

INTERNATIONAL STUDIES IN

SOCIAL, HUMAN AND ADMINISTRATIVE SCIENCES-II

June 2023

EDITORS

ASSOC. PROF. DR. AYŞE ÇATALCALI CEYLAN

ASSOC. PROF. DR. SALIH BATAL

Genel Yayın Yönetmeni / Editor in Chief • C. Cansın Selin Temana

Kapak & İç Tasarım / Cover & Interior Design • Serüven Yayınevi

Birinci Basım / First Edition • © Haziran 2023

ISBN • 978-625-6450-58-5

© copyright

Bu kitabın yayın hakkı Serüven Yayınevi'ne aittir.

Kaynak gösterilmeden alıntı yapılamaz, izin almadan hiçbir yolla çoğaltılamaz.

The right to publish this book belongs to Serüven Publishing. Citation can not be shown without the source, reproduced in any way without permission.

Serüven Yayınevi / Serüven Publishing

Türkiye Adres / Turkey Address: Kızılay Mah. Fevzi Çakmak 1. Sokak

Ümit Apt No: 22/A Çankaya/ANKARA

Telefon / Phone: 05437675765

web: www.seruenyayinevi.com

e-mail: seruenyayinevi@gmail.com

Baskı & Cilt / Printing & Volume

Sertifika / Certificate No: 47083

International Studies in
SOCIAL, HUMAN AND ADMINISTRATIVE
Sciences - II

June 2023

Editors

ASSOC. PROF. DR. AYŞE ÇATALCALI CEYLAN
ASSOC. PROF. DR. SALIH BATAL

CONTENTS

Chapter 1

MEMORY CONFORMITY EFFECTS WITH DRM LISTS ON CLIMATE
RELATED GROUPS

Gökhan ŞAHİN 1

Chapter 2

UNDERSTANDING CUSTOMERS IN AN AI-BASED B2B SALES
WORLD

Eslem ŞEN, Dilek SAĞLIK ÖZÇAM 19

Chapter 3

REFLECTIONS OF POSTMODERNISM IN PENELOPE FITZGERALD'S
"THE BLUE FLOWER": A HISTOGRAPHIC NOVEL

Melike Sultan ÇİÇEKLER 41

Chapter 4

INFLUENCE OF BLOCKCHAIN TECHNOLOGY IN SUPPLY CHAIN
MANAGEMENT

Nesrin BAKICI 57

Chapter 5

THE EFFECT OF SERVICE QUALITY ON CUSTOMER SATISFACTION
AND CUSTOMER LOYALTY: A RESEARCH ON CUSTOMERS OF
SUDAN TELECOMMUNICATION COMPANIES

Sara Abdelbagi Mohamed ABDELRAHIM, Muhammed Talha NARCI 77

Chapter 6

A HISTORICAL LOOK ON THE JAPANESE MILITARY
MODERNIZATION PROCESS

Ahmet M. KADIOĞLU 97

Chapter 7

ORGANIZATIONAL LEGITIMACY THROUGH STORYTELLING

Elif ENGİN, Burcu EKER AKGÖZ

113

Chapter 8

MENTAL HEALTH OF WOMEN AFFECTED BY CONFLICT AND WAR:
WHAT SOCIAL WORKERS CAN DO?

Yaser SNOUBAR

129

Chapter 9

A STUDY OF MAGICAL REALISM IN NEIL GAIMAN'S THE SLEEPER
AND THE SPINDLE

Aybike KELEŞ

141

Chapter 10

FLEXIBLE WORK ARRANGEMENTS IN THE ERA OF DISASTERS AND
TECHNOLOGY

Ramazan Özkan YILDIZ, Handan AKKAŞ

157

Chapter 1

MEMORY CONFORMITY EFFECTS WITH DRM LISTS ON CLIMATE RELATED GROUPS

Gökhan ŞAHİN¹



¹ Email: gsahin@ktu.edu.tr, Karadeniz Technical University,
Department of Psychology, Trabzon, Turkey. ORCID:0000-0002-6479-7018

False memory studies are one of the most popular types of studies in which the observation of memory errors is a source of various types of information about the system. False memories are defined as “either remembering events that never happened, or remembering them quite differently from the way they happened”(Roediger and McDermott, 1995). Problems with eyewitness testimony and forensic cases have been effective factors in making false memories one of the most popular areas of research in recent years, as well as one of the reasons for the popularisation of memory conformity research. It has been observed that people who witness a criminal incident show a memory bias in the same direction as the available evidence and can identify innocent people with similar demographic characteristics to the suspects as criminals. In addition, people’s statements during psychotherapy sessions that they were sexually abused in childhood, which were later revealed under the guidance of the psychologist, are among the other reasons why researchers attach importance to false memory studies.

By talking to each other about the event, more than one person who experienced the same event can share information. Talking to another person about the same event can affect each other’s memories because memory is an organic system that works in a reconstructive way rather than a machine that records information as it is (Wright, 2009). The situation where several people influence each other’s individual memories as a result of talking after the event is called memory conformity (Gabbert, 2003) or social contagion of memory (Roediger, Meade and Bergman, 2001).

Memory conformity, which occurs naturally when people interact with each other in everyday life, can be observed using various methods in an experimental setting. Studies using the misinformation paradigm are one of the leading methods. In these studies, participants can be asked to share their knowledge with each other by making them believe that they have information about the same event, when in fact they have witnessed different events. In this way, they can transfer their knowledge to each other without realising it. In another method, researchers can observe the effects of memory coherence by using a collaborator with one participant, rather than several participants at the same time. The participant may tend to use the information from the other person without realising that the other person is actually the researcher’s collaborator. The participant may tend to use the information obtained from the other person without realising that the other person is actually the researcher’s collaborator. This situation, in which memory errors are revealed by presenting people with misleading information that differs from their own knowledge of an event, is called the post-event misinformation effect. For the emergence of memory conformity, the physical presence of the other person, that is, the possibility of face-to-face communication, and the absence of the other person in the physical environment is an important

factor in conformity. Reysen's (2005) study, using a sample of psychology students, examined the effects of a virtual collaborator who was not physically present in the environment on memory congruence. In the task of the study, participants were asked to learn some word lists and then recall them first individually and then in a group during the test phase. The participants were informed that during the recall phase they would be working with a person in another room via computers connected to each other. It was counterbalanced between the participant and the collaborator who would respond first to the words to be presented. In half of the lists, the participant who was asked to give the old or new answer to the words presented was the first to give the answer. For the other half of the lists, they first saw the collaborator's answers on the screen and then gave their own answers. After the cooperative recall phase, participants were given a surprise individual recall task. This allowed the effects of memory conformity to be examined under the condition that the collaborator was not physically present in the environment and there was no face-to-face interaction. As a result of the study, it was observed that the virtual collaborator could also induce memory conformity effects.

Trustworthiness is one of the most important factors in the use of someone else's information. The social status of a person is one of the important concepts in perceiving a person as trustworthy. Spouses or romantic partners can benefit from each other's memory in everyday life. For example, one partner may be better at remembering the shopping list, while the other may be better at remembering the birthdays of family members. In such examples, partners cognitively reduce their own memory load by using each other as a resource. (French, Garry and Mori, 2008). Numbers, Meade and Perga's (2014) study revealed a different finding about the effect of the partner on memory conformity behaviour. Even under the condition that all the answers given by the other person were incorrect, it was observed that participants benefited from this information, i.e. they showed conformity effects. These results show that whether the memory of the partner is strong or weak, i.e. the accuracy of the information he/she provides, is not very important because we can adapt to the other person, whether his/her memory is good or bad.

In the emergence of memory conformity, apart from who we share information about the event we remember, what we remember with that person is another important factor. Learning the memorised material in an easy or difficult task (black and white pictures and short learning period) (Wright, Villalba, 2012); working with emotionally charged material (Brown & Schaefer, 2010; Porter, Spencer, & Birt, 2003; Wright, Busnello, Buratto, & Stein, 2012) may show different results regarding conformity.

Theoretical explanations of how memory conformity is produced in different ways in everyday life and experimental settings can be grouped under three main headings. These are normative and informative social influences

and memory distortion. Normative and informative social influences, which are called social influences in adaptive behaviour and cause people to adapt to another person, have the same effect on memory congruence. People may want to avoid a disagreement that is socially inappropriate by disagreeing with the other person. In another situation, they may think that the other person has the right information, or at least trust the other person's information more than their own, even if they are not sure about the accuracy of the other person's information. Conformity behaviour in both conditions theoretically results from normative and informative social influences. (Wright at all., when eyewitness).

Factors such as who the person is, whether he/she is trustworthy or not, whether he/she is familiar or unfamiliar have a direct effect on memory performance. Considering that at least two people are required for memory conformity to occur, the group effect should not be ignored. In the simplest and most basic way, groups can be divided into in-groups and out-groups. (Tajfel, 1982). In-groups can be defined, simply and for whatever reason, as groups to which you belong and to which you feel you belong, while out-groups can be defined in the opposite way as groups to which you do not feel you belong. There is not just one in-group and one out-group, there can be many. Even very simple and insignificant issues are sufficient for their formation. The minimal group paradigm proposed by Tajfel and his colleagues in the 1970s is a paradigm that shows that ingroups and outgroups can be so easily separated and that minimal conditions are sufficient for people to be included in groups. Even simple categories are sufficient to observe ingroup-outgroup effects. Examples of such categories are age, gender, occupation or enrolled university department.

Two methods are most commonly used in studies of recognition memory performance. The first is the yes-no test, in which people are asked to give an old or new response to a single stimulus presented to them. The second is the two-alternative forced-choice method, in which people are asked to choose which of two stimuli presented at the same time is old. (Jang and Wixted, 2009). In yes-no tests, the stimulus is presented alone and the person is asked to decide whether it is old or new. In the forced-choice method, stimuli are presented in pairs. One of the stimuli is the target stimulus and the other is the distractor stimulus, and the person is asked to choose one of these two options. It is known that, all other things being equal, recognition performance is better with the two-alternative forced-choice method than with the yes-no method. (Jang and Wixted, 2009). The most important difference between the two methods is observed in the bias process that signal detection theory reveals in terms of decision performance. Bias is defined as the general tendency of people to give the old answer when they should give the old or new answer. (Westerberg and Marsolek, 2003).

In the two-alternative forced-choice method, to measure the sensitivity of individuals to discriminate between old and new stimuli, one of the two alternatives should be a stimulus that has actually been presented to them and the other should be a new stimulus. In their studies with DRM lists, Westerberg and Marsolek (2003) and Weinstein, McDermott and Chan (2010) used the two-alternative forced-choice method in the test phase. Whereas Westerberg and Marsolek presented two words of the same type, one of which was actually studied and one of which was not (i.e., presenting two critical words at the same time), Weinstein et al. presented two different types of words at the same time. For example, they presented a studied related list word and an unstudied critical word as response alternatives. As a result of both studies, in which the response bias was removed, they found that people's sensitivity to critical words within the word types of the DRM method decreased significantly. In other words, people had difficulty discriminating whether they were actually presented with only critical words within the word types.

McGuire, London and Wright (2015) compared the DRM paradigm and the memory conformity paradigm in terms of false memory elicitation in an adolescent sample. The researchers found that the two paradigms produced false memories separately, but argued that there was no relationship between them in terms of false memories. They mentioned that the false memories observed in the DRM task were internally generated memory errors, whereas the memory congruency task observed false memories due to external sources, so the two were separate. Mazzoni (2002) argued that false memories revealed by DRM lists and memory errors occurring in eyewitness testimony involve different laws and processes. Mazzoni divided these two memory errors into autonomous and suggestive disorders. He argues that the two paradigms that produce false memories differ in the social influence they involve. He argued that memory errors observed in eyewitness testimony have a more social basis, whereas false memories observed in DRM lists do not have a social basis, and therefore these two paradigms are different processes.

Masanabu (2012) investigated the effects of memory conformity with a study using DRM lists. In the study, participants who learned DRM lists using the auditory modality were given an individual recall task in the first and last test phases, but in the phase between the two tests they were asked to recall together with a live collaborator. At this stage, half of the participants responded before the collaborator, while the other half responded after the collaborator. At the end of the study, it was found that the correct answers given by the collaborator reduced the incorrect answer rates given by the participants, regardless of the order in which they responded.

As can be seen from the studies reviewed in the literature, the relationship between memory conformity and false memories revealed by DRM lists has mostly been in the direction of examining the correlational relationship

between the two tasks by applying them separately. However, there are no studies that have examined memory conformity using DRM lists as a material, i.e. examining the two paradigms in a combined form. In the researcher's Ph.D. study (Şahin, 2019), the effects of memory conformity were examined with DRM lists using the same method. No significant group effects were observed in the study, which used the manipulation of being a psychology student as the ingroup and being a philosophy student as the outgroup. A total of three experiments were conducted in which the DRM lists were answered in a forced-choice manner during the test phase, followed by a remember/know assessment of the answers. In the second and third experiments, in order to examine memory conformity effects, participants were also provided with the response information of another person under some of the word pairs displayed during the test phase. We wanted to examine how the identity of this other person (in-group/out-group comparison in the second experiment) or the accuracy of his/her response (correct/false information rate varied between the second and third experiments) would affect participants' responses. In this way, the aim was to investigate the effects of memory coherence in false memories observed with DRM lists. In all three experiments, participants categorised their responses as remember/know, which allowed us to examine memory conformity effects in false memories in recognition memory. In the first experiment, in which there was no response from the other person, it was observed that the critical words from the DRM lists were remembered more incorrectly than other types of words. In the second and third experiments, in which the other person's response was added, the other person's responses on unrelated words influenced the correct response rates. In all three experiments, the highest recall for critical words was after both correct and incorrect responses. The other person's incorrect response caused a decrease in recall for critical words. Recall was highest for unrelated words, where the other person's response affected correct rates. These results showed that unrelated words, for which individuals had weaker recall, were vulnerable to the other person's response, and that for critical words, for which individuals had the most recall, the other person's incorrect responses reduced this recall.

The aim of this study was to investigate the effects of memory coherence on false memories, as observed using DRM lists, in people grouped according to their views on climate change. At the beginning of the study, participants were presented with two group options. These groups were formed using city and nature emoticons presented with symbols. Then, in the test phase, people were given the chance to see the answers given by a group member under one of the two words presented with 2afc (of course, this is a manipulation, the other person is the researcher's virtual collaborator). In one condition, the virtual collaborator always gave the correct answer information with the icon in the nature group, while in the other condition, the person with the icon

in the city group always gave the wrong answer. A between-subjects design was used. Finally, people's views on climate change were assessed in terms of climate change denial. The Climate Denial Scale (McCright & Dunlap, 2020) was used to measure individuals' climate denial. Together with all these variables, individuals' attitudes towards climate and nature and their memory performance in DRM lists about the group they belong to and how they are affected by the knowledge of the other person who is an in-group/out-group member (memory conformity) were examined and compared between groups.

Method

Participants

A sample size analysis was performed using the GPower software, as described by Faul et al. (2007), to determine the required number of participants. Prior studies by Goodman et al. (2011) and Maulina et al. (2021), which employed similar experimental methods and word lists, indicated an average effect size of 0.198. Conducting an a priori power analysis in GPower, considering a repeated measures design with a within-between interaction, involving two groups and four measures, with a correction for the correlation between repetitions set at 0.5, indicated a total sample size of 58 participants.

For this experiment, a total of 67 participants were recruited, including 8 men. The mean age of the participants was 23.10 years, with a standard deviation of 3.21. The research was announced through social media, and participation was entirely voluntary.

Measures

DRM lists

In this research, the Deese-Roediger-McDermott (DRM) method, developed by Deese, Roediger, and McDermott in 1995, was utilized. To create Turkish word lists, the researchers relied on the work of Şahin and Tekman (2019) who had previously developed word lists using the DRM method. In selecting the words for the lists, Tekcan and Göz (2005) conducted studies on Turkish word norms, considering the imagination and concreteness scores of the words. Each list comprised 8 words, with 7 of them being conceptually related, and the remaining word being a critical word with the highest associations to the given list. The researchers used a total of 12 lists in their study, including two additional unrelated lists, each consisting of 8 words.

Climate change denial scale

The scale developed by McCright and Dunlap (2011) to measure attitudes towards climate change consists of 5 questions, answered as a 5-point Likert scale (strongly disagree - strongly agree). It aims to measure the degree of denial of climate change. The Turkish version of the scale was used by Kırıl

Uçar in the cross-cultural study by Nartova-Bochaver et al. (2022).

Procedure

For data collection, an online platform, specifically Google Forms, was utilized in this study. The researchers employed this method to ensure convenience and accessibility for participants. The data collection process involved distributing the survey through Google Forms and allowing participants to respond remotely. The study determined the required number of samples through power analysis, a statistical technique that helps determine the appropriate sample size for achieving meaningful results. Once the predetermined number of participants was reached, the researchers concluded the data collection phase. In the first form, participants reached a version of the study page by choosing one of the options (A-B) presented to them. They then consented to participate by reading the instructions on the experimental study page. After answering questions about demographic information, they chose one of the two options for the group manipulation. The icons for the groups are shown in Figure 1. After group selection, the learning phase began. After the presentation of the words was completed, the test phase began. In this phase, the participants were asked to respond by selecting one of the two words on the screen next to each other. Participants in the nature group saw the nature symbol under one of the two words (always under the correct answer). In the instructions they were given, they were told that this symbol represented the answers given by a participant who had taken part in the study before them, using the symbol of the group they were in. In reality, however, the icons placed by the researcher acted in a sense as virtual collaborators. Participants in the city group were presented with the city icon under one of the two words (always the wrong option) and the other participant's answer. At the end of the test phase, the questions on the climate denial scale were answered and the study was completed.

The experiment consisted of 12 lists, each containing 8 words, resulting in a total of 96 words presented. To ensure distinctiveness, unrelated word lists were included at the beginning and end, separate from the main word lists. Before the testing phase, participants were instructed to count and write 5 digits in reverse order starting from 895. The testing phase then began, employing a two-alternative forced choice (2AFC) response method instead of the traditional yes/no procedure. This approach focused on sensitivity to explain memory errors, as recommended by Green and Swets (1966). During the recognition phase of the 2AFC test, participants were presented with an old word from the learning phase and a new word in each trial, following the methodology established by Şahin and Tekman (2019). They had to select the option that represented the old word. Participants were presented with two words at each response step, following the 2AFC format, and asked to choose one of them. Then they were prompted to provide a "remember" or "know"

response. After completing 20 word pairs and providing remember/know ratings, the testing phase concluded.

In the test phase, out of the 20 word pairs presented, 5 were critical words, 5 were related words, and 10 were unrelated words. Each pair consisted of one word that had been previously presented during the learning phase of the same word type (critical, related, or unrelated), and one new word.

At the conclusion of the experiment, participants were presented with 5 questions from the climate change denial scale. The collected data were analyzed using the JASP 0.14.1 software (JASP Team, 2018). To classify participants based on levels of climate change denial, the average score of the 67 individuals ($M = 8$, $Min = 5$, $Max = 25$) who completed the climate change denial scale was used. Participants scoring below the average were categorized as belonging to the low climate denial group, while those scoring above the average were classified as part of the high climate denial group. Furthermore, an independent samples t-test was conducted to examine whether there were any significant differences between the two groups in terms of age. The results indicated that there was no statistically significant difference between the low and high climate denial groups in terms of age, $t(65) = 0.60$, $p = .545$.

Figure 1. Group manipulation



Results

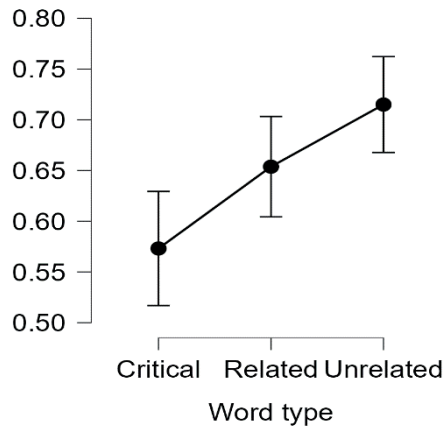
Total correct answers by DRM lists word type

The study aimed to analyze participants' accuracy in identifying three different word types: critical, related, and unrelated. Specifically, the researchers examined the average number of correct responses when participants were presented with two words during the testing phase and were asked to select the words they had seen during the learning phase. To analyze these results, a repeated measures analysis of variance (ANOVA) was employed for the three word types.

The results of the ANOVA indicated that word type had a significant

effect on participants' accuracy in selecting the correct word ($F(1.96, 129.82) = 7.71, p < .001, \eta^2 = .105$). This suggests that the participants' success in accurately choosing the word they had previously encountered during the test phase varied depending on the specific word type. The observed effect size ($\eta^2 = .105$) indicates a moderate influence of word type on the participants' accuracy. Overall, these findings highlight that participants' performance in identifying the correct word was influenced by the category or type of the word, namely critical, related, or unrelated. Due to the violation of sphericity, Huynh-Feldt correction was applied for word type main effect. According to the results of the Bonferroni post-hoc test conducted to see between which word types this significant difference occurred, it was found that the mean scores of correct responses for critical words were significantly different from the mean scores of correct responses for related and unrelated words. The lowest correct responses among the word types were for critical words. While the average of correct responses for critical words was .57, it was .65 for related words and .72 for unrelated words. The average rates are shown in Figure 2.

Figure 2. Hit rates for word type intervals (Error bars show 95% confidence).



Comparison of correct answers and remember/know evaluations according to word type between groups

The participants' correct responses for the three word types (critical, related, unrelated) and their remember/know evaluations for these responses were evaluated by mixed design analysis of variance between the groups (nature/city).

3 (Word: Critical, related, unrelated) x 2 (Hit, False) x 2 (remember, know) x 2 group x 2 manipulation mixed design analysis of variance was performed. Comparison between groups was made on the variable of manipulation (correct, wrong) and group choice (nature, city). As a result of the analysis of variance, the main effects of Word type ($F(1.05, 54.77) = 11.02, p < .001, \eta^2 = .175$) and hit/false ($F(1, 52) = 47.89, p < .001, \eta^2 = .479$) were statistically significant. The word factor and hit/false response ($F(2.06, 107.09) = 4.53, p$

$< .05$, $\eta^2 = .08$), word factor and remember/know ($F(2.03, 105.69 = 14.92$, $p < .001$, $\eta^2 = .223$) remember/know and manipulation two way interactions ($F(1, 52 = 6.33$, $p < .05$, $\eta^2 = .109$) were significant. Word type, manipulation and group 3 way interaction ($F(1.05, 54.77 = 3.90$, $p < .05$, $\eta^2 = .07$) were significant. Word type, hit false, remember/know and manipulation 4 way interactions ($F(2.02, 109.24 = 4.44$, $p < .05$, $\eta^2 = .07$) were significant. Also interactions between group of manipulation and group ($F(1, 52 = 4.09$, $p < .05$, $\eta^2 = .07$) were significant. Due to the violation of sphericity, Huynh-Feldt correction was applied for Word type main effect, Word factor, true/false response interaction and word, remember/know interactions and interactions of Word type, hit/false, remember/know and group manipulation.

In order to see from which groups the significance of significant interactions originated, post- hoc test was applied. According to the Bonferroni test results, the responses (total) given for unrelated words differed significantly from the responses given for related (($M = .024$, $SE = .006$), $t = 4.04$, $p = .001$) and critical words (($M = .026$, $SE = .006$), $t = 4.36$, $p = .001$). False responses for critical words are significantly higher than false responses for related (($M = .06$, $SE = .022$), $t = 2.78$, $p = .037$). and unrelated (($M = .085$, $SE = .022$), $t = 3.93$, $p = .001$). words. The remember responses for unrelated words were significantly lower than the remember responses for related (($M = .110$, $SE = .023$), $t = 4.83$, $p = .001$) words and critical words. (($M = .143$, $SE = .023$), $t = 6.29$, $p = .001$). Also, the know responses for critical words are significantly less than the know responses for unrelated words. (($M = -.091$, $SE = .023$), $t = -3.98$, $p = .001$).

Responses of those who preferred the nature in group selection for unrelated words in the condition in which they saw a correct response from the other person and at the same time the response of someone from the ingroup differed significantly from their responses for unrelated words in the condition in which they saw an incorrect response from the other person and the outgroup (($M = .05$, $SE = .001$), $t = 4.76$, $p = .001$). They gave more correct responses for unrelated words in the condition in which they saw the correct response of the other person. Rates shown between groups in Figure 3.

Finally, a post hoc test was conducted to see the direction of the significant interaction between word, true/false, remember/know and manipulation. According to the results of the Bonferroni test, for unrelated words, in the condition in which they received correct information from the other person, the remember rating after the correct response was significantly higher than the remember rating after the incorrect response (($M = .284$, $SE = .064$), $t = 4.42$, $p = .003$). When they received incorrect information from the other person, the remember rating after the correct responses for unrelated words was significantly different from the know rating. (($M = -.037$, $SE = .084$), $t = -4.42$, $p = .004$). Rates for variables by manipulation shown in Figure 4.

Figure 3. Rates for word types by manipulation between groups

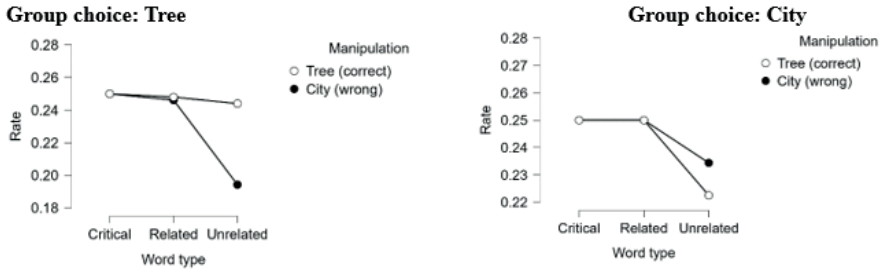
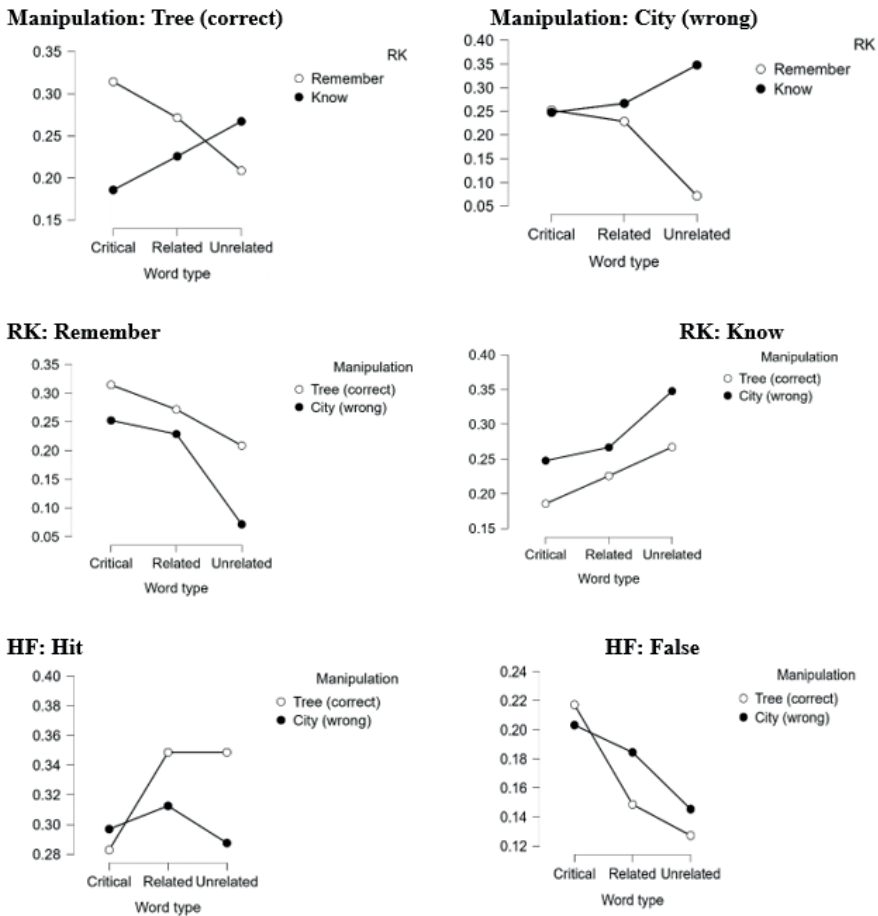


Figure 4. Rates for R/K and H/F between manipulation



Correct answers and remember/know evaluations according to word type between climate change denial groups

The participants' correct responses for the three word types (critical, related, unrelated) and their remember/know evaluations for these responses were evaluated by mixed design analysis of variance between the climate change denial groups.

No statistically significant group effect was found. ($F_{1, 65} = 2.86, p = 0.09, \eta^2 = .042$).

Discussion

An experiment was conducted in which the DRM lists studied in the learning phase were responded to in the test phase using a forced-choice procedure, and people then made a remember/know rating of their responses. To examine memory conformity effects, the response information of another person was presented under some of the word pairs displayed in the test phase. The effects of the identity of this other person (ingroup/outgroup member) and the accuracy of the response (completely true, completely false) on participants' responses were analysed. The aim was to observe the effects of memory conformity on false memories in DRM lists. During group formation, based on the minimal group paradigm, the city or tree symbol chosen by the participants at the beginning of the study was used under one of the options presented in the test phase, with the information that it was the other person's answer. Finally, the relationship between the levels of climate denial obtained by applying the climate denial scale to individuals, group choices and the use of the other person's answer was also examined. When we look at the analysis of total correct responses, where people responded correctly by choosing the word actually presented to them in the learning phase from the two words presented in the test phase, the lowest number of correct responses were given for critical words, as observed in other research in the literature using DRM lists and the forced-choice method. In other words, people made the most errors on critical words of the word pairs presented to them. An analysis of the results of the "remember/know" ratings given after responding to the word pairs presented showed that the highest number of "remember" ratings were given to critical words. Remember ratings after correct and incorrect responses differed significantly for all three word types. People gave significantly more remember ratings after giving the correct answer. After incorrectly giving the old answer to critical words that were not actually presented to them, they rated these answers with a high percentage of remember ratings. This finding is in line with Roediger and McDermott (1995). In their study, in which they introduced the DRM paradigm, they observed that after people incorrectly recalled critical words that were not actually presented to them, they rated these responses as remember at a high

rate. Looking at the know ratings that people gave after responding to the presented word pairs, it was observed that they gave the highest number of know responses to significantly unrelated words. The analyses showing the effects of memory conformity on the recall of DRM lists by adding another person's response information to the forced-choice method provided different information for the DRM and memory conformity literature. For true/false responses, whether the other person's response was correct or incorrect had no effect on critical and related words, whereas significant effects were observed for unrelated words. When the other person's information was correct, it was observed that they increased their correct response rates for unrelated words by using this information. However, in the recall/know ratings, the recall response for unrelated words decreased significantly when the other person provided incorrect information. Instead, there was an increase in the know rating. According to Wixted and Mickes (2010), the know response may be associated with lower memory performance. In other words, in the false information condition, memory performance for unrelated words decreased even more and was reflected as an increase in the know rating. The fact that this effect was only observed for unrelated words is also consistent with the fact that this is the type of word for which people have less memory power among word types. It was also observed that the remember-know ratings for critical words were also influenced by the correctness of the other person's answer. While the remember/know ratings for critical words differed in the condition where the other person always answered correctly, the remember/know ratings for critical words did not differ in the condition where the other person always answered incorrectly. This finding seems to be due to the decrease in remember ratings for critical words. In other words, when receiving incorrect information from the other person, it can be interpreted that people's memory for critical words decreases.

Confidence in one's own memory is an important factor in the observation of memory conformity. For unrelated words, it has been observed that people do not trust their own memory sufficiently, therefore they are more open to conformity effects in this word type. This finding is also consistent with Paterson et al.'s (2012) hypothesis that the know response is preferred over the remember response when the other person is accommodated.

People have a high level of confidence in their own knowledge of critical words. However, it was observed that their memory performance was significantly impaired when they saw an incorrect answer from the other person. These findings provide important insights into the effects of memory conformity in DRM lists. Confidence in one's own memory and in the other's knowledge, which is an important factor in the emergence of memory conformity, had different effects in a DRM list recognition task. The conformity effects observed for DRM lists were that people were more open

to the other person's knowledge for irrelevant words for which they had lower memory performance, and for critical words for which their confidence in their own knowledge was high, this confidence decreased when they saw an incorrect answer from the other person.

No significant effects were observed in the analyses of the study with the climate change denial scale. At the beginning of the study, city and tree symbols were used in the group selection categories presented to individuals. It was expected that those with low levels of climate change denial would mostly be in the tree group and those with high levels of climate change denial would be in the city group. Thus, it was also expected that the information about the other person presented to them in the test phase would show an ingroup/outgroup effect. However, these expectations were not fulfilled. It can be seen as a limitation that the level of climate change denial of all participants was low, similar to the country scores in the original study of the scale (Nartova-Bochaver et al., 2022) (original study, Turkey $M= 1.62$, $SD= .58$, this study $M=1.68$, $SD= .69$).

The results of the present study are consistent with the previous study (Şahin, 2019), which investigated memory congruency effects in DRM lists using a virtual collaborator. Again, conformity effects were mostly observed for unrelated words. However, in contrast to this study, most false recall was observed over critical words, which is consistent with the general finding in the literature. Performing a similar task with a live collaborator or social interaction may contribute to the interpretation of memory conformity effects in the DRM paradigm. Although there are studies in the literature that observe memory conformity effects when using virtual collaborators, seeing the results of a live interaction in a study that examines DRM lists and memory conformity in the same task will contribute to our knowledge of both topics.

REFERENCES

- Brown, C., & Schaefer, A. (2010). The effects of conformity on recognition judgements for emotional stimuli. *Acta Psychologica*, *133*(1), 38–44. <https://doi.org/10.1016/j.actpsy.2009.08.004>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. <https://doi.org/10.3758/BF03193146>
- French, L., Garry, M., & Mori, K. (2008). You say tomato? Collaborative remembering leads to more false memories for intimate couples than for strangers. *Memory (Hove, England)*, *16*(3), 262–273. <https://doi.org/10.1080/09658210701801491>
- Gabbert, F., Memon, A., & Allan, K. (2003). Memory conformity: Can eyewitnesses influence each other's memories for an event? *Applied Cognitive Psychology*, *17*(5), 533–543. <https://doi.org/10.1002/acp.885>.
- Goodman, G. S., Ogle, C. M., Block, S. D., Harris, L. S., Larson, R. P., Augusti, E. M., Cho, Y. Il, Beber, J., Timmer, S., & Urquiza, A. (2011). False memory for trauma-related Deese-Roediger-McDermott lists in adolescents and adults with histories of child sexual abuse. *Development and Psychopathology*, *23*(2), 423–438. <https://doi.org/10.1017/S0954579411000150>
- Green, D. M., & Swets, J. A. (1966). *Signal detection theory and psychophysics*. Wiley.
- Jang, Y., Wixted, J. T., & Huber, D. E. (2009). Testing Signal-Detection Models of Yes/No and Two-Alternative Forced-Choice Recognition Memory. *Journal of Experimental Psychology: General*, *138*(2), 291–306. <https://doi.org/10.1037/a0015525>
- JASP Team. (2018). JASP (Version 0.8.6.0). İçinde [Computer software].
- Masanobu, T. (2012.). *The Effects of Conformity on False Recognition in the Deese-Roediger-McDermott paradigm*.
- Maulina, D., Irwanda, D. Y., Sekarmewangi, T. H., Putri, K. M. H., & Otgaar, H. (2021). How accurate are memories of traffic accidents? Increased false memory levels among motorcyclists when confronted with accident-related word lists. *Transportation Research Part F: Traffic Psychology and Behaviour*, *80*, 275–294. <https://doi.org/10.1016/j.trf.2021.04.015>
- Mazzoni, G., & Giuliana. (2002). Naturally Occurring and Suggestion- Dependent Memory Distortions: The Convergence of Disparate Research Traditions. *European Psychologist*. <https://doi.org/10.1027//1016-9040.7.1.17>
- Mcguire, K., London, K., & Wright, D. B. (2015). Developmental Trends in False Memory Across Adolescence and Young Adulthood: A Comparison of DRM and Memory Conformity Paradigms. *Applied Cognitive Psychology*, *29*(3), 334–344. <https://doi.org/10.1002/acp.3114>

- McCright, A. M., & Dunlap, R. E. (2011). Cool dudes: The denial of climate change among conservative white males in the United States. *Global Environmental Change*, 21(4), 1163–1172.
- Nartova-Bochaver, S.K.; Donat, M.; Ucar, G.K.; Korneev, A.A.; Heidmets, M.E.; Kamble, S.;
- Khachatryan, N.; Kryazh, I.V.; Larionow, P.; Rodríguez-González, D.; et al. The role of environmental identity and individualism/collectivism in predicting climate change denial: Evidence from nine countries. *J. Environ. Psychol.* 2022, 84, 101899.
- Numbers, K. T., Meade, M. L., & Perga, V. a. (2014). The influences of partner accuracy and partner memory ability on social false memories. *Memory & cognition*, 42(8), 1225–1238. <https://doi.org/10.3758/s13421-014-0443-9>
- Paterson, H. M., Kemp, R., & McIntyre, S. (2012). Can a witness report hearsay evidence unintentionally? The effects of discussion on eyewitness memory. *Psychology, Crime & Law*, 18(6), 505–527. <https://doi.org/http://dx.doi.org/10.1080/1068316X.2010.510117>
- Porter, S., Spencer, L., & Birt, A. R. (2003). Blinded by emotion? Effect of the emotionality of a scene on susceptibility to false memories. *Canadian Journal of Behavioural Science*, 35(3), 165–175. <https://doi.org/10.1037/h0087198>
- Reysen, M. B. (2005). {T}he effects of conformity on recognition judgements. *Memory*, 13(1), 87–94.
- Roediger, H. L., & McDermott, K. B. (1995). Creating False Memories: Remembering Words Not Presented in Lists. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 21(4), 803–814. <https://doi.org/10.1037/0278-7393.21.4.803>
- Şahin, G., (2020). DRM Listelerinde Bellekte Uyma Davranışı: İki Alternatifli Zorunlu Seçim Yöntemi ve Hatırlıyorum/Biliyorum Değerlendirmesi ile Tanıma Belleğinin İncelenmesi. *DRM Listelerinde Bellekte Uyma Davranışı* (pp.437-472), Ankara: Gece Kitaplığı.
- Şahin, G., & Tekman, H. G. (2019). Sahte Hatıralarda Zorunlu Seçim Yöntemi ile Hatırlıyorum/ Biliyorum ve Modalite Etkileri. *Psikoloji Çalışmaları / Studies in Psychology*, 39, 179–193. <https://doi.org/10.26650/sp2019-0016>
- Tajfel, H. (1982). Social Psychology of Intergroup Relations. *Annual Review of Psychology*. <https://doi.org/10.1146/annurev.ps.33.020182.000245>
- Tekcan, A. İ., & Göz, İ. (2005). *Türkçe Kelime Normları: 600 Türkçe Kelimenin İmgelem, Somutluk, Sıklık Değerleri ve Çağrışım Setleri*. Boğaziçi Üniversitesi Yayınları.
- Roediger, H. L., Meade, M. L., & Bergman, E. T. (2001). Social contagion of memory. *Psychonomic bulletin & review*, 8(2), 365–371. <https://doi.org/10.3758/BF03196174>
- Weinstein, Y., McDermott, K. B., & Chan, J. C. K. (2010). True and false memories in the DRM paradigm on a forced choice test. *Memory*, 18(4), 375–384. <https://>

doi.org/10.1080/09658211003685533

- Westerberg, C. E., & Marsolek, C. J. (2003). Sensitivity Reductions in False Recognition: A Measure of False Memories with Stronger Theoretical Implications. *Journal of Experimental Psychology: Learning Memory and Cognition*. <https://doi.org/10.1037/0278-7393.29.5.747>
- Wixted, J. T., & Mickes, L. (2010). A continuous dual-process model of remember/know judgments. *Psychological Review*. <https://doi.org/10.1037/a0020874>
- Wright, D. B., Busnello, R. H. D., Buratto, L. G., & Stein, L. M. (2012). Are valence and social avoidance associated with the memory conformity effect? *Acta Psychologica*, *141*(1), 78–85. <https://doi.org/10.1016/j.actpsy.2012.06.008>
- Wright, D. B., Memon, A., Skagerberg, E. M., & Gabbert, F. (2009). When eyewitnesses talk. *Current Directions in Psychological Science*. <https://doi.org/10.1111/j.1467-8721.2009.01631.x>
- Wright, D. B., & Villalba, D. K. (2012). Memory conformity affects inaccurate memories more than accurate memories. *Memory*. <https://doi.org/10.1080/09658211.2012.654798>

Chapter 2

UNDERSTANDING CUSTOMERS IN AN AI-BASED B2B SALES WORLD

Eslem Ően¹
Dilek Saęlık zam²



1 Galatasaray niversitesi Yksek Lisans ğrencisi

Eslem Ően ORCID ID: 0009-0003-2830-7995

2 Yeditepe niversitesi ğretim Grevlisi

Prof. Dr. Dilek Saęlık zam ORCID ID: 0000-0003-1672-3548

Breakthrough technologies and their exponentially increasing effects on sales require sectors to be dynamic and make customer needs rapidly change regarding their environments. The B2B ecosystem also faces substantial changes in parallel with these technologies, one of which is Artificial Intelligence (AI) (Saura et al., 2021). AI has started to transform the business-to-business (B2B) human-centric sales process and affected the B2B sales funnel already (Paschen et al., 2019). According to Ledro et al. (2022), both businesses and academics consider artificial intelligence technology as the next step toward managing customer relations more intelligently. As supported by the research of Bag et al. (2021), a positive relationship between big data powered by artificial intelligence and customer knowledge creation exists, which also has a positive relationship with rational decision-making in B2B marketing and selling. Since digital tools using advanced technologies complete data-based tasks and offer valuable solution paths on behalf of managers within a short time, it is anticipated that organizations look forward to adapting these technologies into their operations. Still, the literature indicates that most B2B companies using digital tools cannot entirely benefit from them (Bag et al., 2021). Commercial leaders mostly think that AI technology is underutilized, but 90% of them expect their companies to use it more often over the next two years (Deveau et al., 2023).

Before proceeding with artificial intelligence and its impact as an advanced digitalization technology in B2B markets, it would be beneficial to mention B2B sales processes. The traditional B2B sales process is explained by Kovanen (2021) in a seven-step funnel of which steps are orderly; prospecting, pre-approach, approach, presentation, overcoming objections, closing, and follow-up. Different approaches also exist in the literature. Wengler et al. (2021) start the sales process with “market analysis”, which defines a step assumed to be the highest digitization (digit-based numeric operations) potential by organizations at around 60% of the totally required activities. The other alternative process is provided by Fraccastoro et al. (2021). The steps of the process are; the identification of new business opportunities which is the need discovery stage, persuasion, and relationship management (Fraccastoro et al., 2021). Also, according to the results of an interview with salespeople, the first step is stated as identifying potential customers (Rodriguez et al., 2020). Along with the variety in sales processes, in the core of all approaches, as can be seen, understanding customers is the inevitable part of a sales process. Sales managers cannot invest in all customers in their target segment due to time and cost limitations, so they would like to find the right ones at the beginning of the sales process to sustain their operations effectively. One side of the cost belongs to sales teams. Digitalization and automation would likely to reduce the cost of salesforce which contributes to the revenue thereby (Rodriguez et al., 2020). The routine tasks and basic analyzes could be

attained through digital tools rather than sales members, so they can focus on more complex processes. Secondly, price sensitivity, willingness to pay, or cost of finding expectations and needs for buyers are other challenges from customers' perspectives (Deloitte, 2023). They do not want to waste time during pre-approach which consists of searching information and finding answers to their basic questions.

Considering the stages of the sales process, it is obvious that digitalization in B2B sales activities would be useful for both buyers and suppliers, during specifically for understanding customers. As defined by Singh et al. (2019), digitalization is the use of digital assets such as artificial intelligence, digital products, digitization, or digital platforms. It also allows an understanding of market dynamics and generates better solutions than manual processes (Singh et al., 2019). The other term often used and confused with digitalization is digitization. Digitization, which can be also called data-based numeric operations, allows the gathering, arranging, and processing of data in marketing to obtain sales knowledge. Big data has become a common term pondered by many functions of organizations. Sales teams also want to benefit from this huge opportunity. However, big data is hard to organize to obtain a valuable outcome for decision-makers in sales without technology-based assistance. At this point, artificial intelligence (AI) comes to the scene. AI is a form of digitalization representing the automation of some steps in the sales process by learning from big data (Singh et al., 2019).

However, digital transformation of sales processes should be conducted carefully in a balance. (Rodriguez et al., 2020). While it facilitates the sales process in defining customer needs and expectations, interaction with salespeople is still necessitated. "Face-to-face interaction or human touch at one point within the process is required to gain mutual trust and build a relationship with potential customers, which digitalization underestimates" (Rodriguez et al., 2020, p. 2). The report of McKinsey&Company (Driedonks et al., 2021) also emphasizes that 68% of sales outperformers interconnect traditional methods and digital channels although 42% of them earn half of their revenues from digital channels. Since human interaction is a significant preference for B2B customers along their customer journeys, human resources need to exist as well as digital resources at several levels of intensity (Angevine et al., 2018). In other words, success should not be attached to the mere digitalization of sales processes.

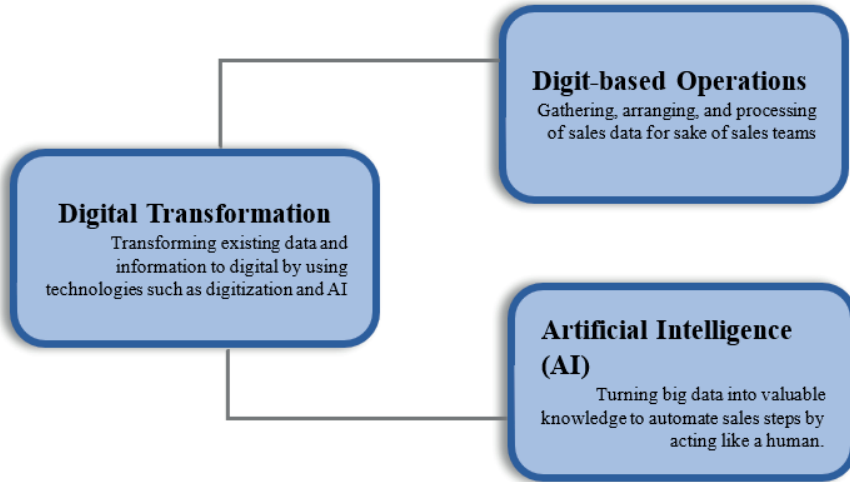


Figure 1. Term explanations adapted from Singh et al., 2019

The history of Artificial Intelligence is dates to the 1930s with the use of technology and date, and the first AI-themed conference was held in 1956 in the USA (Vladimirovich, 2020). It is defined as any tool comprehending its environment by imitating cognitive functions of humans like learning, reasoning, or natural language processing thanks to its ability to learn from data (Cyvoct & Fathi, 2019). In a different definition, it is used to assign an ability to learn from experience, arrange new inputs, and finally fulfill a task just as a human (D'arco et al., 2019). It can also turn big data into valuable knowledge for companies (Paschen et al., 2020). One of the major problems in sales and marketing is data-based. Despite a huge amount of data, it is very difficult to turn it into applicable knowledge. However, artificial intelligence integrated into sales management systems could solve three problems which are incomplete data, the distribution of collected data, and outdated data (Vladimirovich, 2020). Human-based data-related processes might remain incapable to obtain structured information quickly and properly. However, thanks to management tools using AI such as CRM and PRM, the tasks like automatic collection of data reduce the wrong entry risk by salesforce. The creation of a common database reachable by all sales reps and updating the existing data systematically would likely to ease reaching the needed knowledge to understand customers. Moreover, smart solutions in a complex business environment are required for marketers in B2B, which help process automation to structure and customize the data (Bag et al., 2021). Thanks to these abilities, AI finds optimal solutions for problems and achieves especially routine goals and tasks on behalf of managers easily.

As required by today's conditions in many functions of businesses, sales teams have also needed to take a step toward the digital world. Many researchers and managers have several ideas about the benefits and challenges of digital technologies. However, digitalization has become an inevitable part of the future sales world since it has already started to be integrated into the business processes of managers. Though big data, machine learning, and Artificial Intelligence as a part of digitalization are new-age tools to understand customers in Business-to-Customers(B2C) markets, they are not advanced and used enough in Business-to-Business(B2B) markets (Schatz & Morelli, 2021). It is estimated that B2B markets earn trillions of dollars, but still, it gets behind the B2C to practice technologies and automation in their processes (Karlinsky-Shichor & Netzer, 2019). B2B customers might be seen fewer in number than B2C customers. However, they are mostly more profitable ones considering the volume of sales, long-term sales agreements, or the high-profit margin of services/products in the B2B market (Dasanayaka et al., 2020). The customers in B2B are not only professionals that have to make a profit through products/services they buy from their suppliers but also account for their operations toward their stakeholders such as investors and end-consumers at the end of the day. Moreover, they are customers having more involvement, experience, and consciousness during sales compared to B2C buyers. Since their sales processes are more complex and have more parties that might be affected by buyer preference (West et al., 2020), sales management of businesses accordingly have to be aware of the needs of all stakeholders in sectors, but especially their customers, to obtain competitive advantage and be successful in the market.

Factors Affecting the Acceleration of Digitalization in B2B Sales

One of the most crucial factors accelerating changes in sector dynamics and management in different ways is Covid-19 obviously. According to a report by McKinsey&Company (2020), the shift to digital instead of traditional interactions doubled in B2B customers all around the world after the pandemic. It means that digital experiences became more important than ever. However, customers want both in-person engagement and human interactions instead of a definite shift to a remote sale process, which is defined as a hybrid sales structure. Hence, the ability to interpret the meaning of the pandemic for B2B buyers is critical for managers before drawing a new route.

The other significant consideration is the economic factors for buyers. Almost 90% of sales representatives emphasize the importance of current economic conditions in anticipating customer needs (Salesforce, 2020). Suppliers want regular buyers to keep up even in tough crises, so according to them, long-term relationships with customers came into prominence with the effect of existing economic situations (Salesforce, 2020). The pricing policies of sellers also significantly determine the economic satisfaction of customers

and the entire evaluation of business partners in B2B markets (Dasanayaka et al., 2020). Due to an increase in the cost of supplies, intermediaries, or transactions, price offers might be updated immediately, and the validity of old ones might expire. Transparency, here, is the keyword. Customers demand price transparency and easy-to-understand pricing with a better experience today (Angevine et al., 2018). Moreover, even one customer means a lot for companies in terms of profit.

Understanding Customer Needs and Wants

Changing dynamics in the B2B sales world necessitate adaption to digital technologies for managers. Many business leaders are aware of the radically reshaped B2B environment by digital and analytics (Angevine et al., 2018). While expectations and needs are shifting on the side of customers (Angevine et al., 2018), outperforming companies tend to exploit advanced sales technology such as complex distribution strategies and technology-driven operations to meet rapid changes (Deveau et al., 2023). At this point, AI-based tools might bring a better competitive advantage for companies since most of them started to be familiar with and use big data in digitization, automation, and machine learning. There exist different ways and tools to integrate artificial intelligence into sales processes as some of them listed below.

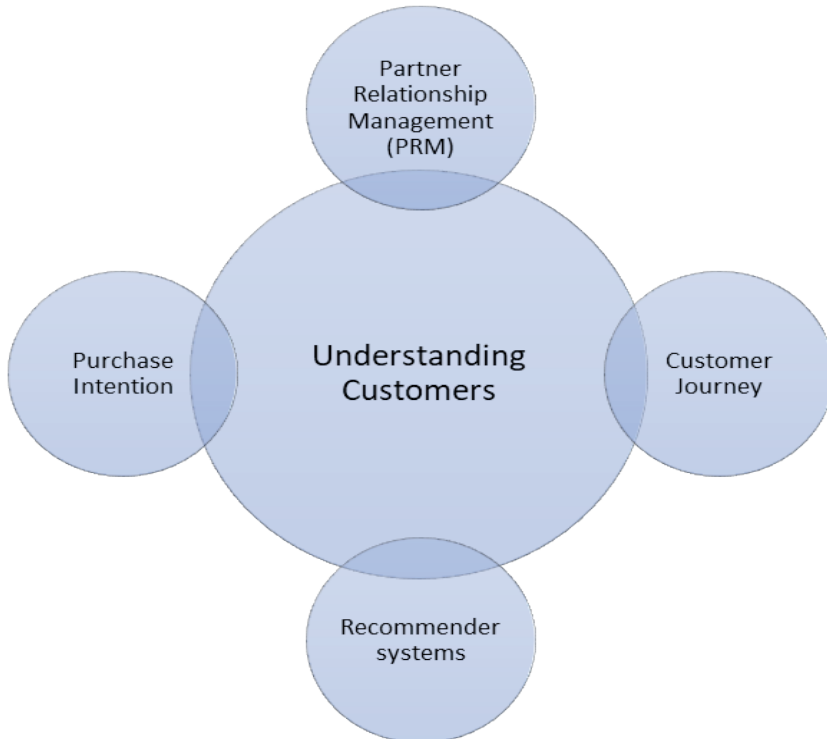


Figure 2. Elements that help understand customers in an AI world

Through AI-based Partner Relationship Management (PRM)

Before explaining Partner Relationship Management (PRM), it would be useful to mention Customer Relationship Management (CRM) because PRM solutions are mostly confused with CRM solutions (Chatterjee et al., 2023). Obtaining, managing, and using data collected from all customer contact points to support personalized marketing and sales define the scope of CRM mainly (Ledro et al., 2022). For companies developing and implementing CRM systems, it is almost impossible without AI-integrated technologies to use personality insight services, chatbots, or facial recognition today. To assimilate and analyze customer data, AI performs a fundamental task (Ledro et al., 2022). Artificial intelligence which is based on CRMs might be used in data strategies for customer knowledge management (Saura et al., 2021).

PRM, contrary to CRM, is used in B2B sales. Interactions between buyers and sellers in B2B become long-term and relationship-based (Karlinsky-Shichor & Netzer, 2019). Hence, customers are also partners of sellers contrary to B2C markets since the operations of customers with their suppliers affect the success of seller firms directly. To control and manage this network among partners, sales managers prefer to use Partner Relationship Management (PRM). According to Chatterjee (2023), PRM is defined as a partnership strategy to collaborate with markets and boost and strengthen networks with partners. It enables sales managers to optimize their costs, automate routine partner and business processes, increase sales in channels effectively, and accordingly enhance firm revenue thanks to sales enablement (Chatterjee et al., 2023). As can be seen, managers can reduce the operational workload for their representatives through PRM while increasing efficiency in the sales process such as providing needed product info only and designing after-sales supports through customer requests. The profit margin and revenue are also expected to improve at the end.

Though PRM is an effective system for managers to enhance their success in B2B sales, artificial intelligence is also suggested to be integrated with PRM by Chatterjee et al. (2023) beyond traditional PRM. Today's PRM acts as a tool for gathering valuable customer data to obtain new sales opportunities besides optimization of existing sales operations. AI-integrated PRM is expected to both gather and process the collected data to turn it into more useful forecasts and information in sales processes (Chatterjee et al., 2023). In return, this system promises a more customized service and quick responses for buyers by forecasting each customer's needs or better communication (Chatterjee et al., 2023). Beyond data collection and organizing, AI-based PRMs can understand tendencies in consumer behavior and produce useful knowledge from existing data which can enable decision-makers to create new sales strategies. Moreover, AI-integrated PRM would likely to help sellers make happy and profitable customers since the most frequent complaint of

buyers is the slow response time by their suppliers (Angevine et al., 2018). Finally, within the framework of understanding customers, it facilitates firms' understanding of the information need of prospective buyers deeply during the sales process and preparing the right offers quickly.

Through Understanding Purchase Intention

Interacting with the right customers having a willingness to pay for a product/service is one of the key indicators in B2B sales. Commercial product or service designs are generally complicated and differentiated, which contain several features having different applications and contributions to the value chain (Bountzoukos et al., 2023). Product needs, solution-based features, and expectations of customers might determine the price sensitivity of customers based on the value evaluation for offered products/services.

Offering a lower or higher price than buyers' willingness to pay without anticipating consumer behavior might result in sale failure. A high price prevents customers from closing sales. On the other hand, companies might miss the opportunity to get a better profit margin by setting a low price with cost-based pricing. AI-based tools have the ability to forecast via big data tracked and obtained from daily operations of customers and historical data. Moreover, computers using natural language understanding, which is a precious feature of AI, analyze text or speech including keywords customers used to make forecast the purchase probability (Paschen et al., 2020).

Sales reps tend to determine and adjust prices through case-based information collected during customer visits in a biased way by using their soft skills, so there can be variations in prices within the same customer segment that might harm the transparency customers want (Karlinsky-Shichor & Netzer, 2019). However, the research by McKinsey&Company (Angevine et al., 2018) evidence that digital tools such as having integration with AI technology can compare historical price offers and deals to identify a price having the highest possibility of resulting in the sale of a proposal.

In other respects, although understanding the intention of buyers within the pricing context, a complete automation of pricing processes in sales might cause reaching easy-to-acquire but less profitable customers (Karlinsky-Shichor & Netzer, 2019). The complexity of the pre-approach step in the sales process changes the direction of negotiation power from sellers to buyers, so this requires managers to adopt technological solutions to draw the attention of the customers (Rusthollkarhu et al., 2022). Therefore, companies need to be flexible and quick in their price offers. Dynamic pricing determined by identifying customers who perceive products as more valuable, here, can help achieve this (Bountzoukos et al., 2023). AI can identify which segment has a tendency or need the incentive to purchase a specific product (Fischer et al., 2022). In price-sensitive sectors especially, artificial intelligence can

automatically forecast the willingness to pay, and sensitivity toward personal incentives for specific products and accordingly assist the negotiation process by proposing prices specific to prospects (Fischer et al., 2022). As an example, Dell which is an American-based technology company uses AI-enabled tools to predict the prospective behavior of its potential customers to lead to offer and sell them different products at different prices by helping its sales reps to pinpoint high-quality leads (Paschen et al., 2020). Another study by Karlinsky-Shichor and Netzer (2019) shows that real-time price recommendations rather than generating manual quotes for sales representatives substantially increased profits. Consequently, by using AI in the pricing process, sales managers would likely to obtain more reasonable and profitable price offers for customers selected as potential ones through their actual purchase intention and price sensitivity.

Through Customer Journey

Customer experience has been conceptualized by Lemon and Verhoef in 2016 which is also named as journey consisting of a search, pre-transaction, transaction, and post-transaction steps (Hoyer et al., 2022). The customer journey concept analyzes preferences and experiences in the pre-purchase step of a sale by using customer relationship management (CRM) systems and web analytics within the customer journey concept (Folstad and Kvale, 2018). Relatedly, the pre-transaction step, which consists of understanding customers as this chapter has focused on, interests in need recognition, searching, and consideration of buyers (Rusthollkarhu et al., 2022). Customer journey management, at this point, is not only related to the evaluation of the seller's offer but also its pattern, communication with sales reps, and interaction with the industry (Rusthollkarhu et al., 2022).

According to a survey by Boston Consulting Group (Tordjman et al., 2022), companies caring about customer experience and sales path tend to create more value for their customers by 55% and gain more revenue by 195% compared to their peers. On the other hand, difficulties in the phases of design, control, and management during customer journeys push firms through digital paths (Lundin & Kindström, 2023). It means this is a mutual process.

Companies in some industries, such as enterprise technology, might intensively struggle with strategy development that is focused on customers because they tend to have limited knowledge about target customers compared to B2C companies (Angevine et al., 2018). Sales representatives can gain valuable insight into customer experiences via interaction while customer journeys are evaluated by digital footprints today (Ancillai et al., 2019). One reason is the shifting customer behavior. A McKinsey survey about customer decision journeys in 2006 shows that 76% of B2B buyers prefer to speak

to a sales representative only when the product or service they will buy is completely new (Angevine et al., 2018). Moreover, 85% of the respondents indicate that they do not need in-person support while making a purchase with familiarized and routine products or services (Angevine et al., 2018). It means that sales managers might direct their representatives to new customers rather than routine buyers toward actual customer needs.

As seen in AI's role in PRM and the purchase intention of consumers, AI technology has also many functions in customer journey management in the B2B market. There exist many tools assisting managers and fulfilling AI functions in stages of the sales process (Rusthollkarhu et al., 2022). Customer journeys, in detail, are based on a continuous relationship with customers via multiple touchpoints, which mean any digital and physical interaction by search engines, websites, or digital platforms with businesses in the contemporary B2B world (Lundin & Kindström, 2023). The importance of touchpoints providing customized communication and digital experience in B2B customer journeys is scaling up. (Schatz & Morelli, 2021). Though it is hard to mention all, today, some common digital touchpoints are used, some of which are AI-based software platforms (Paschen et al., 2020), chatbots (Fischer et al., 2022), websites (Li & Kannan, 2014), and recommender systems (Rusthollkarhu et al., 2022).

1. AI-based Software Platforms

To reach potential customers, managers need to know them and then segment which is really costly and time-consuming. In the traditional sales funnel of Dubinsky, managers manually filter out if a business is a prospect for their company or not to lead the sales team effectively (Prieto and Braga, 2021). However, AI-based tools get the relevant data quickly, measure their potential and provide a reliable output on behalf of companies. They are also prepared to process all kind of data – structured or not – to classifying customers according to several criteria. (Paschen et al., 2020). For instance, an AI-integrated software of SocailMiningAi filters the social posts of customers to measure the purchase intention of prospective customers in real time, which enables sellers to reach the right customers at the right time (SocialMiningAi, 2023). Thanks to the ability to process both text and image data such as social media posts and photos, AI can easily prospect customer profiles (Paschen et al., 2020). Another example using AI-based is Natural language processing (NLP). This technology in AI offers the ability to understand the feelings, tones, and emotions of online conversations (Huff & Bonde, 2022). As a complementary feature, programs writing different contents within the AI context can also create original articles about preferred products by customers to promote offerings and reduce personnel costs (Moradi & Dass, 2022).

As well as new customers, churn rate, meaning the rate of outgoing

customers, is also an important metric in the B2B context (Moradi & Dass, 2022). The reasons for churn might vary from unsatisfactory product experience to the alternatives in the market (Fahli, 2021). The application of AI in software platforms could measure this possibility. Similarly, these could find alternative solutions to return lost ones. To give an example, they can predict what type of incentive or communication design could have a chance to regain a buyer. Since even the loss of one customer might result in a crucial economic cost for the businesses (Schatz & Morelli, 2021), the use of technology would be a good supporter to predict the churn rate and fixing it before suffering.

2. Chatbots

New digital touchpoints are shaping the way to engage with businesses from scratch (Tordjman et al., 2022). Chatbots are one example proving this change. Chatbots are tools enabling customers to get personalized recommendations via 24/7 support, and answers to their non-complex questions instantly without any real-time assistance from salespersons (Fischer et al., 2022). Nowadays, chatbots are tried by different industries as a part of customer touchpoints since these tools tend to improve the customer experience during searching for products and related information about them (Kushwaha et al., 2021). Especially AI chatbots, which are advanced dialogue systems, help automate the entire business processes (Nuruzzaman & Hussain, 2018). For instance, it automates customer journey management activities by guiding customers online in the pre-approach step of sales management (Rustholkarhu et al., 2022). This technology can generate product demos, write customized emails, create guides on the company's website at less cost, and know customer profiles to find upsell opportunities for sales teams (Tordjman et al., 2022). Through these benefits, companies might track customer tendencies, search history, and real-time needs easily to design their products/services accordingly and determine their sales activities. It is also possible to meet needs better than traditional ways. From the customer perspective, if the process could serve consistently, customers can also interact with this kind of touchpoint more smoothly for the sake of themselves (Lundin & Kindström, 2023).

Probably the most popular AI chatbot is ChatGPT nowadays. It has launched in 2022 as an open-source language model developed by an OpenAI company (Ajevksi et al., 2023). This technology can help manage sales processes, detect patterns of chatbot users, automate routine customer services, or improve existing products by providing real-time data about customers' behavior and trends (George et al., 2023). For instance, in a B2B context, sales managers can obtain real-time customer clicks and time spent to understand their journey of them. Products can sometimes be complex and have technical details difficult to comprehend. For customers having difficulty in the search process, ChatGPT can generate technical content and filter industry-based

properties of products on behalf of companies (Chui et al., 2022). Another practice with ChatGPT is predicting the next word of customers based on their historical data (Ajevksi et al., 2023). This advanced feature can gain valuable insight for salespeople to lead conversations during their face-to-face meetings. It can also identify pain points during the sales processes to fix shortcomings of related stages with a minimum cost (Novo et al., 2023). Finding the bottlenecks could be challenging and costly for suppliers while involving the process in person, but AI technologies could achieve this task automatically. Lastly, ChatGPT has a technology to find accurate answers to complex questions and solutions without any human touch compared to basic chatbots (George et al., 2023). This facilitates focusing on tasks that potential buyers need a human touch.

3. Websites

Besides customers, suppliers also benefit from the data obtained by AI-based tools can get customer insights. Websites are significant channels for this. Companies can use their own websites to reach customers, track their experiences, and responses such as website visit history, click on the number of ads, search links, or referral links (Li & Kannan, 2014). As mentioned previously in this chapter, reaching the right customer is crucial to reduce the cost and time spent by sales teams. For example, B2B sales managers can use NLP as an extension of AI to cluster client opinions and reevaluate their existing target by analyzing website data (Moradi & Dass, 2022). This kind of analysis could generate a demand forecast quickly from data for sales teams to move forward to the next stage after the “pre-approach” in the sales funnel for customers. Traditional meetings and searching for the actual intention of prospects before talking about preparing offers and deals are expensive processes. If companies let customers use their websites to compare their products and references with the others in the sector transparently, some prospects go out of focus automatically. In the end, it means reducing the salesforce expenditure obviously.

Moreover, from time to time, companies might face difficulties to turn their prospects into actual ones. Re-targeting which is a technique encouraging customers to rotate customers toward the sales process again, tends to facilitate capturing them by looking at the website click history with the role of initial interaction point for prospects (Moradi & Dass, 2022). For instance, tailored content could be created thanks to the collected data from visitors of websites (Moradi & Dass, 2022).

4. Recommender Systems

Recommender systems, like others mentioned above, could contribute to managing customer journeys. They have customized service support by both learning from historical data and interpreting the existing data to make

strong predictions (Zhang et al., 2021). Recommendation engines are able to detect not only the purchase history of firms but also the size or operational complexity of their organizations (Vlachos & Vassilios, 2016). Accordingly, based on customer profiles, AI analyzes and presents relevant products (Fischer et al., 2020). As an example, ServiceMax, which is a management software for technical issues about equipment and infrastructure businesses, draws a suitable customer journey via AI for customers visiting the website of the supplier (Paschen et al., 2020). The system perceiving the current user activity on the company's webpage can make a suggestion for this user to view a related product. Even if it does not turn into a purchase, companies could get rid of a segment that is not willing to pay for their products/services practically.

Though AI can automatize many processes, interaction with sales professionals is preferred when especially products have technical and complex features. For customers preferring this kind of interaction, recommender systems provide support to arrange meetings by finding the right time and the way of communication (Rustholkarhu et al., 2022).

AI-Based Digital Platforms	Benefits
AI-based Software Platforms	<ul style="list-style-type: none"> • Finding the right customers • Measuring purchase intention • Understanding the feelings, tones, and emotions of customers
Chatbots	<ul style="list-style-type: none"> • Personalized recommendations for customers • Designing need-based products/services • Less costly interaction
Websites	<ul style="list-style-type: none"> • Tracking customer responses and experiences • Reevaluation of existing target customer • Re-targeting
Recommender Systems	<ul style="list-style-type: none"> • Eliminating non-profitable customers • Offering the right products at the right time • Assisting in case of need for face-to-face interaction

Some Challenges with AI in B2B Sales Management

Besides lots of benefits for sales managers, AI-based tools have some limitations and challenges as well to understand customers. Companies operating in the B2B world such as industrial firms especially live through those while integrating their companies into AI technologies (Lundin & Kindström, 2023). Challenges faced by companies can be basically listed as data-based, economical, and readiness.

One of the challenges is related to dependence on data too much. The collection of data from customers is more complex in the B2B context than in B2C since there are multiple stakeholders and sources (Dwivedi and Wang, 2022), so gathering them to arrange and interpret might be difficult. Also,

the complexity in the interpretation of outcomes, standardizing, and sharing collected data across the whole organization may create obstacles for companies due to the large volume of big data. Thus, due to the data-based problems, AI solutions have a risk to fail and misleading sales managers in their decision-making process. Additionally, small, and medium-sized enterprises (SMEs), especially, can struggle with meeting the necessities of different systems such as appropriate data structure and managing it. The data of companies might be scattered or in different formats which are inappropriate with AI tools (Novo et al., 2023). If the data is not prepared for AI to process and learn from it, it might be a dead investment for companies. Also, there might be inadequate storage or insufficient infrastructure to keep and backup the data, which leads to a data management problem (Novo et al, 2023). Not to face such a risk, the entire operations of information management within the business should be checked at the beginning.

The other difficulty comes from the economic side. Though AI-based technologies provide cost-saving, the mass introduction of AI technologies could shake organizations economically because they require significant investments and changes to working practices (Dwivedi et al., 2021). Besides initial cost, new demands of potential customers about digital tools might create an unexpected cost. Potential buyers are more powerful and demanding for complex combinations of products/services than in the past (Singh et al., 2019). Customers force suppliers to enhance their existing technologies if they like using AI-based tools and exploring new functions. An enjoyable interface and navigation process of them, for example, can be expected since it affects the process positively for them (Kushwaha et al., 2021). Thus, companies need to be able to provide such an experience for their prospects. If they cannot, it would be safer to wait until be ready to implement a holistic experience for users than jump into the AI pool. On the other hand, in an interview of research by Rodriguez et al. (2020), the results say that the accessibility of information sources in the digitalization of complex sales processes in a B2B context is critical. For example, some interviewees emphasize that some companies do not invest in using customer databases, but salespeople make an effort to gather information via social media or other digital platforms manually when they do not have enough time (Rodriguez et al., 2020). This result shows that it would be an opportunity for sales managers that they can invest in digital tools such as AI-integrated ones if they get the green light from their sales representatives to use the technology readily. Since their businesses will not pay too much for adaptation and motivation processes for reps, it would be more profitable for companies than pushing and training salespeople. As required an initial investment cost, maintenance has also a share in the costs of organizations using AI. AI-based technologies have technical details, so it might be hard to update frequently and fix bugs. Since potential customers

visiting the websites or digital platforms of suppliers expect uninterrupted service without considering the challenge of maintenance costs. Rapid responses toward any bug and breakdown in digital channels interacted with customers should be provided to sustain a stable digital experience and increase their loyalty (Gavin et al., 2020).

Lastly, and one of the most basic challenges for businesses is readiness. As mentioned in the chapter, B2B markets have a high dependence on stakeholders compared to B2C markets. Therefore, companies need to ensure that AI technologies they consider using should be accepted by both their organizations, sales representatives, and potential buyers (Moradi & Dass, 2022). Companies should establish a strong engagement for their end-users, which can be called as direct buyers in B2B markets, in the early stages of customer journeys to adapt them to new digital solutions in later stages (Lund & Kindström, 2023). Additionally, the outcomes of the systematic review of Di Vaio et al. (2020) suggest that companies must be careful since the success of AI technologies highly depends on the level of knowledge among users. Before investing in AI-integrated applications, companies may prefer training their departments and providing enough knowledge about how to take advantage of these technologies for their customers (Moradi & Dass, 2022).

DISCUSSION

Digitalization and its extensions like digitization and artificial intelligence are leading a paradigm shift today. The adoption of software and techniques using AI is closely related to this shift due to the role of optimization and efficiency (Saura et al., 2021). The developments in Artificial intelligence (AI), which represents an advanced technology having the capacity to learn from historical data and to enhance itself continuously (Cyvoct & Fathi, 2019) are accelerating the necessity of digitalization in many sectors. Though B2C markets actively use data-driven analytic tools for a while, B2B managers have recently started to turn their faces toward a data-based world (Atkins et al., 2019). While sales forces in B2B markets were investing an enormous time to understand the factors affecting buying decisions formerly (Schatz & Morelli, 2021), several developments in AI are leading a change in getting information and insight about prospects today (Huff & Bonde, 2022). It can be stated that AI tools play a role in assistants for sales managers.

With the acceleration of digitalization after Covid-19 and economic-based dynamics in B2B, the first stages in the sales funnel became more important than ever. As mentioned at the beginning, the sales process starts with understanding customer needs and expectations to focus on the right segment for sellers. However, this is not a simple task for sales managers due to the high number of stakeholders. At this point, some AI-integrated tools to enable managers to understand customers during their sales processes

are Partnership Management Systems, chatbots, and the websites of their companies. Software programs having an integration with AI technology could find the right customers and measure willingness to pay for prospects by analyzing their feelings, manners, tones, and emotions of them. It is very useful for salesforces because they spend a serious time for identifying all of these. Some of which are almost impossible for managers to get in a structured way. Chatbots communicating with customers without an initial human touch could serve for customized recommendations and designing B2B products/services through customers' needs and responses with a minimal cost. Similarly, websites and recommender systems can provide some opportunities against competitors of sellers in the market. For instance, they can track user activities and prepare effective offers by evaluating target segment profitability.

While having such a complex technology, it is inevitable to face some challenges. For instance, AI tools need a high amount of incremental costs. When demanding customers are included in the situation, companies might be inadequate to meet the necessities required by the involvement of AI in the B2B sales world. Secondly, the digitalization process is data-driven rigidly. Hence, any disconnection or bug in the company's data has an incline to interrupt the running of AI systems. Last but not least, organizations need to feel ready to implement complicated digitalization tools. Otherwise, the investment might result in a failure rather than a success story for sellers.

Many specialists claim that customer management will be closely dependent on AI-based technologies (Ledro et al., 2022). Still, as required by B2B dynamics, buyers want long-term relationships, bulk buying, and rapid solutions at the same time. Overall findings and references evidence that intervention by salespeople might be useful to cover the shortcomings of AI technology. Moreover, it should be remembered that, still, human interaction is preferred by many customers during sales processes (Fahli, 2021). Consequently, despite the limitations of AI and the customer need for human interaction, it can be expected that companies in the B2B world will be forced to adapt to their all routine tasks, maybe medium-level operations, to survive in today's competitive environment in the upcoming days.

Finally, for future research, some gaps about implementation of AI technologies could be investigated. The optimal solutions to be successful in sectors for different type of organizations for several reasons might vary. First of all, industrial and large-scale companies could start investing in learning and adapting some features of AI technology into their particular operations while it might be near to impossible to understand and implement advanced technologies for SMEs or Non-governmental Organizations (NGOs) due to cost-based limitations and their organizational incapacibilities. For instance, their data structure and number of members who can contribute to analytic

side may not meet the requirements of AI. Also, managers should decide whether sales forces and other business departments are ready to actively use these complicated tools. If they are not ready, managers might want to think about planning a training program for them. Or, businesses might rethink according to their financial resources, organizational culture, or the number of employees. In this sense, researchers could focus on how these organizations should make a preliminary preparation before purchasing AI-based software and struggling with implementing them or should they really invest in advanced technologies for their businesses.

REFERENCES

- A. Shaji George, & A. S. Hovan George. (2023). A Review of ChatGPT AI's Impact on Several Business Sectors. *Partners Universal International Innovation Journal*, 1(1), 9–23. <https://doi.org/10.5281/zenodo.7644359>
- Ajevski, M., Barker, K., Gilbert, A., Hardie, L., & Ryan, F. (2023, May 22). ChatGPT and the future of legal education and practice. *The Law Teacher*, 1–13. <https://doi.org/10.1080/03069400.2023.2207426>
- Ancillai, C., Terho, H., Cardinali, S., & Pascucci, F. (2020). Advancing social media-driven sales research: Establishing conceptual foundations for B-to-B social selling. *Industrial Marketing Management*, 293-308. <https://doi.org/10.1016/j.indmarman.2019.01.002>
- Angevine, C., Catlin, T., Chappuis, B., Esber, D., Harrison, L., Hatami, H., Jakobsen, S., Liu, W. W., Maechler, N., Mahdavian, M., McLellan, K., & Naik, K. (2018). (rep.). *Digital Sales &*
- Analytics: Driving above-market growth in B2B (pp. 1–73). McKinsey&Company. Retrieved May 2023, from <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/digital-sales-and-analytics-compendium>.
- Bag, S., Gupta, S., Kumar, A., & Sivarajah, U. (2020). An integrated artificial intelligence framework for knowledge creation and B2B marketing rational decision-making for improving firm performance. *Industrial Marketing Management*, 178-189. <https://doi.org/10.1016/j.indmarman.2020.12.001>
- Berger, T., Seidenstricker, S., Fischer, H., & Holopainen, T. (2023, April 4). Artificial Intelligence in Sales: Chatbots and Customer Profiles. *Talk Turku Amk*. Retrieved June 11, 2023, from <https://talk.turkuamk.fi/myynti/artificial-intelligence-in-sales-chatbots-and-customer-profiles/>
- Bongers, F. M., Schumann, J. H., & Schmitz, C. (2021, April 3). How the introduction of digital sales channels affects salespeople in business-to-business contexts: a qualitative inquiry. *Journal of Personal Selling & Sales Management*, 41(2), 150–166. <https://doi.org/10.1080/08853134.2021.1906260>
- Bountzoukos, E., Timo Teger, Aadroun, S., & Shats, M. (2023). (rep.). *The Future of Sales series presents: Three trends affecting Manufacturing Sales* (p. 1). Deloitte . Retrieved May 2023, from <https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/deloitte-digital/deloitte-nl-future-of-sales-manufacturing.pdf>.
- By Liz Harrison , Gavin, R., Plotkin, C. L., & Stanley, J. (2020). (rep.). *How B2B sales have changed during COVID-19*. McKinsey&Company. Retrieved May 2023, from <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/how-b2b-sales-have-changed-during-covid-19>.
- Chatterjee, S., Chaudhuri, R., Vrontis, D., & Kadic-Maglajlić, S. (2023). Adoption of AI integrated partner relationship management (AI-PRM) in B2B sales channels: Exploratory study. *Industrial Marketing Management*, (13), 164-173. <https://>

doi.org/10.1016/j.indmarman.2022.12.014

- Chintalapati, S., & Pandey, S. K. (2022). Artificial intelligence in marketing: A systematic literature review. *International Journal of Market Research*, 64(1), 38-68. <https://doi.org/10.1177/14707853211018428>
- Chui, M., Roberts, R., & Yee, L. (2022). (rep.). *Generative AI is here: How tools like ChatGPT could change your business* (pp. 1–5). London: McKinsey&Company.
- Cyvoc, A., & Fathi, S. (2019). *Artificial Intelligence in Business-to-Business Sales Processes* [Master thesis].
- Dasanayaka, S. W. S. B., Al Serhan, O., Glambosky, M., & Gleason, K. (2020). The business-to-business relationship: Examining Sri Lankan telecommunication operators and vendors. *Journal of Business & Industrial Marketing*, 35(6), 1069–1087.
- De Caigny, A., Coussement, K., Verbeke, W., Idbenjra, K., & Phan, M. (2021, November). Uplift modeling and its implications for B2B customer churn prediction: A segmentation-based modeling approach. *Industrial Marketing Management*, 99, 28–39. <https://doi.org/10.1016/j.indmarman.2021.10.001>
- Deveau, R., Griffin, S. J., & Reis, S. (2023). (rep.). *AI-powered marketing and sales reach new heights with generative AI* (pp. 1–10). McKinsey&Company. Retrieved May 2023, from <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/ai-powered-marketing-and-sales-reach-new-heights-with-generative-ai>.
- Di Vaio, A., Palladino, R., Hassan, R., & Escobar, O. (2020, December). Artificial intelligence and business models in the sustainable development goals perspective: A systematic literature review. *Journal of Business Research*, 121, 283–314. <https://doi.org/10.1016/j.jbusres.2020.08.019>
- Driedonks, B., Hostetter, S., & Paulowsky, R. (2021). (rep.). *By the numbers: What drives sales-growth outperformance* (pp. 1–12). McKinsey&Company. Retrieved May 2023, from <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/by-the-numbers-what-drives-sales-growth-outperformance>.
- Dwivedi, Y. K., & Wang, Y. (2022). Guest editorial: Artificial intelligence for B2B marketing: Challenges and opportunities. *Industrial Marketing Management*, 105, 109-113. <https://doi.org/10.1016/j.indmarman.2022.06.001>.
- Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A., Galanos, V., Ilavarasan, P. V., Janssen, M., Jones, P., Kar, A. K., Kizgin, H., Kronemann, B., Lal, B., Lucini, B., . . . Williams, M. D. (2021, April). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 57, 101994. <https://doi.org/10.1016/j.ijinfomgt.2019.08.002>.
- El Fahli, M. B. (2021). *The Impact of Artificial Intelligence on the B2B Sales Funnel* [Bachelor's Thesis].

- Fischer, H., Seidenstricker, S., Berger, T., & Holopainen, T. (2022). Artificial Intelligence in B2B Sales: Impact on the Sales Process. *Artificial Intelligence and Social Computing*, 28, 135-142. <https://doi.org/10.54941/ahfe1001456>.
- Følstad, A., & Kvale, K. (2018, February 8). Customer journeys: a systematic literature review. *Journal of Service Theory and Practice*, 28(2), 196–227. <https://doi.org/10.1108/jstp-11-2014-0261>.
- Fraccastoro, S., Gabrielsson, M., & Pullins, E. B. (2021, August). The integrated use of social media, digital, and traditional communication tools in the B2B sales process of international SMEs. *International Business Review*, 30(4), 101776. <https://doi.org/10.1016/j.ibusrev.2020.101776>.
- Kushwaha, A. K., Kumar, P., & Kar, A. K. (2021, October). What impacts customer experience for B2B enterprises on using AI-enabled chatbots? Insights from Big data analytics. *Industrial Marketing Management*, 98, 207–221. <https://doi.org/10.1016/j.indmarman.2021.08.011>.
- Li, H. A., & Kannan, P. (2014, February). Attributing Conversions in a Multichannel Online Marketing Environment: An Empirical Model and a Field Experiment. *Journal of Marketing Research*, 51(1), 40–56. <https://doi.org/10.1509/jmr.13.0050>.
- Moradi, M., & Dass, M. (2022, November). Applications of artificial intelligence in B2B marketing: Challenges and future directions. *Industrial Marketing Management*, 107, 300–314. <https://doi.org/10.1016/j.indmarman.2022.10.016>.
- Müller Csernetzky, P., Keiderling, F., Kowalkowski, C., Østerlund, M., West, S., & Stoll, O. (2020). Adjusting customer journey mapping for application in industrial product-service systems. *International Journal of Business Environment*, 11(3), 275. <https://doi.org/10.1504/ijbe.2020.10032987>
- Novo, E., Ribeiro, H. N. R., & Martins, C. A. D. (2023, April 27). HE IMPORTANCE OF BUSINESS INTELLIGENCE TOOLS IN THE DIGITAL TRANSITION ERA: THE PRINTRIA CASE [Conference].
- Nuruzzaman, M., & Hussain, O. K. (2018, October). A Survey on Chatbot Implementation in Customer Service Industry through Deep Neural Networks. 2018 IEEE 15th International Conference on E-Business Engineering (ICEBE). <https://doi.org/10.1109/icebe.2018.00019>.
- Paschen, J., Wilson, M., & Ferreira, J. J. (2019). Collaborative intelligence: How human and artificial intelligence create value along the B2B sales funnel. *Business Horizons*, (63), 403-414. <https://doi.org/10.1016/j.bushor.2020.01.003>.
- Prieto, F., & Braga, H. F. T. (2021). Contribution of Artificial Intelligence in B2B Sales: A Danfoss Case Study. *International Journal of Advanced Engineering Research and Science (IJAERS)*, (13), 164-173. <https://doi.org/https://dx.doi.org/10.22161/ijaers.84.27>
- Rodríguez, R., Svensson, G., & Mehl, E. J. (2020, August). Digitalization process of complex B2B sales processes – Enablers and obstacles. *Technology in Society*, 62, 101324. <https://doi.org/10.1016/j.techsoc.2020.101324>.

- Rustholkarhu, S., Toukola, S., Aarikka-Stenroos, L., & Mahlamaki, T. (2022). Managing B2B customer journeys in digital era: Four management activities with artificial intelligence-empowered tools. *Industrial Marketing Management*, 241-257. <https://doi.org/10.1016/j.indmarman.2022.04.014>.
- Saura, J. R., Ribeiro-Soriano, D., & Palacios-Marqués, D. (2021). Setting B2B digital marketing in artificial intelligence-based CRMs: A review and directions for future research. *Industrial Marketing Management*, 161-178. <https://doi.org/10.1016/j.indmarman.2021.08.006>.
- Schatz, S., & Morelli, F. (2021). Artificial Intelligence in B2B sales – An approach to predict customer churn. *Anwendungen und Konzepte der Wirtschaftsinformatik*, (13). <https://doi.org/10.26034/lu.akwi.2021.3298>
- Singh, J., Flaherty, K., Sohi, R. S., Deeter-Schmelz, D., Habel, J., Meunier-FitzHugh, K. L., Malshe, A., Mullins, R., & Onyemah, V. (2019). Sales profession and professionals in the age of digitization and artificial intelligence technologies: Concepts, priorities, and questions. *Journal of Personal Selling & Sales Management*, 39, 2-22. <https://doi.org/10.1080/08853134.2018.1557525>.
- Socialminingai: The most intelligent real-time customer search and Discovery Platform. (2023). Retrieved from <https://funnelai.com/>.
- Tordjman, K. L., Poddar, B., Robnett, S., Bearez, J.-B., & Ogata, K. (2023). (rep.). *Building Customer Experience for the Future* (pp. 1–16). Boaton, Massachusetts: Boston Consulting Group.
- Vlachos, M., Vassiliadis, V. G., Heckel, R., & Labbi, A. (2016, September). Toward interpretable predictive models in B2B recommender systems. *IBM Journal of Research and Development*, 60(5/6), 11:1-11:12. <https://doi.org/10.1147/jrd.2016.2602097>.
- Vladimirovich, K. M. (2020). Future Marketing in B2B Segment: Integrating Artificial Intelligence into Sales Management. *International Journal of Innovative Technologies in Economy*. https://doi.org/10.31435/rsglobal_ijite/30092020/7149.
- Wengler, S., Hildmann, G., & Vossebein, U. (2021, January 4). Digital transformation in sales as an evolving process. *Journal of Business & Industrial Marketing*, 36(4), 599–614. <https://doi.org/10.1108/jbim-03-2020-0124>.
- Witell, L., Kowalkowski, C., Perks, H., Raddats, C., Schwabe, M., Benedettini, O., & Burton, J. (2020, August). Characterizing customer experience management in business markets. *Journal of Business Research*, 116, 420–430. <https://doi.org/10.1016/j.jbusres.2019.08.050>.
- Zhang, Q., Lu, J., & Jin, Y. (2020, November 1). Artificial intelligence in recommender systems. *Complex & Intelligent Systems*, 7(1), 439–457. <https://doi.org/10.1007/s40747-020-00212-w>.

Chapter 3

REFLECTIONS OF POSTMODERNISM IN PENELOPE FITZGERALD'S "*THE BLUE FLOWER*": A HISTOGRAPHIC NOVEL

Melike SULTAN ÇİÇEKLER¹



¹ Lect. Melike Sultan Çiçekler, Kahramanmaraş İstiklal
University Department of Common Lessons,
email: melike.sultan91@gmail.com, ORCID ID: 0000-0001-8285-287X

Introduction

The Blue Flower by Penelope Fitzgerald stands as a remarkable work of the postmodern literature that combines history, fiction, and philosophy. Linda Hutcheon, a key literary theorist, suggests that postmodernism cannot simply be used as a synonym for the contemporary (Hutcheon, 1988, p. 4). Supporting Hutcheon's view, Fitzgerald, in her novel, fulfills the three definitions by Edmund Smyth to be considered a postmodern work. For Smyth, postmodernism indicates a cultural condition, a set of textual and artistic characteristics, and a periodizing description (Smyth, 1991, p. 9).

Published in 1995, the novel inspires readers with its elusive narrative, rich character development, and exploration of the human condition. The novel takes place in late 18th century Germany and explores the life of a romantic German poet, Friedrich von Hardenberg¹. Fritz is split between his love for a much younger woman, Sophie, and his passion for poetry. With Fritz's personal and artistic struggles, the novel offers a unique perspective on the cultural and intellectual mindset of the time. Although Fitzgerald's earlier novels are characterized by the use of linear narration and natural authority, in *The Blue Flower*, readers are well aware of the narrator's textual existence and control (Lu, 1999).

The novel creates a gap between reality and fantasy by combining fictional elements, such as dialogues and interior monologues, with historical characters and events, like the effects of the French Revolution on Germany. The postmodern features of the novel, including metafictional techniques and fragmented structure, invite the reader to question the conventional writing style of historical novels. These features make the novel quite distinctive, as many critics agree. However, the novel is not difficult to read despite its fragmented structures and metafictional elements, it is rather simple, yet elegant, which makes Fitzgerald's art unique. Furthermore, the novel's exploration of the themes of love, loss, and identity adds to its literary value. Additionally, *The Blue Flower* illustrates Fitzgerald's deep engagement with philosophical and historical themes, as well as its postmodern notions. The pursuit of *the blue flower*, by Fritz, symbolizes his quest for absolute truth and beauty, mirroring the ideals of German Romanticism. Fitzgerald's interpretation of the history serves to explore the complex relationship between the past and the present, inviting readers to question the objectivity of historical accounts.

By blending postmodern elements, *The Blue Flower* evolves into not only a historical novel, but a representation of history itself. The fiction in the book causes readers to form bonds with the characters, and the historical events provide a glimpse into understanding the German culture of the time and the

¹ Called Fritz in the novel.

romanticism movement. Finally, a harsh transition from fiction to historical reality awakens the readers to the fact that they are reading a fictionalized history.

1. A Brief Background of the Author and the Novel

“Writers like writing about other writers.”

Penelope Fitzgerald, 1996

Penelope Fitzgerald, born in 1916 and passed away in 2000, was a contemporary British writer, known for her “distinctive and elegant style” (Akbay & Memmedova, n.d., p. 115). She has been “acclaimed as one of the finest, if most enigmatic, British novelists of the late twentieth century” (Lee, 2013, p. 1). She wrote nine novels in total, publishing her first novel when she was sixty. Her novels are; *The Golden Child* (1977), *The Bookshop* (1978), *Offshore* (1979), *Human Voices* (1980), *At Freddie’s* (1982), *Innocence* (1986), *The Beginning of Spring* (1988), *The Gate of Angels* (1990), and *The Blue Flower* (1995) (“Penelope Fitzgerald,” 2023), respectively². Her final work of fiction at the age of eighty, *The Blue Flower*, won the prestigious US National Book Critics’ Circle Award (Lee, 2013, p. 1). Among her novels, she wrote a collection of short stories, three biographies, and numerous critical essays and book reviews. Her works, according to Hermione Lee are “distinguished by their acute wit, deft handling of emotional tone, and unsentimental yet deeply felt commitment to portraying the lives of outsiders” (Lee, 2013, p. 1).

The Blue Flower, Fitzgerald’s final novel published in 1995, won a major award in America and made her an international name, is considered a “literary biography as well as a historical novel” (Akbay, 2021, p. 6). The novel, “straddling the line between fiction and biography, and blending poetic symbolism with social realism, offers a tender and often humorous portrait of a young artist in love” (Savu, 2006, p. 69). The novel has fifty-nine tiny chapters, “like short songs in a song cycle, each with a fragment of speech for a title” (Lee, 2013, p. 482). Fitzgerald had been thinking about the subject of *The Blue Flower* for years, and began to research it in 1991 (Lee, 2013, p. 466). Lee, in her biography of Fitzgerald, writes that the long years of research was due to her health issues, including asthma, severe hay fever, arrhythmia, and high blood pressure, as she was in her mid-seventies (Lee, 2013, p. 466). The novel deals with the early life of the German Romantic poet, Friedrich von Hardenberg, under the pseudonym Novalis, but mentioned Fritz in the novel, meaning “clearer of new land” (Fitzgerald, 2001, p. 471). One should note that the novel does not mention the poet’s life after he actually became a recognized poet, but rather his early life touching on specific scenes, fictionally, and the relationships he has with other characters.

² Her four novels *The Bookshop*, *The Beginning of Spring* and *The Gate of Angels* were shortlisted for the Booker Prize, but her third novel *Offshore* won the Booker Prize the year it was published.

The German Romantic period is better mentioned briefly, as the novel is a historical and fictional treatment of Novalis. In the late 18th and 19th centuries, Germany experienced a literary and cultural movement known as the German Romantic period. It was a reaction to the Age of Enlightenment, which emphasized science, reason, and the capacity of the individual mind. The Romantics, in contrast, were drawn to the power of the imagination, intuition, and feelings. The movement was distinguished by its focus on the individual, especially on their emotional and spiritual lives. The Romantics often found inspiration in nature. Their works reflected a desire to break free from the constraints of reason and rationality and connect with something deeper and more meaningful (Behler, 1993).

The real-life character in the novel, Fritz, is indeed a romantic, which is seen through the novel from the beginning to the end; he is searching for meaning via the search of *the blue flower* with the pursuit of Sophie, as he calls her his “*Philo-Sophie*”. A question comes to mind at this point, “Why would a British writer bother herself with a foreign poet?”. In her biography, Hermione Lee puts forward that “there is no evidence that German Romanticism had been a long interest of Fitzgerald’s. Nor had she been in the habit of writing novels about writers” (Lee, 2013, p. 472). So, what was it that pushed her to write about Novalis? Lee, later points out some clues about Fitzgerald’s interest in him: “she had once heard, in a church in Bonn, a musical setting of Novalis’s mystic poems, *Hymns to the Night*, and then began to look into his life” (Lee, 2013, p. 472). Not only did these poems pave her way into writing Novalis’s early life, but also D.H. Lawrence’s novel *The Fox* (Lee, 2013, p. 473). Lee, also pens down that the story of *the blue flower* lies at the heart of Novalis’s Romantic novel, “*Heinrich von Ofterdingen*” (Lee, 2013, p. 473), which Fitzgerald writes “was never finished” (Fitzgerald, 2001, p. 471).

Though the novel is a fictional historical biography of the German poet, the character Sophie is of importance, as she is the source for Fritz’s pursuit of meaning. Fritz, as well as in real life, is writing a story about finding *the blue flower*, *The Truth*. We come across with *the blue flower*, the recurrent motif for his ambition and passion for the meaning, before he even meets Sophie in Chapter 17, “*What is the meaning?*” (Fitzgerald, 2001, p. 329), when he has just written the beginning of the story and is reading it to Karoline:

His father and mother were already in bed and asleep, the clock on the wall ticked with monotonous beat, the wind whistled outside the rattling window-pane. From time to time the room grew brighter when the moonlight shone in. the young man lay restlessly on his bed and remembered the stranger and his stories. “It was not the thought of the treasure which stirred up such unspeakable longings in me,” he said to himself. “I have no craving to be rich, but I long to see the blue flower. It lies incessantly at my heart, and I can imagine and think about nothing

else. Never did I feel like this before. It is as if until now I had been dreaming, or as if had carried me into another world. For in the world I used to live in, who would have troubled himself about flowers? Such a wild passion for a flower was never heard of there. But where could this stranger have come from? None of us had ever seen such a man before. And yet I don't know how it was that I alone was truly caught and held by what he told us. Everyone else heard what I did, and yet none of them paid him serious attention (Fitzgerald, 2001, p. 331).

Fritz, in the following chapter *The Rockenthiens* (Fitzgerald, 2001, p. 333), sees Sophie for the first time and falls in love at once while she “stood by the window, tapping idly on the glass as though she was trying to attract the attention of someone outside” (Fitzgerald, 2001, p. 336), learning that she was only twelve years old. Sophie von Kühn, is the youngest stepdaughter of the Rockenthiens and develops an interest in Fritz as well; “But would you be content to live with me? Sophie hesitated, and then said; “Truly, I like you (Fitzgerald, 2001, p. 339)”, not in a grown-up way, but eventually the two get engaged and plan marriage when she turns sixteen. She, unfortunately gets tuberculosis, and undergoes failed operations on a tumor without anesthetic, which causes her death when she turns fifteen. As Sophie is not a beautiful and clever girl in a conventional way, Fritz's love for her is not understood by his family and friends, especially by his brother Erasmus who utters his protest: “Fritz, Sophie is stupid (Fitzgerald, 2001, p. 354)”, “Her mind is empty (Fitzgerald, 2001, p. 354)”, “Fritz, she is not beautiful, she is not even pretty. I say again this Sophie is empty-headed, moreover, at twelve years old she has a double chin (Fitzgerald, 2001, p. 355)”, yet Fritz addresses her as his *Philosophy*, his *spirit's guide*, his *Wisdom*, his *Absolute*, his *Perfection* and his *heart's heart*.

Overall, as a biographer and a historian, Fitzgerald achieves “both a brief resurrection and an imaginative vision”(Savu, 2006, p. 68) of the German poet, when Fritz was a student of history, law, and philosophy in Jena, Leipzig and Wittenberg. The novel develops into his job in the Salt Mine Directorate and his engagement to a much younger girl Sophie, and the never-ending pursuit of meaning; truth.

2. Postmodern Reflections in *The Blue Flower* as a Histographic Novel

“Novels arise out of the shortcomings of history.”

F. von Hardenberg, later Novalis, 1799 -1800

In *The Blue Flower*, the protagonist's, Fritz's, ambitious curiosity and concern with questions about the roots of being, knowledge, truth, and faith put him between modernity and postmodernity. Therefore, the novel will be investigated as a historical biography, which Hutcheon describes in her article as a “histographic metafiction” (Hutcheon, 1989, p. 228), which is a

type of postmodern fiction that erases the distinction between history and fiction using techniques such as parody, satire and intertextuality. With the novel, we come to the understanding that what Fitzgerald “suggests is not only the shortcomings of history that make novels, but also that novels contain their own shortcomings” (Savu, 2006, p. 70), as the novel ends with many, for history is unstable by itself. Although historiographic metafiction combines history and fiction with a blurred line between, highlighting how the narrative is constructed, Fitzgerald disregards this poststructuralist belief of turning everything into discourse; as she “reclaims the enduring values of lived experience, of dreams and passions that cannot be contained by language” (Savu, 2006, p. 70). We can understand from the novel that, according to Fitzgerald, a biography, even when fictionalized, shapes both subjectivity and creativity, showing a way to look into one’s life. In short, this understanding implies that fiction is not predetermined but rather shaped by the choices and actions of the characters, and that the meaning is not fixed but can be interpreted differently. Fritz, later Novalis, as a romantic poet, understood the strength and weakness of reason. It is useful in freeing people from their belief systems, but weak as a visionary because it is not creative.

Hereunder, a number of scenes from the novel will be shown to highlight the postmodern features along with the romantic plot. Hence, the purpose is, humbly, to highlight the fictionality and incompleteness of *The Blue Flower* as a historiographic novel in light of postmodernism.

The Blue Flower starts with *medias res*. It is only in the last paragraph of Chapter 33, *At Jena* (Fitzgerald, 2001, p. 386), we come to understand the very first chapter, *The Washday* (Fitzgerald, 2001, p. 277) and the events happening within:

It was in this way that Dietmahler witnessed the Great Wash at Weissenfels, and told the Freiherr von Hardenberg, in all sincerity, that he knew nothing about his son’s entanglement with a young woman of the middle class, or indeed, with any other woman (Fitzgerald, 2001, p. 388).

In Chapter 1, Fritz invites a friend from Jena, Jacob Dietmahler, to his house in Weissenfels. Dietmahler arrives on washday and feels disturbed by all the linens flying in the blue sky. The chapter demonstrates how Fritz’s family and friends see him. It also gives a glimpse of Fritz’s father’s dominant nature and conservative world views when Sidonie, the sister, and the mother are having a conversation about making arrangements for the guest-room for their guest, Jacob: “This Dietmahler must get used to the Father, and to the way we do things, otherwise let him pack up and go straight home.” (Fitzgerald, 2001, p. 279), “Fritz should have told him that we lead a plain, God-fearing life.” (Fitzgerald, 2001, p. 279), and when Fritz is telling Dietmahler “we are old-fashioned in Weissenfels” (Fitzgerald, 2001, p. 280). In Chapter 2, *The Study*

(Fitzgerald, 2001, p. 281), with the anxious query of the father, the Freiherr, about Fritz's romantic relationship "with a young woman of the middle class" (Fitzgerald, 2001, p. 281), Dietmahler responds that his friend cannot be judged "by ordinary standards (Fitzgerald, 2001, p. 281)" as he "is a poet and a philosopher (Fitzgerald, 2001, p. 281)" implies the romantic plot against the father's conventional enforcement with his demand of Fritz's upcoming career as an *Assistant Inspector of Salt Mines* (Fitzgerald, 2001, p. 281).

In Chapter 5, *The History of Freiherr Heinrich von Hardenberg* (Fitzgerald, 2001, p. 291), Fitzgerald switches from fiction into a historical background of Fritz's father, Freiherr von Hardenberg. This chapter is the first implication of the novel that makes it historical. It is three pages long, consisting of the Freiherr's early life, military occupations, religious conversions, marriage, and children. It also gives insights into the social and political context of his time:

[...] born in 1738, and while he was still a boy came into the properties of Oberwiederstadt on the River Wipper. [...] During the Seven Years' War he served, as a loyal subject, in the Hanoverian Legion. After the Peace of Paris, he gave up his commission. [...] married, but in 1769 there was an epidemic of smallpox in towns along the Wipper, and his young wife died. [...] He had undergone a profound religious conversion [...] The Freiherr now worshipped with the Moravian Brethren [...] married his young cousin [...](Fitzgerald, 2001, p. 291)

Chapter 6 and Chapter 7 continue to give historical backgrounds, but in a fictional narrative kind of way. As a result, it is challenging to determine whether these two chapters are biographies or works of fiction. The title of Chapter 6, *Uncle Wilhem* (Fitzgerald, 2001, p. 294) implies to the reader that Fitzgerald would fictionalize Fritz's uncle, but see that it is a bit of both. We learn about the effects of the historical event *The Seven Years' War* on the Hardenberg's family. They were short in money due to the war, and some of their properties had to be sold. The remaining properties were not quite pleasant. We learn, too, that Uncle Wilhelm tutored Fritz when he was seventeen. Yet, the chapter must be looked at quite carefully. It is a fictionalized historical background of many subjects; the Seven Years' War, the towns in which Hardenbergs lived (*Oberwiederstadt, Schlöben-bei-Jena, Weissenfels*), German Order of Knighthood, and Wilhelm's individual background and occupation. Not only does the short chapter consist of these subjects, but it also turns into fiction with a fictionalized dialogue, yet still realistic, between Fritz and his brother Erasmus discussing his staying at his uncle's for just a few months:

"Best of Fritzes, you were luck" said fourteen-year-old Erasmus.

"I am not sure about that," said Fritz. "Luck has its rules, if you can understand them, and then it is scarcely luck."

“[...] What did they talk about?”

“Nature-philosophy, galvanism, animal magnetism and freemasonry.”
said Fritz (Fitzgerald, 2001, pp. 296, 297).

The same concept continues in Chapter 7, *The Freiherr and The French Revolution* (Fitzgerald, 2001, p. 298), where, as readers, we think of it as a technical historical background of the French Revolution and the Prussian army. The chapter has a feeling of a frank historical background, decorated with domestic dialogues from the household. This technique is used by Fitzgerald many times throughout the novel. The chapter gives an understanding of how the French Revolution had an impact on German society. It shows its impacts on the family structure, within the mind and imagination of an individual, and on the nation. We see these through the dialogues of the mother, the Freiherr, who is a fan of the French King, Fritz, Erasmus and the younger brother, the Bernhard, when Fritz brings a newspaper, the *Jenaer Allgemeine Zeitung* from Jena:

“They are going to bring a civil action against the legitimate king of France?”

“Yes, they accuse him of treason.”

“They have gone mad. [...] “I shall not touch another newspaper until the French nation returns to its senses again.”

[...] shouted Erasmus, drumming on his saucer. “The revolution is the ultimate event, no interpretation is possible, what is certain is that a republic is the way forward for all humanity.”

“It is possible to make the world new.” said Fritz, “or rather to restore it to what it once was, for the golden age was certainly once a reality.”

“The king is the father, the nation is his family.”

“When the golden age returns there will be no fathers,” murmured the Bernhard (Fitzgerald, 2001, p. 300).

It is seen that Fitzgerald was attracted to the historical moment of the French Revolution as it was a time of “uncertainty and expectancy (Lee, 2013, p. 478)”, which she also decorates with Fritz’s ambitious love towards Sophie. Additionally, what makes this chapter distinctive is the first sentence: “WERE THINGS worse at Weissenfels when a letter from the Big Cross arrived, or when the Mother’s elder brother, Captain August von Böltzig, happened to come to the house?”(Fitzgerald, 2001, p. 298). In her essay “Modernification”, Virginia Woolf points out that “the proper stuff of fiction doesn’t exist; everything is proper stuff of fiction, every feeling, every thought; every quality of brain and spirit is drawn upon (Woolf, 2013, p. 164)”. As this novel is a histographic novel, it is made up of fiction, so everything goes with it. The first two words of the sentence are written in capital letters; showing fragmented structure.

In standard English, mother is a proper noun, but Fitzgerald writes it with a capital letter, too. These examples emphasize how important the chapter is to the mother of the Hardenbergs, thus proving the idea that everything goes with fiction.

The titles of *The Blue Flower* are of great importance as well. As mentioned earlier, Lee describes them as *fragment of speech* (Lee, 2013, p. 482). Such examples are *What is the Meaning?* (Fitzgerald, 2001, p. 329), *I Can't Comprehend Her* (Fitzgerald, 2001, p. 351), *A Second Reading* (Fitzgerald, 2001, p. 370), *I Could Not Paint Her* (Fitzgerald, 2001, p. 378), *The Intended* (Fitzgerald, 2001, p. 425), and *Visitors* (Fitzgerald, 2001, p. 434). Not only these chapters, but all of them are consisted of "encounters, thought processes, dialogue, journals, letters, gossip, dramas, description, scattered with German words and the names of people and places" (Lee, 2013, p. 482). All the chapters are full of small explanations, fragmented and disturbed by dialogues, or all of a sudden, historical background and letters. Thus, these features make the novel postmodern.

In Chapter 39, *The Quarrel* (Fitzgerald, 2001, p. 402), Fritz makes a joke about how his sweetheart Sophie has turned from a child, who did not know anything, to an innocent thirteen-years old young woman. Sophie starts crying because she was teased. The focal point of the narrative is on the quarrel between the couple, but it moves around to different incidents about Sophie and her brother before the narrator comes back to the argument in the conversation between Fritz and Sophie's older sister, Mandelsloh. What Fitzgerald does in this chapter that she uses informative narrator technique to force the readers to recognize the narrator's presence, power and function:

He had no manners, Sophie had wept. That was what they said to her when she was in disgrace, the strongest reproach she knew. Fritz replied that he had been to the Universities of Jena, Leipzig and Wittenberg, and knew somewhat more about manners than a thing of thirteen.

'A thing of thirteen, Fricke! Can you believe that, can you explain that?'

'How did he explain it himself?'

'He said I was a torment to him.'

In his next letters to Sophie, Fritz called himself inexcusable, uncultivated, ungracious, impolite, incorrect, intolerable, impertinent and inhuman.

The Mandelsloh advised him to stop it. 'Whatever the cause of the trouble was, she has forgotten it.'

'There was no cause,' Fritz told her.

'That makes it more difficult, still she has forgotten it' (Fitzgerald, 2001, p. 403).

It is seen that the incident is indirectly referred to through different narrative voices, and is basically told, instead of shown, to the reader (Lu, 1999, p. 139). A dominant feature in postmodern writing is when the reader is positioned to be addressed and informed by the narrator. Chapter 44, *The Intended*, is describing the engagement party between Sophie and Fritz, from the narrator's view, where Anton, Fritz's brother, is playing the piano to welcome Sophie and her family:

The front rows were emptied and shifted to make place for the newcomers. Anton nodded, and continued with a setting of some Zinzendorf's hymns for the Brethren, passing on to the airs from two or three Singspiele and the, what was the piece that he played after that? – that very beautiful piece, I did not know it, could Anton have improvised it himself?

No-one admitted to knowing it, but all half-closed their eyes in pleasure (Fitzgerald, 2001, p. 427).

The narrative tone is self-reflexive in the sense that it often reminds the reader more of the presence of the narrator than the characters (Lu, 1999, p. 144).

Fitzgerald uses fragmented structure in the very last sentence in the last chapter, *Magister Kegel's Lesson* (Fitzgerald, 2001, p. 465): “Best of brothers –”(Fitzgerald, 2001, p. 469). It is a broken half sentence ending with a dash. It is known that it is a very small dialogue between Fritz and Erasmus, implying that Fritz could not bear seeing Sophie suffering from her illness in her sickbed, as he says before Erasmus responds, “I could not stay–”(Fitzgerald, 2001, p. 469). Out of many fragmented sentence structures, these last sentences were given as final examples, as they also imply the half-ended story of the novel.

Turning into another postmodern feature is challenging grand narratives. Fitzgerald challenges a number of grand narratives throughout the novel, which will be limited within this paper into two categories. The first grand narrative that she challenges is the gender norms. Fitzgerald portrays an unconventional female character, Sidonie, Fritz's younger sister, who denies societal expectations. Sidonie asserts her independence and resists conforming to conventional gender roles. It is most obvious in her dialogues with her conventional mother:

‘God in heaven spare me a marriage like yours!’ The Freifrau scarcely heeded her. ‘And there is another thing, you have not thought – the Father may raise his voice.’ This did not perturb Sidonie. (Fitzgerald, 2001, p. 279) [...] ‘Why is it God-fearing not to have a slop-pail?’ asked Sidonie. ‘What are these words? Are you ashamed of your home, Sidonie?’ ‘Yes, I am.’ She was fifteen, burning like a flame. Impatience, translated into spiritual energy, raced through all the young Hardenbergs (Fitzgerald, 2001, p. 280).

Throughout the novel, Sidonie is portrayed as a rebellious daughter who rejects the societal attributes like marriage. Her dialogues, mostly with her mother, imply that she does not fear the authority of her father. She acts as an agency for women, criticizing gender norms, and thus becomes a symbol of strength and resilience.

The grand narrative of beauty is challenged in the novel by redefining the concept. It is generally accepted that beauty is first conceived by external appearances, yet, we discover that with the search for *the blue flower*, physical appearance somehow transcends into something much deeper. It is almost unseen and quite difficult to comprehend. This is mostly obvious in Fritz's love for Sophie. She does not have a traditional beauty; she is not even bright. As a poet and an intellectual, Fritz is continuously criticized for his love for Sophie. Fitzgerald challenges the beauty standards with Sophie, using humor, which is a postmodern feature as well. We can see both the challenge of beauty standards and humor in the following dialogue Fritz has with Sophie:

'Now, tell me what you think about poetry.'

'I don't think about it at all,' said Sophie.

'But you would not want to hurt a poet's feelings.'

'I would not want to hurt anyone's feelings.'

'Let us speak of something else. What do you like best to eat?'

Cabbage soup, Sophie told him, and a nice smoked eel (Fitzgerald, 2001, p. 347).

With this dialogue, it is seen that Fritz is trying to put her into a standard lady form, but Sophie is responding with quite simple and ordinary answers. Fritz's never-ending pursuit of meaning, truth, and love is tried to be achieved with Sophie. Yet, it is seen that this is impossible, as Sophie is just a young girl with basic standards. To better capture the challenge of beauty with humor, as seen just a little earlier in the given dialogue above, Fritz is questioning Sophie's indescribable attractiveness —which is rather describable by others —with an interior monologue:

What or whom does she look like? he thought, with this rich hair, and her long, pretty nose, not at all like her mother's. Nor were her arched eyebrows. In the third volume of Lavater's *Physiognomische Fragmente* there was an illustration, after a copperplate by Johann Heinrich Lips, of Raphael's self-portrait at the age of twenty-five. This picture had exactly the air of Sophie. From the copperplate, of course, you couldn't tell the colour, or the tonality of the flesh, only that the expression was unworldly and humane and that the large eyes were dark as night (Fitzgerald, 2001, p. 347).

Fritz compares Sophie's face to a self-portrait by a male artist, Raphael. The

similarity in the expression and the darkness of the eyes catch his attention. It is clear that Fritz sees Sophie as a work of art, with her features resembling those of a masterpiece by Raphael. Additionally, what Fitzgerald does in this scene is to challenge, even attack, the conventional beauty standards by using the same standard for both sexes. Overall, this scene serves as a commentary to societal norms and expectations surrounding gender roles and beauty standards.

Another striking example of portraying Sophie by using humor is in Chapter 26, *The Mandelsloh* (Fitzgerald, 2001, p. 362), when Sophie writes a letter to Fritz six days after Christmas:

Dear Hardenberg

In the first place I thank you for your letter secondly for your hair and thirdly for the sweet Needle-case which has given me much pleasure. You ask me whether you may be allowed to write to me? You can be assured that it is pleasant to me at All Times to read a letter from you. You know dear Hardenberg I must write no more.

Sophie von Kühn (Fitzgerald, 2001, p. 362)

It is clear that Sophie's writing is full of mistakes; she writes the first letters of the proper nouns *needle-case* and *all times* in capital. This indicates the level of her intellect. Yet, not only the letters she writes to Fritz but also her diaries show the inefficacy of her brightness, all her entries are quite short, simple, absurd, and even blunt:

January 8

Today once again we were alone and nothing much happened.

January 9

Today we were again alone and nothing much happened.

January 10

Hardenburch came at mid-day.

January 13

Today Hardenburch went away and I had nothing to amuse me.

March 8

Today we all decided to go to church but the weather held us up. [...]

March 13

It was a day of penance and Hartenb. Was there. [...] (Fitzgerald, 2001, p. 369)

Sophie miswrites Fritz's family name *Hardenberg* for *Hardenburch* and later does not even bother herself to write the full name, but shortens

it as *Hartenb*. In the entries and letters, Fitzgerald uses humor to show how important Sophie was to Fritz, but how he was the opposite to Sophie. She was Fritz's ultimate search for the meaning, but Sophie describes her moments with him as '*nothing much happened*'.

In the final chapter of *The Blue Flower*, there were many questions remained unanswered; we were neither given the key to the mystery of *the blue flower*, nor Sophie's final status of her illness. Not only in the *Afterword* (Fitzgerald, 2001, p. 471) section of the novel that Fitzgerald writes exactly when Sophie died, and what happened after the tragedy. The first words of this section are "SOPHIE DIED at half past ten in the morning [...]" (Fitzgerald, 2001, p. 471) create a sense of shock in the reader. Later, she lists all the unanswered questions of the characters, as if she proves that the novel was after all a historical biography giving the sense to waken up the reader from fiction into reality, by sending the characters far away into historical distance. These are the features that make Fitzgerald's method rather strange. In short, with history, biography and fiction mixed all together, Fitzgerald's novel is considered "a novel of sorts" (Lee, 2013, p. 482), serving as a histographic novel.

Conclusion

In conclusion, Penelope Fitzgerald's *The Blue Flower* is a remarkable illustration of a histographic novel that includes postmodern elements to challenge the traditional historical narratives. By mixing fiction and historical events and characters, Fitzgerald creates a story that blurs the metaphoric line between fiction and reality. By doing so, as Hermione Lee suggests, "we feel [...] that we are living in another world, listening to people speaking in another language, walking through places where we are not at home yet which seem very familiar to us, as in a dream." (Lee, 2013, p. 413,414) persuades that the novel should be considered as a histographic novel, blending historical places and events with beautifully written fiction. Thus, through the novel's fragmented narrative structure and histographic exploration, the readers are invited to question the nature of truth, the construction of history and the complexities of human existence.

Furthermore, Fitzgerald's frequent use of dialogue placed between two narrative descriptions appears to be a narrative technique that goes beyond the scope of character development. The narrator's separated monitoring makes it clear that she is there to inform the reader, rather than only report the details. However, the dialogues appear disjointed despite the fact that they frequently require the narrator's comments to supplement what is left unsaid. Hereby, the narrator becomes mostly an informant, not a detailed story-teller. And as a result, with the own voice of the narrator, the narration becomes a reconstructed version of how things actually happened.

In addition, Fitzgerald chooses to use humor as a focalization of the

narrator. She uses it due to the urge to challenge the grand narratives like the standards of beauty and gender roles; be it when introducing Sophie's beauty, be it the way she was seen by others and Fritz.

All in all, the never-ending search of *the blue flower* is a recurring motif in the novel. Just like how Hermoine Lee describes *the blue flower* as something that “can never be found, it can only be sought” (Lee, 2014, p. 418), it is ensured that Fritz's fragmented story of *the blue flower* and the desire to achieve it with his young Sophie is never accomplished. It is not even accomplished after the death of Sophie. It is only seen in the *Afterword* section of the novel that Fitzgerald announces the events happening in a biographical order by writing that Fritz in December 1798 was engaged to another woman, and “had entirely changed his plan for the story of the Blue Flower”(Fitzgerald, 2001, p. 472) proves the ambitious pursuit of the never-accomplished truth.

REFERENCES

- Akbay, Y. S. (2021). *Penelope Fitzgerald: The Idealized Self* [Doctoral Dissertation]. Süleyman Demirel University.
- Akbay, Y. S., & Memmedova, B. (n.d.). *Defamiliarization in Penelope Fitzgerald's Novel "The Bookshop."*
- Behler, E. (1993). *German Romantic Literary Theory*. Cambridge University Press.
- Fitzgerald, P. (2001). *The Bookshop; The Gate of Angels; The Blue Flower*. Everyman's Library.
- Hutcheon, L. (1988). *A POETICS OF POSTMODERNISM*. Routledge.
- Hutcheon, L. (1989). The Pastime of Past Time: Fiction, History, Historiographical Metafiction. In *Historiographic Metafiction Parody and the Intertextuality of History*. Johns Hopkins University.
- Lee, H. (2013). *Penelope Fitzgerald: A Life*. Random House.
- Lee, H. (2014). *Penelope Fitzgerald: A Life*. Vintage Books.
- Lu, L. (1999). *PENELOPE FITZGERALD'S FICTION AND LITERARY CAREER: FORM AND CONTEXT*. University of Glasgow.
- Penelope Fitzgerald. (2023). In *Wikipedia*. https://en.wikipedia.org/w/index.php?title=Penelope_Fitzgerald&oldid=1142813676
- Savu, L. E. (2006). *Postmortem Postmodernists: Authorship and Cultural Revisionism in Late Twentieth-Century Narrative* [Dissertation for PHD]. The University of North Carolina.
- Smyth, E. J. (1991). *Postmodernism and Contemporary Fiction*. B. T. Batsford.
- Woolf, V. (2013). *The Common Reader*. Lulu Press, Inc.

Chapter 4

INFLUENCE OF BLOCKCHAIN TECHNOLOGY IN SUPPLY CHAIN MANAGEMENT

Nesrin BAKICI¹

¹ Yeditepe University – Institute of Social Sciences
Doctoral Program in International Trade and Logistics Management
OrcID: 0009-0005-6216-1365



1. Introduction

All activities and information flows concerning the production or transformation of products from a raw material phase to their final destination are covered by the supply chain concept (Kulahli et al., 2022). To attain sustainable competitive advantage, supply chain management unifies these activities through developed supply chain relationships (Park et al., 2021).

Regardless of industry, the main priority for the operation and strategy of business has become to improve operations and supply chain functions. To make the right decisions in supply chain operations, companies need accurate and real-time information on many issues such as inventory, material, and product transit movements. The rapid improvement of Information and Communication Technologies, has enabled companies to access such data, analyse the data, and then take more timely decisions, anticipate customer demands and necessary operations. Thus, traceability, which is effective in making correct and timely decisions, has become one of the fundamental elements of supply chain management (Manzoor et al., 2022).

Emerging technologies, such as the Blockchain, are making it easier for companies to gain more value from their supply chains in an increasingly digital world. Digital technologies can significantly enhance the performance of the supply chain by adding new capabilities. For some time, Blockchain technology has been on the agenda of the supply chain, and it is already being used in real platforms (Batwa et al., 2020; Batwa et al., 2021).

The term “blockchain” came into existence in the wake of the 2008 global financial crisis, as an anonymous person/group called Satoshi Nakamoto published a white paper entitled ‘Bitcoin: A Peer-to-Peer Electronic Cash System’. The article portrayed a new end-to-end payment system that enables the transfer of digital currencies between two parties without the need for financial establishments or the government (Nakamoto, 2008).

In supply chain management, one of the main goals of effective logistics is to get the product in the right condition, on time and at the lowest possible cost. In addition, the end user needs to get reliable information about the product. However, achieving these goals efficiently is becoming increasingly difficult for supply chain members. Globalization, increase in international competition and increase in outsourcing, as well as the increase in the number of members in the supply chain, transform the supply chain into a more complex structure. The methods of the supply chain have begun to get inadequate as a result of the world’s developments and are causing problems. The major challenges for the current supply chain include a lack of communications, a lack of information flow and insecurity between members (Dutta et al., 2020; Kopyto et al., 2020)

Any phase of a product's production to its sale can be documented by the use of blockchain technology in the supply chain, which will allow it to build up a permanent history of that product. With this system, human errors are minimized by providing an autonomous structure to the supply chain. Thus, the supply chain can be reliably and sustainably structured through blockchain technology at a lower cost (Wang et al., 2019; Staub, 2022).

The fact that blockchain technology provides total product traceability and increases visibility in various stages of the supply chain is one of its main advantages. According to data published in Forbes magazine, America's superstore and largest grocery store, Walmart uses blockchain to track the journey from farm to the store of 1,500 food products from 70 suppliers, making it easy to detect cases of contamination or spoilage. Walmart is also working on using blockchain-based invoices, which speed up the process from about three months to almost real-time (Forbes, 2023).

Apart from product tracking, blockchain technology is a strong tool to gather overall product information that can be used to authenticate products and certify their origin, and to assure the quality and integrity of products (Wang et al., 2022). As a means to tackle uncertainties and challenges in supply chain management, blockchain is also one of the new technologies under Industry 4.0's concepts and principles (Rodrigues et al., 2021; Singh et al., 2022).

Industry 4.0, in general terms, can be defined as a system that provides an opportunity for people to use only their brain power, robots take over production, the analysis of very large data to be quickly sorted and evaluated, and those who want to produce all kinds of things themselves with hardware such as three-dimensional printers. With this system, it is expected to allow machines to communicate and store the collected data and be able to perform transactions on it. Blockchain technology is thought to be the most appropriate technology to ensure high security in the absence of manipulation of this data and no outside interference with the machines (Javaid et al., 2021).

2. Literature Review

Digitalization finds widespread application areas in supply chain management in all sectors (Özkanlısoy and Akkartal, 2021).

Decentralized, immutable digital records of every transaction or event in the supply chain are provided to create by Blockchain Technology. This feature provides greater transparency and traceability as data is viewed and verified by all participants (Yousefi et al., 2022; Meidute-Kavaliauskiene et al., 2021). Companies could monitor and trace the movements of goods, raw materials or components throughout their entire supply chain using blockchains to ensure ethical sourcing, fair trade practices and environmental sustainability

(Szewczyk, 2019).

Realtime visibility of the various aspects of the supply chain, including inventory levels, shipping status, and manufacturing processes, is provided by Blockchain-based supply chain platforms (Khanfar et al., 2021; Verny et al., 2020; Yadav et al., 2020). This increased visibility helps identify inefficiencies, reduce waste, and optimize logistics, leading to improved sustainability (Shoaib, et al., 2023). For example, companies can identify bottlenecks, optimize routes, and reduce carbon emissions by streamlining transportation and logistics operations (Ayan et al., 2022; Difrancesco et al., 2022; Hong, 2022; Taqui et al., 2022).

Smart contracts, which are contractual agreements with automatic triggers for actions if the predefined conditions are fulfilled, can be implemented by Blockchain technology. Smart contracts are used to implement sustainability practices within the supply chain. For example, a smart contract can automatically verify that suppliers meet certain sustainability criteria before executing a purchase order or payment. This automation reduces reliance on manual verification processes and ensures compliance with sustainability standards (Rejeb et al., 2023; Munir et al., 2022; Kawabata et al., 2020).

Blockchain technology provides secure and reliable collaboration between supply chain partners. The decentralized structure of the Blockchain makes unnecessary the need for intermediaries and provides a shared platform for participants to exchange information, track transactions and verify data (Manzoormet al., 2022). This increases trust among stakeholders and facilitates collaboration in the implementation of sustainable practices (Kaya et al., 2019). Additionally, blockchain-based systems promote transparency and trust in sustainable claims, as it validates certificates such as fair trade or organic labels (Agi et al., 2022).

Blockchain technology supports the application of circular economy principles by enabling efficient tracking and monitoring of resources throughout their lifecycle. It facilitates the creation of digital records for materials, enabling them to be reused, recycled, or disposed of properly. This ensures optimum use of resources, minimizing waste and meeting sustainability goals (Difrancesco et al., 2022; Kouhizadeh et al., 2020).

3. Sustainability in Supply Chain Management

In today's global and dynamically evolving business environment, supply chain management is of vital importance. The supply chain is portrayed as a system whereby enables manufacturers to deliver their products to the end consumer. This process includes not only the manufacturer and the customer, but also the retailer, and the information flow is carried out between these actors depending on the rules and reliability (Kulahli et al., 2022).

Management of the supply chain is portrayed as planning, designing, implementing, controlling, and monitoring activities in the supply chain to build a competitive groundwork, leveraging global logistics, creating net value, synchronising supply, and demand, and evaluating performance globally (Parung, 2019).

Factors such as globalization, mass production and consumption, and product diversity push manufacturers to seek new ways in the supply chain. While various studies suggest integrating sustainability principles into the supply chain; It shows that organizations can respond to the demands of their internal and external stakeholders for specific social goals and improve their economic performance by addressing social problems (Chandan et al., 2019).

There is complexity and controversy to the concept of sustainability. Although there is no globally accepted explanation of the term sustainability, it is known that this idea emerged from the theory of sustainable development, which was ennobled at the Rio de Janeiro Earth Summit in 1992 (Basiago, 1998). The original explanation of sustainable development, propounded by the Brundtland Commission, is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987; Carter et al., 2008).

Sustainable supply chain management has been created because of a combination of the three dimensions of sustainability (Economic, Environmental and Social) and supply chain management (Gedik, 2021; Varsei, 2016; Rosic, 2012). Sustainable supply chain management adds the targets of protecting the values of the environment and social to traditional supply chain management, which concentrates on the speed, cost, and reliability of operations.

Sustainability needs to be incorporated into supply chain management, whether it is a manufacturer or a service provider, to protect the environment and protect its prestige on the market (Ansari et al., 2015). Sustainability helps a company comply with its duty of protecting human rights while maintaining profitability, thus fulfilling its social responsibility duties.

4. Blockchain Technology

a. A Brief Definition and History

The conceptualization and introduction of blockchain technology were first by Satoshi Nakamoto in 2008 (Nakamoto, 2008). Blockchain technology is essentially an encrypted file system that consents all users who have been given access to this network at the same time to track, verify and permanently store a block of data from their network environment in a decentralised, immutable distributed database (Khanfar et al., 2021; Casino et al., 2019).

Blockchains are records of transactions, just like a traditional ledger. Any movement of money, any item or confidential data may be involved in these transactions. Blockchain is a transparent and verifiable technology designed for the safe and secure storage of data of value, and the exchange and management of data between two parties without the need for an intermediary (Singh et al., 2022; Batwa et al., 2021; Rejeb et al., 2020; Treiblmaier, 2018).

The development of blockchain technology started with digital money applications and progressed in the form of smart contracts, decentralized applications, and integrating Blockchain into Industry 4.0 with a wide variety of application areas.

b. Application Areas of Blockchain Technology

Due to its capabilities, as well as the benefits thereof, Blockchain is a developing and dynamic technology that has been adopted in different sectors like Financial Services, Healthcare, Government, Travel and Hospitality, and Retail. The benefits of blockchain technology like traceability, transparency, data security and real-time sharing of information can be enjoyed by many different industries (Khanfar et al., 2021; Esmaeilian et al., 2020; Casino et al., 2019).

In the financial services industry, Blockchain technology has been practised in several innovative ways. This technology provides an automatic trading lifecycle whereby all participants can reach the same data on a transaction, simplifying and streamlining the whole transaction associated with asset management and payments. In this way, it is no longer necessary to have brokers or intermediaries and ensures that transaction data are managed transparently and effectively (Dutta et al., 2020).

In the healthcare sector, Blockchain technology may play a major role as it is able to improve security, privacy, and data interoperability. In a sector where interoperability issues are widespread, this system could help to address many of those problems and enable the secure transfer of healthcare data between different organisations and individuals involved. Blockchain does not allow interference from third parties and in addition, it abstains from overheads. By applying digital signatures and encrypting them for the sake of confidentiality and authenticity, blockchain allows healthcare records to be stored in distributed databases (Agbo et al., 2020).

The operations and services of the government could be transformed using blockchain technology. In the Government sector, which is already operating in many areas, it can have a significant impact on improving data processing problems. Properly connecting and sharing data with Blockchain enables better data management across several departments. It increases transparency and makes it easier to monitor and audit transactions (Ølnes et al., 2017).

Blockchain technology could change the rules of the game for hospitality and travel businesses. Blockchain can manage loyalty programs and source and track inventory as well as secure payments. In this way, it can facilitate operations and improve the customer experience. Moreover, it may be used for the storage of major documents such as passports, other identity cards, bookings and management of travel insurance, loyalty, or reward schemes (Khanna et al., 2020; Dogru et al., 2018).

There are great opportunities in applying Blockchain technology to the retail industry. These opportunities include everything from checking for the authenticity of goods with high value, prevention of fraudulent transactions, the detection of stolen items, activation of virtual guarantees, management of loyalty points and simplifying supply chain operations (Chakrabarti et al., 2017). Simulation studies will also be a part of blockchain applications, it is another factor that will increase the attractiveness of the application (Akkartal et al., 2010).

5. Blockchain Technology in Supply Chain Management

At its most fundamental level, the management of the movement of products, data and finances linked to a product or service is the essential aspect of supply chain management, which includes the procurement of materials for processing as well as their delivery to end users. The supply chain activities include procurement, product lifecycle management, inventory planning, order management, logistics, customs clearance, and distribution. Supply chains contain a complex network of many organizations, including various companies and governments, such as suppliers, manufacturers, distributors, retailers, auditors, and consumers (Fernandez, 2022).

Developments over the years with industrialization have made supply chain management systems more complex. Despite this, supply chain management has been a linear and silent function controlled by supply chain experts for generations. However, with the spread of the Internet, technological innovation and increasing demand from an economy driven by globalization, this situation has changed. Today's supply chain has lost the characteristic that it was a linear entity. It's become a complicated network system that can be accessed at any time of day, and which has several networks attached to it. Consumers who demand that their orders be fulfilled, when and how they desire them are at the heart of these networks (Sahoo et al., 2022).

Due to increasing industry awareness of the technology, the number of areas of usage for Blockchain in supply chain management continues to increase. In addition, it is possible to use blockchain for smart contracts management, visibility of supply chains, traceability, and safety as well as product sourcing (Gammelgaard et al., 2019).

It helps to effectively manage the supply chain by applying blockchain technology so that participants can record prices, dates, locations, quality, certificates, and other relevant information. The collection of this information on the blockchain can help to ensure supply chain traceability, decrease losses due to counterfeits and grey markets, and increase transparency and compliance concerning outsourcing contract production, which may be beneficial for an organization's leadership position (Laaper et al., 2017).

a. Benefits of Using Blockchain in Supply Chains

With its transparency, traceability, speed, and consensus features, blockchain can lead to an easier operation of supply chain management. Blockchain organizes the operating systems of the supply chain on a unified platform based on information sharing and processing capabilities. Blockchain is making it possible to reduce some supply chain risks associated with behavioural uncertainties, fraud risks, data losses, administrative errors, transaction and operational issues and information flow. It is thus capable of making a significant improvement in supply chain monitoring and management (Alkhudary et al., 2022; Azzi et al., 2019).

Blockchain plays an instrumental role in increasing the efficiency of supply chains worldwide and enabling companies to carry out transactions on their own without intermediaries. In addition to improving the integration of finance and logistics services, blockchain facilitates greater data collaboration between stakeholders (Rejeb et al., 2021).

The time required to complete orders and payments is shortened by integrating payment solutions so that products are delivered correctly and on time. In addition to these benefits, the use of blockchain and smart contracts can help companies improve compliance, reduce legal costs and penalties for late tax payments as well as prevent counterfeiting and fraud (Gohil et al., 2021).

The information provided by the Blockchain, such as how products are manufactured, how they begin shipping, and how data is managed, is all stored digitally. In the blockchain, security features that are dependent on a data structure enable accurate tracking and monitoring capabilities to be performed as well as timeliness of invoices, agreements, and exchanges when such information is constantly stored and appropriately provided with relevant information. It's easy to hack into a traditional security system, therefore it's risky. Unlike traditional methods, blockchain protects information more safely by applying the best techniques in cryptography (Javaid et al., 2021).

The Blockchain is a shared database that supports the transparency of information. The uploading of data and information relating to products is the responsibility of all partners. The accountability and trust between partners

can be increased by the digital collection of accurate data. Within minutes, the Blockchain technology is capable of showing product updates. The exact location of the product, how it is produced and when it will be delivered on a single platform can be monitored by all partners. Blockchain communicates with its partners. This results in a more streamlined procedure with shorter lead times, fewer redundancies, lower delays, and ultimately very reduced supply chains. In addition, making sure the quality standards are met, will give sellers more control over the production of the product (Jadhav et al., 2022; Berneis et al., 2021; Khanfar et al., 2021; Queiroz et al., 2019).

Fraud in highly valuable products such as diamonds and medicines may be reduced by the transparency of Blockchain technology. In addition to reducing or eliminating the impact of counterfeit products, as well as increasing trust among end users on the markets, Blockchain can help companies track how ingredients and final products are transported via each subcontractor to reduce losses due to counterfeiting and grey market trading. Blockchain allows all parties involved in the supply chain to have access to an identical set of information that might reduce communications or data transmission errors (Laaper et al., 2017).

Blockchain helps supply chain procedures be more transparent by creating a traceable digital record. If an incident occurs anywhere along the global supply chain, locating the incident is easy. Traceability is particularly advantageous in food safety or drug safety incidents and can even prevent incidents from occurring in the first place (Rodrigues et al., 2021; Esmailian et al., 2020; Niu et al., 2019; Song et al., 2019).

b. Environmental Perspective of Using Blockchain Technology in Sustainable Supply Chain

Problems such as increasing environmental and cost issues, limited natural resources, global warming, and depletion and transformation of energy resources have made it essential for organizations to evaluate the environmental risks of the supply chain and take precautions. Identifying and managing environmental risks is challenging due to the lack of transparency and visibility in a centrally managed supply chain (Parmentola et al., 2022; Berg et al., 2021; Munir et al., 2021).

While the use of resources can become more efficient through the transparency and traceability provided by blockchain technology, it can also provide real data to organizations in reducing greenhouse gas emissions (Sabeti et al., 2019). While the management of wastes that may arise in the supply chain process contributes to the circular economy, the transportation cost and time can be reduced by eliminating the problems experienced in the transportation of raw materials or products with smart agreements (Du et al., 2022; Khanfar et al., 2021; Wong et al., 2020).

Since the blockchain allows real-time monitoring, it can be facilitated in the calculation of greenhouse gas emissions and the evaluation of the product life cycle, and the development of carbon capture technologies can be supported by determining at which stage of the supply the emission is high. In addition, more accountable and reliable data can be provided to auditors in detecting illegal practices, such as animal and plant supply (Khanfar et al., 2021; Esmaeilian et al., 2020; Paliwal et al., 2020).

The immutability, accountability, and transparency of blockchain data help keep companies accountable for their sustainability claims, helping to track carbon balances and other environmental metrics (Rejeb et al., 2020; Chandan et al., 2019).

c. Social Perspective of Using Blockchain Technology in Sustainable Supply Chain

When the concept of social sustainability is examined closely, organizations are concerned with identifying and managing, directly and indirectly, positive, and negative business impacts on various stakeholders such as employees, employees in the value chain, customers, and local communities (Khanfar et al., 2021; Venkatesh et al., 2020).

From the point of view of the supply chain, this approach is mostly seen in the steps taken to control and prevent issues such as the protection of human rights, child labour, improvement of working conditions, occupational health and safety, and the fight against corruption (Chandan et al., 2019; Giannakis et al., 2016).

Child labour forced labour and human trafficking are often more prevalent in upstream manufacturing in a company's supply chain, however, the risk of such fundamental violations of labour and human rights can also occur at any time (ILO, 2019). Suppliers and business partners in many situations may be restricted in their visibility due to the fragmentation and distribution of supply chains, as well as the resulting complexity (Munir et al., 2022). New trends contain the use of traceability or custody chain instruments by businesses individually or as part of the industry or intersectoral initiatives to find out more about business partners and their compliance with child labour, forced labour and human trafficking (Rejeb et al., 2021; ILO, 2019).

This ensures that corruption is prevented for a variety of stakeholders in the supply chain since data can be changed only by authorized networks using blockchain technology. Blockchain technology ensures that procurement processes are documented transparently, with the assurance of reliable and ethical suppliers (Park et al., 2021).

Ethical sourcing usage is supported by providing clear access to product history, traceability, and verification of supplier activities with blockchain technology (Venkatesh et al., 2020; Saberi et al., 2019).

d. Economic Perspective of Using Blockchain Technology in Sustainable Supply Chain

Economic sustainability refers to the ability of an economic system or activity to support long-term well-being and prosperity without depleting the available resources or causing significant harm to the environment or society (Gedik, 2020). Economic sustainability can be considered as governance concerning the management of companies and supply chains (Park et al., 2021).

Economic sustainability requires companies to evolve a solid management form that establishes transparency, traceability, and accountability, and can also attract potential investors by strengthening relationships with external stakeholders. Sustainable governance, by improving companies' competitiveness, enhancing the sound and transparent management of corporations, and increasing their profits to support environmental protection and social development, will have a lasting impact on logistics chains (Park et al., 2021; Tan et al., 2020; Nayak et al., 2019).

Blockchain technology enables the implementation of smart contracts. Smart contracts on the blockchain aim to automatically facilitate, validate, and enforce digital contract negotiations without central authorities (Tan et al., 2020; Wang et al., 2019). With the ability to automatically react to changes made by stakeholders throughout the supply chain and notify the smart contract, blockchain saves companies money and time. In addition, the fact that the deliveries made on the day, or the follow-up of the payments are made through a single and unchanging system is effective in establishing trust and cooperation between the stakeholders (Rejeb et al., 2020; Sakız et al., 2019).

Decentralization is one of the key benefits of applying blockchain technologies to supply chain management. The additional costs, increased system difficulties and product rejection of customers may arise because products and material flow are monopolized by fewer intermediaries. By eliminating intermediaries serving as central authorities whose primary function is the verification of transactions, blockchain technology can help to address these issues (Betti et al., 2019; Kouhizadeh et al., 2019).

Blockchain, which also plays an important role in sustainability management, finds usage areas especially in fleet management sustainability (Akkartal and Aras, 2021). In addition, it is an inevitable fact that the blockchain will be used more widely together with the Internet of Things in warehouse management applications, which will be completely unmanned in the future (Adbelhadi and Akkartal, 2019).

6. Conclusion

The benefits of blockchain technology for supply chains and its contribution to sustainability have been examined in this study. Blockchain provides a decentralized and immutable ledger that records and verifies transactions in a network of participants. This transparency and traceability ensure that stakeholders in the supply chain are closely tracking the movements of goods, verifying their origin, ensuring authenticity as well as reducing risks of fraud or counterfeit products. This transparency enables companies and consumers to make informed decisions about the products they buy and encourages responsible supply chain management, promoting ethical sourcing and sustainable practices.

Blockchain streamlines supply chain processes by automating manual tasks, reducing paperwork, and increasing efficiency. Smart contracts, which ensure the execution of contractual arrangements according to predefined conditions, automate payment processing, quality inspections, and compliance verification, among other tasks. This automation eliminates middlemen and reduces delays, thus increasing the overall speed and efficiency of supply chain operations. As a result, resources are used more efficiently, and waste and environmental impact are reduced.

Blockchain's decentralized nature and consensus mechanisms build trust among supply chain participants, enabling secure and direct peer-to-peer transactions without intermediaries or central authorities. This trust and cooperation foster closer relationships among stakeholders, promoting sustainable practices such as sharing knowledge, coordinating efforts, and jointly addressing environmental and social challenges.

Counterfeit products pose significant risks for both consumers and brands. Blockchain technology helps fight counterfeiting by ensuring the integrity and authenticity of products throughout the supply chain. By recording every transaction and movement of goods on the blockchain, stakeholders can easily verify the origin and authenticity of products. This prevents the circulation of counterfeit products and helps protect consumers while promoting sustainable consumption.

Blockchain is used to monitor and manage the environmental impact in supply chains. It provides real-time monitoring and auditing of sustainability metrics, ensuring compliance with environmental regulations and promoting sustainable practices. Such data-driven insights help companies identify areas for improvement, optimize resource use, and minimize their carbon footprint.

By leveraging the benefits of blockchain in their supply chains, businesses can support sustainability by reducing waste, increasing efficiency, ensuring ethical practices, fighting fraud, and making more informed decisions. The

transparency and traceability offered by blockchain technology encourage consumers to support sustainable products and hold companies accountable for their environmental and social impacts.

REFERENCES

- Abdelhadi, A., & Akkartal, E. (2019). A framework of IoT implementations and challenges in Warehouse Management, Transportation and Retailing. *Eurasian Business & Economics Journal*, 18, 25-41.
- Agarwal, S. (2018). *Blockchain technology in supply chain and logistics* (Doctoral dissertation, Massachusetts Institute of Technology).
- Agbo, C. C., & Mahmoud, Q. H. (2020). Blockchain in healthcare: Opportunities, challenges, and possible solutions. *International Journal of Healthcare Information Systems and Informatics (IJHISI)*, 15(3), 82-97.
- Agi, M. A., & Jha, A. K. (2022). Blockchain technology in the supply chain: An integrated theoretical perspective of organizational adoption. *International Journal of Production Economics*, 247, 108458.
- Akkartal, E., & Aras, G. Y. (2021). Sustainability in Fleet Management. *Journal of Advanced Research in Economics and Administrative Sciences*, 2(3), 13-39. <https://doi.org/10.47631/jareas.v2i3.288>.
- Akkartal, G. R., Barooti, A. H., & Akkartal, E. (2019). Gamification Methods for Teaching Logistics and Supply Chain Management. *Eurasian Business and Economic Journal*, 17(5), 53-71.
- Akkartal, E., Mendes, M. and Mendes, E. (2010) Determination of Suitable Permutation Numbers in Comparing Independent Group Means: A Monte Carlo Simulation Study. *Journal of Scientific & Industrial Research*, 69, 422-425.
- Alkhudary, R., Queiroz, M. M., & Fénies, P. (2022). Mitigating the risk of specific supply chain disruptions through blockchain technology. In *Supply Chain Forum: An International Journal* (pp. 1-11). Taylor & Francis.
- Ansari, Z. N., & Qureshi, M. N. (2015). Sustainability in supply chain management: An overview. *IUP Journal of Supply Chain Management*, 12(2).
- Ayan, B., Güner, E., & Son-Turan, S. (2022). Blockchain Technology and Sustainability in Supply Chains and a Closer Look at Different Industries: A Mixed Method Approach. *Logistics*, 6(4), 85.
- Azzi, R., Chamoun, R. K., & Sokhn, M. (2019). The power of a blockchain-based supply chain. *Computers & industrial engineering*, 135, 582-592.
- Basiago, A. D. (1998). Economic, social, and environmental sustainability in development theory and urban planning practice. *Environmentalist*, 19(2), 145-161.
- Batwa, A., & Norrman, A. (2021). Blockchain technology and trust in supply chain management: A literature review and research agenda. *Operations and Supply Chain Management: An International Journal*, 14(2), 203-220.
- Batwa, A., & Norrman, A. (2020). A framework for exploring blockchain technology in supply chain management. *Operations and Supply Chain Management: An*

International Journal, 13(3), 294-306.

- Berg, J., & Myllymaa, L. (2021). Impact of blockchain on sustainable supply chain practices: A study on blockchain technology's benefits and current barriers in sustainable SCM.
- Berneis, M., Bartsch, D., & Winkler, H. (2021). Applications of Blockchain Technology in Logistics and Supply Chain Management—Insights from a Systematic Literature Review. *Logistics*, 5(3), 43.
- Betti, Q., Khoury, R., Hallé, S., & Montreuil, B. (2019). Improving hyperconnected logistics with blockchains and smart contracts. *IT Professional*, 21(4), 25-32.
- Blossey, G., Eisenhardt, J., & Hahn, G. (2019). Blockchain technology in supply chain management: An application perspective.
- Brundtland, G. H. (1987). What is sustainable development? Our common future, 8(9).
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: moving toward new theory. *International journal of physical distribution & logistics management*.
- Casino, F., Dasaklis, T. K., & Patsakis, C. (2019). A systematic literature review of blockchain-based applications: Current status, classification and open issues. *Telematics and informatics*, 36, 55-81.
- Chandan, A., Potdar, V., & Rosano, M. (2019). How Blockchain can help in supply chain sustainability.
- Chakrabarti, A., & Chaudhuri, A. K. (2017). Blockchain and its scope in retail. *International Research Journal of Engineering and Technology*, 4(7), 3053-3056.
- Cole, R., Stevenson, M., & Aitken, J. (2019). Blockchain technology: implications for operations and supply chain management. *Supply Chain Management: An International Journal*, 24(4), 469-483.
- DiFrancesco, R. M., Meena, P., & Kumar, G. (2022). How blockchain technology improves sustainable supply chain processes: a practical guide. *Operations Management Research*, 1-22.
- Dogru, T., Mody, M., & Leonardi, C. (2018). Blockchain technology & its implications for the hospitality industry. Boston University, 1-12.
- Du, W., Ma, X., Yuan, H., & Zhu, Y. (2022). Blockchain technology-based sustainable management research: the status quo and a general framework for future application. *Environmental Science and Pollution Research*, 29(39), 58648-58663.
- Dursun, T., Birinci, F., Alptekin, B., Sertkaya, I., Hasekioglu, O., Tunaboylu, B., & Zaim, S. (2022). Blockchain technology for supply chain management. In *Industrial Engineering in the Internet-of-Things World: Selected Papers from the Virtual Global Joint Conference on Industrial Engineering and Its Application Areas, GJCIE 2020, August 14–15, 2020* (pp. 203-217). Springer International Publishing.

- Dutta, P., Choi, T. M., Somani, S., & Butala, R. (2020). Blockchain technology in supply chain operations: Applications, challenges, and research opportunities. *Transportation research part e: Logistics and transportation review*, 142, 102067.
- Esmailian, B., Sarkis, J., Lewis, K., & Behdad, S. (2020). Blockchain for the future of sustainable supply chain management in Industry 4.0. *Resources, Conservation and Recycling*, 163, 105064.
- Fernandez, T. E. (2022). Blockchain Technology in Supply Chain Management. In *Logistics Engineering*. IntechOpen.
- Forbes Blockchain 50 2023: <https://www.forbes.com/sites/ninabambysheva/2023/02/07/forbes-blockchain-50-2023/?sh=5b1c6abc319d>
- Gammelgaard, B., Welling, H. S., & Nielsen, P. B. M. (2019). *Blockchain Technology for Supply Chains: A Guidebook*. Copenhagen Business School, CBS.
- Gedik, Y. (2021). Sürdürülebilir Tedarik Zinciri Yönetimi ve Sürdürülebilirliğin Tedarik Zincirleri Üzerindeki Etkileri: Kavramsal Bir Değerlendirme. *International Journal of Management Economics & Business/Uluslararası Yönetim İktisat ve İşletme Dergisi*, 17(3).
- Gedik, Y. (2020). Sosyal, Ekonomik Ve Çevresel Boyutlarla Sürdürülebilirlik Ve Sürdürülebilir Kalkınma. *Uluslararası Ekonomi Siyaset İnsan ve Toplum Bilimleri Dergisi*, 3(3), 196-215.
- Giannakis, M., & Papadopoulos, T. (2016). Supply chain sustainability: A risk management approach. *International Journal of Production Economics*, 171, 455-470.
- Gohil, D., & Thakker, S. V. (2021). Blockchain-integrated technologies for solving supply chain challenges. *Modern Supply Chain Research and Applications*, 3(2), 78-97.
- Gurtu, A., & Johny, J. (2019). Potential of blockchain technology in supply chain management: a literature review. *International Journal of Physical Distribution & Logistics Management*.
- Hong, L. (2022). *Blockchain Technology in Supply Chain Management: Performance and Risk Management Perspective* (Doctoral dissertation, University of Rhode Island).
- Ilo, O. (2019). *Ending child labour, forced labour and human trafficking in global supply chains*. ILO, OECD, IOM, UNICEF. International Labour Organisation.
- Jadhav, J. S., & Deshmukh, J. (2022). A review study of the blockchain-based healthcare supply chain. *Social Sciences & Humanities Open*, 6(1), 100328.
- Javaid, M., Haleem, A., Singh, R. P., Khan, S., & Suman, R. (2021). Blockchain technology applications for Industry 4.0: A literature-based review. *Blockchain: Research and Applications*, 2(4), 100027.
- Kaya, S & Turgut, M. (2019). Blockchain technology in supply chain. *The Journal of International Scientific Researches*, 4(2), 121-134.

- Kawabata, T., Acharya, M., Enomoto, T., & Konda, S. A. (2020). *Blockchain Technology and Environmental Sustainability-Foresight Brief No. 19* October 2020. Foresight Brief: Early Warning, Emerging Issues and Futures.
- Khanfar, A. A., Iranmanesh, M., Ghobakhloo, M., Senali, M. G., & Fathi, M. (2021). Applications of blockchain technology in sustainable manufacturing and supply chain management: A systematic review. *Sustainability*, 13(14), 7870.
- Khanna, A., Sah, A., Choudhury, T., & Maheshwari, P. (2020). Blockchain technology for hospitality industry. In *Information Systems: 17th European, Mediterranean, and Middle Eastern Conference, EMCIS 2020, Dubai, United Arab Emirates, November 25–26, 2020, Proceedings 17* (pp. 99-112). Springer International Publishing.
- Kopyto, M., Lechler, S., Heiko, A., & Hartmann, E. (2020). Potentials of blockchain technology in supply chain management: Long-term judgments of an international expert panel. *Technological Forecasting and Social Change*, 161, 120330.
- Kouhizadeh, M., Sarkis, J., & Zhu, Q. (2019). At the nexus of blockchain technology, the circular economy, and product deletion. *Applied Sciences*, 9(8), 1712.
- Kulahli, S., & Cagliyan, V. (2022). Blockchain technology applications in supply chain: a systematic literature review. *The Journal of Social Economic Research*, 22(1), 57-75.
- Laaper, S., Fitzgerald, J., Quasney, E., Yeh, W., & Basir, M. (2017, December). Using blockchain to drive supply chain innovation. In *Digit. Supply Chain Manag. Logist. Proc. Hambg. Int. Conf. Logist* (Vol. 1, p. 2013).
- Manzoor, R., Sahay, B. S., & Singh, S. K. (2022). Blockchain technology in supply chain management: an organizational theoretic overview and research agenda. *Annals of Operations Research*, 1-48.
- Meidute-Kavaliauskiene, I., Yıldız, B., Çiğdem, Ş., & Činčikaitė, R. (2021). An integrated impact of blockchain on supply chain applications. *Logistics*, 5(2), 33.
- Munir, M. A., Habib, M. S., Hussain, A., Shahbaz, M. A., Qamar, A., Masood, T., ... & Salman, C. A. (2022). Blockchain adoption for sustainable supply chain management: An economic, environmental, and social perspective. *Frontiers in Energy Research*, 613.
- Nakamoto, S. (2008). Bitcoin: A peer-to-peer electronic cash system. *Decentralized business review*, 21260.
- Nayak, G., & Dhaigude, A. S. (2019). A conceptual model of sustainable supply chain management in small and medium enterprises using blockchain technology. *Cogent Economics & Finance*, 7(1), 1667184.
- Niu, X., & Li, Z. (2019, March). Research on supply chain management based on blockchain technology. In *Journal of Physics: Conference Series* (Vol. 1176, No. 4, p. 042039). IOP Publishing.
- Ølnes, S., Ubacht, J., & Janssen, M. (2017). Blockchain in government: Benefits

- and implications of distributed ledger technology for information sharing. *Government Information Quarterly*, 34(3), 355-364.
- Özkanlısoy, Ö., & Akkartal, E. (2021). Digital transformation in supply chains: Current applications, contributions and challenges. *Business & Management Studies: An International Journal*, 9(1), 32-55.
- Paliwal, V., Chandra, S., & Sharma, S. (2020). Blockchain technology for sustainable supply chain management: A systematic literature review and a classification framework. *Sustainability*, 12(18), 7638.
- Park, A., & Li, H. (2021). The effect of blockchain technology on supply chain sustainability performances. *Sustainability*, 13(4), 1726.
- Parmentola, A., Petrillo, A., Tutore, I., & De Felice, F. (2022). Is blockchain able to enhance environmental sustainability? A systematic review and research agenda from the perspective of Sustainable Development Goals (SDGs). *Business Strategy and the Environment*, 31(1), 194-217.
- Parung, J. (2019, November). The use of blockchain to support sustainable supply chain strategy. In *IOP Conference Series: Materials Science and Engineering* (Vol. 703, No. 1, p. 012001). IOP Publishing.
- Queiroz, M. M., & Wamba, S. F. (2019). Blockchain adoption challenges in supply chain: An empirical investigation of the main drivers in India and the USA. *International Journal of Information Management*, 46, 70-82.
- Rejeb, A., Zailani, S. (2023). Blockchain Technology and the Circular Economy: A Systematic Literature Review, *Journal of Sustainable Development of Energy, Water and Environment Systems*, 11(2), 1100436.
- Rejeb, A., Rejeb, K., Simske, S., & Treiblmaier, H. (2021). Blockchain Technologies in Logistics and Supply Chain Management: A Bibliometric Review. *Logistics* 2021, 5, 72. *Blockchain-Based Digitalization of Logistics Processes*, 1.
- Rejeb, A., & Rejeb, K. (2020). Blockchain and supply chain sustainability. *Logforum*, 16(3).
- Rodrigues, E., Lourenzani, W., & Satolo, E. (2021). Blockchain in supply chain management: Characteristics and benefits. *BAR-Brazilian Administration Review*, 18.
- Rosic, H. (2012). The economic and environmental sustainability of dual sourcing (p. 119). Peter Lang International Academic Publishers.
- Saberi, S., Kouhizadeh, M., Sarkis, J., & Shen, L. (2019). Blockchain technology and its relationships to sustainable supply chain management. *International Journal of Production Research*, 57(7), 2117-2135.
- Sahoo, S., Kumar, S., Sivarajah, U., Lim, W. M., Westland, J. C., & Kumar, A. (2022). Blockchain for sustainable supply chain management: Trends and ways forward. *Electronic Commerce Research*, 1-56.
- Sakız, B., & Gencer, A. H. (2019). Blockchain Technology and its Impact on the Global Economy. *ON EURASIAN ECONOMIES 2019*, 98.

- Shoab, M., Zhang, S., & Ali, H. (2023). A bibliometric study on blockchain-based supply chain: a theme analysis, adopted methodologies, and future research agenda. *Environmental Science and Pollution Research*, 30(6), 14029-14049.
- Singh, C., Thakkar, R., & Warraich, J. (2022). Blockchain in Supply Chain Management. *European Journal of Engineering and Technology Research*, 7(5), 60-69.
- Singh, R. K., Mishra, R., Gupta, S., & Mukherjee, A. A. (2022). Blockchain Applications for Secured and Resilient Supply Chains: A Systematic Literature Review and Future Research Agenda. *Computers & Industrial Engineering*, 108854.
- Sivula, A., Shamsuzzoha, A., & Helo, P. (2021). Requirements for blockchain technology in supply chain management: An exploratory case study.
- Song, J. M., Sung, J., & Park, T. (2019). Applications of blockchain to improve supply chain traceability. *Procedia Computer Science*, 162, 119-122.
- Staub, S. (2022). Digital Conflicts in Production and Planning. In *Conflict Management in Digital Business* (pp. 1-23). Emerald Publishing Limited.
- Sunny, J., Undralla, N., & Pillai, V. M. (2020). Supply chain transparency through blockchain-based traceability: An overview with demonstration. *Computers & Industrial Engineering*, 150, 106895.
- Szewczyk, P. (2019). Application of blockchain technology in supply chain management. *Zeszyty Naukowe. Organizacja i Zarządzanie/Politechnika Śląska*.
- Tan, B. Q., Wang, F., Liu, J., Kang, K., & Costa, F. (2020). A blockchain-based framework for green logistics in supply chains. *Sustainability*, 12(11), 4656.
- Taqi, W., El Hassani, I., Cherrafi, A., Zekhnini, K., & Benabdellah, A. C. (2022). Blockchain technology for supply chain resilience. In *2022 14th International Colloquium of Logistics and Supply Chain Management (LOGISTIQUA)* (pp. 1-6). IEEE.
- Treiblmaier, H. (2018). The impact of the blockchain on the supply chain: a theory-based research framework and a call for action. *Supply chain management: an international journal*, 23(6), 545-559.
- Venkatesh, V. G., Kang, K., Wang, B., Zhong, R. Y., & Zhang, A. (2020). System architecture for blockchain based transparency of supply chain social sustainability. *Robotics and Computer-Integrated Manufacturing*, 63, 101896.
- Varsei, M. (2016). Sustainable supply chain management: A brief literature review. *The Journal of Developing Areas*, 50(6), 411-419.
- Verny, J., Oulmakki, O., Cabo, X., & Roussel, D. (2020). Blockchain & supply chain: towards an innovative supply chain design. *Projectics/Proyèctica/Projectique*, 26(2), 115-130.
- Wang, M., & Yang, Y. (2022). An empirical analysis of the supply chain flexibility using blockchain technology. *Frontiers in Psychology*, 5916.
- Wang, S., Ouyang, L., Yuan, Y., Ni, X., Han, X., & Wang, F. Y. (2019). Blockchain-enabled smart contracts: architecture, applications, and future trends. *IEEE*

Transactions on Systems, Man, and Cybernetics: Systems, 49(11), 2266-2277.

- Wang, Y., Singgih, M., Wang, J., & Rit, M. (2019). Making sense of blockchain technology: How will it transform supply chains? *International Journal of Production Economics*, 211, 221-236.
- Wong, L. W., Leong, L. Y., Hew, J. J., Tan, G. W. H., & Ooi, K. B. (2020). Time to seize the digital evolution: Adoption of blockchain in operations and supply chain management among Malaysian SMEs. *International Journal of Information Management*, 52, 101997.
- Yadav, S., & Singh, S. P. (2020). Blockchain critical success factors for sustainable supply chain. *Resources, Conservation and Recycling*, 152, 104505.
- Yousefi, S., & Tosarkani, B. M. (2022). An analytical approach for evaluating the impact of blockchain technology on sustainable supply chain performance. *International Journal of Production Economics*, 246, 108429.

Chapter 5

THE EFFECT OF SERVICE QUALITY ON CUSTOMER SATISFACTION AND CUSTOMER LOYALTY: A RESEARCH ON CUSTOMERS OF SUDAN TELECOMMUNICATION COMPANIES

Sara Abdelbagi Mohamed ABDELRAHIM¹

Muhammed Talha NARCI²

1 Sara Abdelbagi Mohamed ABDELRAHIM, Department of Business Administration, Istanbul Aydin University, Institute of Graduate Students (English), Istanbul, Florya Campus, Turkey (Email: sabdelbagiabdelrahim@stu.aydin.edu.tr)

2 Muhammed Talha NARCI (Assist. Prof. Dr.), Istanbul Aydin University, Management Information System, School of Applied Science, Istanbul, Turkiye. E-mail: muhammedtalhanarci@aydin.edu.tr ORCID: 0000-0002-2103-4037



Introduction

The potential for service growth is greater in a developing nation like Sudan. Services are actions, procedures, and outputs (Parasuraman et al., 2005; Zeithaml, 1988). Services are typically defined as “economic activities that produce a price and provide benefits for consumers at specific times and locations because it caused the beneficiary of the services to change in the way they wanted.” A service provider’s ability to succeed is largely reliant on the caliber of their relations with their clients, which affects their ability to win over and keep their business (Ismail et al., 2009; Mukherjee et al., 2017).

An important principle of service marketing is service quality. Due to the intense market rivalry today, developing long-term relationships becomes essential, and consumer loyalty is an increasing problem. Due to the intense rivalry, the service provider is now forced to fight in the market and set itself out from the competition on grounds other than pricing. As a result, the concept of service quality has come into being and gained popularity. A competitive advantage for the business comes from improved service quality. By offering high-quality services, every service provider can set themselves apart (Jamal and Anastasiadou, 2009).

In order to notify professionals to improve service quality to reduce customer loss and to offer solutions for doing so, this study intends to evaluate how service quality influences consumer satisfaction and loyalty. When formulating strategy, the research’s findings suggest emphasizing components of service quality that affect customer satisfaction should be given top priority to encourage clients to stick around for a longer time. This could aid in developing plans to keep devoted clients.

The primary focus of this study is service quality, understanding what it is, how it benefits users, and why it needs to be monitored is so crucial. Several business and public sectors around the world have published a wealth of literature on how to quantify service quality. The majority of the material is offered in one of the following industries: banking, education, travel, lodging, or dining. In the current global economic downturn, the firm’s retention, profitability, and productivity depend most heavily on service quality, customer satisfaction, and loyalty.

According to the literature, many businesses use service excellence as a differentiator. In today’s fiercely competitive, industrialized, and globally interconnected markets, this is even more obvious. Customers are necessary for any firm to succeed and the telecommunications industry is no exception. Several researches on customer satisfaction and the relationship between service quality with customer satisfaction and loyalty in industrialized nations have been conducted using the SERVQUAL (service quality) model.

Unfortunately, the telecom industry in developing nations has seen very little research in this field. Because we want to comprehend how service quality functions in a developing country, we chose Sudan for this study as a developing country. The SERVQUAL scale has made it feasible to fairly understand service quality dimensions including empathy, reliability, responsiveness, and assurance. This study intends to investigate the connection between service quality, customer loyalty, and customer satisfaction. Understanding how service quality affects customer satisfaction and loyalty would help Sudan telecom companies better satisfy their customers. So, this study's research questions are,

Question 1: What is the effect of service quality on customer satisfaction in the telecommunications sector?

Question 2: What is the effect of service quality customer loyalty in the telecommunications sector?

Question 3: What is the effect of customer satisfaction on customer loyalty in the telecommunications sector?

This paper expands the body of studies on service quality by analyzing the aspects that impact telecommunication industry.

Telecommunication Industry in Sudan

Communication businesses have largely been accepted during the past ten years as information technology develops. The development of this technology has unquestionably helped a wide range of people around the world have cheaper access to communication services. With the use of a phone, users may now send and receive brief messages, download data, and access the internet (Ibrahim et al., 2014).

Also, it may come as a surprise to learn that large amounts of data may be sent both domestically and globally in a matter of seconds or minutes thanks to telecommunication, which is the primary medium for communication and interaction between and among individuals and groups. It appears that managers in this field are under pressure from competition and advances in information and communication technologies to provide better, more consistent customer service than in the past in order to maintain customer satisfaction and brand dominance.

According to the literature, many businesses use service quality as a competitive advantage. Several scholars concur that in today's competitive marketplace, organizations must compete not only on price but also on the quality of their services and goods. In today's highly globalized, industrialized, and competitive marketplaces, this is even more obvious. Customers are a company's lifeblood, and the telecommunications industry is no exception

(Agyapong, 2011; Dubey and Srivastava, 2016).

Not to mention that in marketing colleges, winning over consumers' contentment and loyalty is referred to as a way to gauge how well the goods and services provided live up to their expectations. Customers now demand adequate services and are more aware of the standards of quality that are necessary for a product or service to be successful. This has increased competition among businesses in the industry and has made it harder for them to survive and expand. Sudan's telecommunications and Internet infrastructure have recently been upgraded, and the ICT industry has experienced impressive growth.

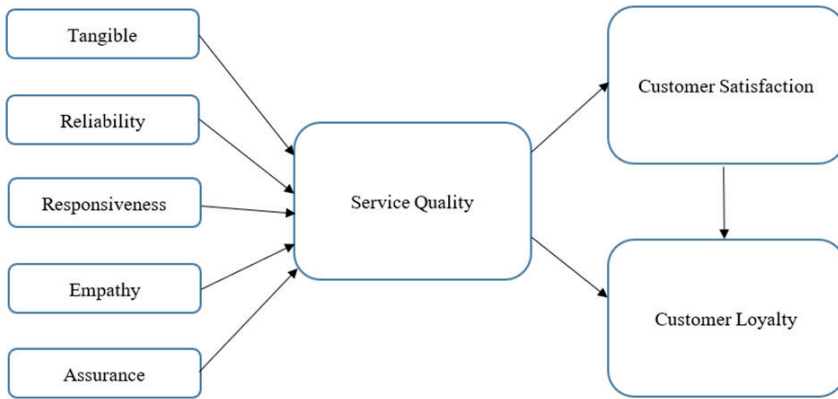
Sudan's ICT is among the most advanced in Africa and the Middle East as a result of the growth of the country's telecommunications industry, as well as the diversification and use of ICT services, including Internet and its applications (Sudan - Logistics Capacity Assessment - Digital Logistics Capacity Assessments).

MTN, Sudatel, and Zain are three international carriers that provide mobile-cellular and mobile broadband services in Sudan. These are the leading telecom companies. Given the increased competition facing telecommunications companies, they should pay close attention to the service they offer.

In conclusion, the primary goal of this study is to investigate and analyses the impact of service quality, which has five dimensions: tangible, dependable, responsive, empathic, assurance, and on client satisfaction and client loyalty in Sudan telecommunication firms.

Literature Review and Hypothesis

The significance of the telecommunications industry to an economy cannot be overstated. This is due to the fact that it serves as the primary method for carrying out every single action and operation. It facilitates decision-making, planning, organizing, motivating, educating, giving feedback, fostering interpersonal and professional relationships, and information sharing. Telecommunication is used in all public, monetary, governmental, cultural, and business actions. Communication obstacles between and among big groups of people, individuals, cooperative organizations, and governmental agencies have been greatly reduced thanks to mobile telecommunication networks. Telecommunications services have grown to be crucial components of various nations' socioeconomic development (Heggde, 2011). Our study, as shown in Figure 1, focused on the impact of service quality on customer satisfaction and customer loyalty.



Conceptual Framework

In this section, each variable in the framework and the hypothesized relationships are discussed briefly.

A. Service Quality

In the 1880s, the trend of service quality was introduced to establish a competitive advantage as firms realized that the quality of the product is the only assurance to maintain a competitive edge (Van Der Wal et al., 2002). Zeithaml and Malhotra well-defined service excellence as “the comparison of buyers’ hope and realization of services”. Perceived service excellence shows positivity to telecommunication industry, such as higher buyer satisfaction, and good feedback from a customer in the form of repurchasing and sharing good words about the product (Zeithaml et al., 2002). The work conducted by them is the most well-known and reveals ten types of dimensions.

Service quality is described as the activity of individuals or activates of groups of people, intangible nature which occurs or takes place always between consumers and teams of service providers, and it can happen physically as well when it comes to goods or tangible products. Researchers explained that Excellence of service is a measurement of how customers get satisfaction and the experienced they have had in telecommunication (Sabiote et al., 2012; Zhang et al., 2022). Namukasa defined excellence of service as reflected by the buyer’s perception of provided services and the expectations of the customers. He observes that “service excellence depends on the requirement of customer’s and need, and the level of services delivered to the customers must meet the expectation of the customers (Namukasa, 2013). Many authors agreed that there are two main components of the service quality, following the so-called “European perspective”: technical quality, functional (Bhat and Darzi, 2020; Chiu et al., 2009).

B. Service Quality Dimensions

1. Reliability

The capacity to consistently and exactly provide the service that has been promised is known as reliability. According to past researches reliability is one of the strongest predictors of service quality and customer satisfaction is favorably influenced by reliability in the banking, hotel, telecommunications, and retail industries, accordingly (Hernon et al., 1999; Rareş, 2014) .

One of the main factors influencing service quality continues to be reliability. In a nutshell, reliability refers to the capacity to consistently meet customers' expectations, respond to their issues in a timely manner, and maintain an error-free track record. Many researchers determined that dependable businesses provide services in the proper way. So, another definition of reliability is the capacity to deliver services dependably, accurately, and with the capability of addressing consumer issues (Knop, 2019; Lee and Kim, 2012; Ocampo et al., 2019).

Consistency and reliability are related concepts. The term consistency describes how items and pieces are compatible and consistent. According to Frei et al., service quality calls for consistency of service output around a perfect goal value chosen by clients (Frei et al., 1999).

2. Assurance

The capacity of a company's employees to motivate confidence and trust by their knowledge, courtesy, and other qualities is known as assurance. Assurance is a factor that affects service quality in the telecommunication industry. It also has an impact on how customers perceive employee competence, which is essential for gaining the trust of clients. In the banking and telecommunications industries, assurance plays a critical role in service quality and positively affects customer satisfaction (Erdil and Yildiz, 2011; Petridou et al., 2007; Yeo et al., 2015). Lee came to the conclusion that customers expect businesses to lead their respective industries in the solutions they provide. Customers are reassured that they can trust you when you demonstrate your expertise, whether by listing your qualifications and professional certificates or by posting client testimonials. Lee and Kim, (2012).

When clients have a wide range of choices yet are unsure of whom to believe when making a purchase, assurance is essential. Imagine you are in charge of an online shop. You must understand how to stand out and win clients' trust given that they are constantly inundated with marketing from possibly dishonest internet retailers.

3. Tangible

Tangible, for instance, tangibles include equipment and staff looks. Several studies' findings indicate that customer issues are less effectively solved by tangibles and have less bearing on how well services are perceived in the banking industry. But other studies claimed that tangibles are important to forecast customer satisfaction in numerous sectors (Mukherjee et al., 2003; Parasuraman et al., 1985).

The majority of the time, tangible assets is objects manufactured by humans. Physical attributes like tools, facilities, and personal appearance are referred to as tangible dimensions in previous studies (Krishnamurthy et al., 2010; Sureshchandar et al., 2002). One of the key factors in the telecom business that persuades clients to enter shop halls and make service purchases are tangibles like sim card packets and telecom network shop interior design. Because of this, tangibility should always be adjusted to match customer perception and expectation.

4. Empathy

Empathy is the kind of considerate, one-on-one service that a business offers its clients. Researchers in the past have suggested that clients should receive tailored service and treatment. Businesses should demonstrate empathy for their clients, just as they would if they were giving them personalized service. The past studies' findings also demonstrate that, in the telecommunications industry, empathy is a strong predictor of customer satisfaction (Lecompte and Goetz, 2016; Parasuraman et al., 1985).

Giving customers individualized attention is the definition of empathy. It is thought that empathy is innate and cannot be learned. Due to the courteous treatment clients receive from personnel, customer loyalty grows. Employees with empathy are reported to be able to recognize the wants of consumers and are also recognized for customizing their engaging behaviors to meet the demands of certain clients. Also, as personnel gets more adept at recognizing their clients, customer satisfaction levels rise. Customers' needs and wants change daily in a developing society, and it is always the responsibility of businesses to satisfy those needs. When their needs are not satisfied, they are forced to look for alternative providers (Giacobbe et al., 2013; Moorman et al., 2019).

5. Responsiveness

Response time and customer-friendly behavior are referred to as responsiveness. For many company sectors, responsiveness is a critical component of client satisfaction. In addition, customer satisfaction is significantly predicted by responsiveness (Parasuraman et al., 1985; Zeithaml et al., 2002).

The capacity to respond quickly and adaptably to client needs is known as responsiveness. Past studies have shown that responsiveness, The second most important characteristic, after reliability, was self-knowledge, It include achieving important personal needs and goals as well as understanding one another so that the partners may understand and support one another. It also embraces the idea of adaptability and the capacity to create services that meet the client requirements (Krishnamurthy et al., 2010; Parasuraman et al., 1985). On the other hand, some investigations discovered that public sector banks' poor responsiveness was a significant contributor to consumers' discontent since these banks fail to offer fast service and because workers are overworked and unwilling to assist the clients. So, it can be inferred from the claims that the responsiveness aspect of Customer satisfaction will be significantly impacted by service quality, particularly in the service sector (Bolton and Drew, 1991; Saleh and Ryan, 2006).

C. Customer Loyalty and Service Quality: A Relationship

Reliability, empathy, and other service quality three components of Servqual were discovered to be positively linked, according to the findings of various previous studies. Studies in the retail industry have shown a strong correlation between customer loyalty and all service quality metrics. With customer pleasure acting as a mediating factor. Empathy had the strongest positive correlation while assurance had the lowest, according to studies on tangibles in the telecommunications business. Responsiveness and reliability were also found to be strongly associated with customer loyalty.

In a study on the Kenyan mobile telecommunications industry, researchers discovered a favorable association between customer loyalty and each of the SERVQUAL model's service quality measures. The strongest factor influencing client loyalty is empathy. Apart from tangibility, all consumer perceptions of service quality factors had a favorable effect on customer loyalty. In the research project carried out by researchers in Ghana's telecommunications business, all five SERVQUAL constructs were discovered to be closely related to customer (Heggde, 2011; Ibrahim et al., 2014; Ojo et al., 2010; S. Alnsour et al., 2014; Van Der Wal et al., 2002).

What a service provider can do to meet client expectations and maintain those expectations throughout the duration of a long-term connection to obtain subsequent purchases is referred to as customer retention. According to past studies, the main benefit of customer retention was repurchasing intent. According to the experts, in order to maintain client loyalty and satisfaction, service providers should always control these factors. It is simpler to keep the customer from selecting goods and services from rivals by ensuring satisfaction and loyalty (Zhang et al., 2022).

In the telecommunications sector, a service contract with an alluring

pricing might help a company keep a customer for a predetermined amount of time. Consumer loyalty is a preference for a brand, a commitment, and a purchase intention. Due to the positive feelings toward the specific company, this loyalty has resulted in a strong desire to repurchase the same brand or service (Mahmood et al., 2018; Sivadas and Baker-Prewitt, 2000).

Customer satisfaction and loyalty are essential components of the customer retention process. Many studies have examined the connection between client retention and loyalty. Giving away gifts, discount coupons, and freebies at an event or festival can increase a customer's loyalty to a certain brand or business by enticing them to make another purchase. Thus, it's crucial that a business that can thrive in a cutthroat industry cultivates valuable relationships with its clients through cultivating client loyalty (Arman Khan et al., 2021; Trenevskaja Blagoeva and Mijoska, 2019).

D. Associating Service Quality and Customer Satisfaction

Long-term retention of a repeat client profile is challenging. This is partially a result of the competition between numerous organizations. Yet there is only one way to stop this phenomenon: by preserving quality and keeping customers happy. Numerous research emphasize the importance of comparing expectations and perceptions to figure out the relationship between customer satisfaction and quality. In fact, many people have advocated using a disconfirmation-based approach to measure expectations and perceptions as the greatest tool for gauging quality and satisfaction (Parasuraman et al., 1985; Zeithaml et al., 2002).

The studies that link customer satisfaction and service quality will be extracted in this step. Researchers looked into whether technical and financial service quality dominated client satisfaction and discovered a favorable relationship between these two characteristics and consumer pleasure. However, their analysis noted that this relies on the dimension used by the organization (Sureshchandar et al., 2002).

In his study on the effects of value, quality, and customer satisfaction on consumer behavioral intentions, Cronin found that the three variables were positively correlated with changes in consumers' purchase volumes. The study also discovered that service value and quality have an impact on customer satisfaction (Cronin and Taylor, 1992).

The results of Cronin were comparable to those of Anderson, who discovered that when quality falls short of expectations, it has a greater negative effect on satisfaction than when quality meets or surpasses human expectations. Buyer elasticity can occasionally have an impact on customer satisfaction. Yet, this varies by industry and company. The likelihood that customers will find a company's products less appealing to purchase decreases

as more customers become unaware of the company's services. Systematically, all businesses encounter this wave, and occasionally the only option is to remain with the default course of action while keeping an eye on market developments. When examining customers' purchasing intentions, the type of correlation between service quality and satisfaction is frequently used (Anderson and Sullivan, 1993; Cronin and Taylor, 1992).

In order to shape consumers' purchasing intentions, Taylor and Baker conducted a study to evaluate the connection between service quality and satisfaction. The results of the empirical research showed that the association between service quality and purchase intent was moderated by customer satisfaction. According to their study, when satisfaction increases relative to other variables, the beneficial impact of service quality on purchase intentions increases.

However, their study goes on to make the argument that models of consumer behavior that take into account both satisfaction and service quality produce a clearer picture of understanding consumer purchase intentions than simple models that solely take into account these factors. Their study also advised marketers to measure customer satisfaction levels for individual service encounters as well as the short- and long-term prognosis for service quality (Anderson and Sullivan, 1993; Cronin and Taylor, 1992; Taylor and Baker, 1994).

Carlson conducted an online poll in order to create a model that would make it simple to evaluate the relationship between user attitudes and the quality of e-services. They observed that customer satisfaction with retail outlets is influenced by service quality. Customers are also presumptively more likely to recommend a department when they are happy than when they are unhappy. Their results agreed with a number of other studies' findings that service quality plays a significant role in determining customer satisfaction (Carlson and O'Cass, 2010; Krishnamurthy et al., 2010; Rust et al., 1995).

When levels of dissatisfaction are higher, service sectors always lose more. Several factors contribute to satisfied clients. They include courteous staff, informed staff, accurate billing, and prompt services. A study by Muhammad et al. looked at the relationship between customer satisfaction and service quality among Pakistani customers of conventional banks and Islamic banks. The study used the SERQUAL scale to create a questionnaire and the Analytical Hierarchy Process to analyze the results. The results of their investigation showed that an improvement in banks' service quality had bigger effects on customer contentment; however the relationship between customer satisfaction and service quality has also drawn various interests in understanding loyalty in business (Buttle, 1996; Muhammad Awan et al., 2011; Wong and Sohal, 2003).

The above arguments lead to the construction of the following hypotheses:

H₁: Service quality has a positive effect on customer satisfaction.

H₂: Service quality has a positive effect on customer loyalty.

H₃: Customer satisfaction has a positive effect on customer loyalty.

Research Method

The study aims mainly to examine that is there an effect of service quality on customer satisfaction and loyalty. For this purpose, the scales of the research which are SERVQUAL dimensions that first conceptualized and proposed by (Parasuraman et al., 1985; Zeithaml et al., 2002), Customer Satisfaction which adopted from (Steven A Taylor, 1994), and customer loyalty that's adopted from (Backman & Crompton, John L., 1991) have used in correlation and regression analysis to test the hypothesis.

This research looked to choose Customers of middle- and upper-class telecom firms in Khartoum who are made up the research universe. Due to the population's availability to telecommunications services, that has 34 million, 630 thousand people in 2021 2021 (Telecommunication in sudan, n.d.), and the fact that most individuals in Khartoum have access to mobile phones, these locations are the ones that are being targeted.

The formula we employ to determine the sample size is as follows:

$$n = (Z^2 * p * q) / E^2$$

Where n is the necessary sample size. Z = Z-score for the appropriate level of confidence p = the anticipated percentage of the population that possesses the desired feature q = 1 - p E is the intended error margin.

We make the cautious assumption that p = 0.5, which yields the highest sample size necessary for any given population. We anticipate that roughly 50% of clients will be satisfied and committed to the Sudanese telecommunications businesses.

Let's now compute the sample size based on the projected values:

Z = Z-score for a 95% confidence interval; for large populations, the typical value is 1.96 E = (0.05) margin of error

$$n = (1.96^2 * 0.5 * 0.5) / (0.05^2) \quad n = (3.8416 * 0.25) / 0.0025 \quad n = 0.9604 / 0.0025 \quad n \approx 384.16$$

Accordingly, using these presumptions, it would require a sample size of about 384 respondents. Although this equation implies an infinite population number, this is not how the world actually works. We employ the following formula to account for the finite population:

$$n' = (n * N) / (n + N - 1)$$

Where: The adjusted sample size is n' . Starting sample size is n . Size of the population, N

Using the estimated values, let's get the corrected sample size:

$$n' = (384 * 34,630,000) / (384 + 34,630,000 - 1) \quad n' = 13,297,440,000 / 34,630,383 \quad n' \approx 384$$

According to this computation, the corrected sample size is still 384 respondents, roughly.

Additionally, Service quality, customer satisfaction, and customer loyalty scales were adopted in this study with the total of 39 questions divided into 4 sections. On the other hand, there were fully functional 464 questionnaire were distributed online with the use of Google form survey tool. Descriptive and inferential statistics were utilized in the study to examine the data using SPSS software Version 26, with the use of Cronbach alpha reliability test, and other descriptive statistics, after that empirical test using regression modeling technique was used to test the model and hypothesis.

Findings

In this part of the study, statistical techniques were applied to the primarily collected data using SPSS statistic package program, and extracted results were interpreted to test the constructed hypothesis for the research. First, the reliability of scales was checked.

To evaluate the scales' reliability (internal consistency), Cronbach's alpha coefficient of each scale was calculated. As can be seen in Table 1, Cronbach's alpha coefficients for service quality scale, customer satisfaction and customer loyalty are 0.939, 0.905 and 0.879 respectively, which is higher than the recommended 0.70 for reliability. According to these results, it can be said that all the scales used in the study are reliable.

Table 1: *Reliability analysis*

	Cronbach's Alpha	N of Items
Servqual Scale	0.939	22
Customer Satisfaction	0.905	4
Customer Loyalty	0.879	5

A. Demographic Characteristics of Respondents

The findings on respondents' demographic data are presented in Table 2; this includes respondents' gender, age, level of education, monthly income,

number of years customers have been using different mobile networks in Sudan, type of Mobile line which customers are using and as well as which tariff plan is most commonly used in Sudan.

Table 2: *Distribution of Demographic Characteristics of the Participants*

Demographic Characteristics	Frequency	Percent	Demographic Characteristics	Frequency	Percent
Gender			Education		
Male	217	46.8	High School and Below	21	4.5
Female	247	53.2	Under Graduate	115	24.8
Marital Status			Graduate	168	36.2
Single	294	63.4	Up Graduate	160	34.5
Married	170	36.6	Household Income		
Age			25000 SDG and below	104	22.4
Under 18	14	3.0	25000 - 35000 SDG	72	15.5
18-30	269	58.0	35000 - 45000 SDG	52	11.2
31-40	112	24.1	45000 SDG and above	236	50.9
41-50	43	9.3	Line type		
51 and more	26	5.6	Zain	202	43.5
Years of Using Mobile			MTN	93	20.0
Less than 1 year	15	3.2	Sudani	169	36.4
1 - 3 years	58	12.5	Tariff plan		
3 - 5 years	39	8.4	Pre-paid	335	72.2
5 years and above	352	75.9	Post-Paid	101	21.8
			Don't know	28	6.0

B. Correlation Analysis

Correlation and regression analyses were performed to test the hypotheses established with the variables in the research. The correlation analysis results are shown in Table 3, and there are positive relationships between variables according to.

Table 3: *Correlation Analysis Values*

Correlations				
		Servqual	Customer Satisfaction	Customer Loyalty
Servqual	Pearson Correlation	1	.731**	.747**
	Sig. (2-tailed)		.000	.000
	N		464	464

Customer Satisfaction	Pearson Correlation		1	.824**
	Sig. (2-tailed)			.000
	N			464
Customer Loyalty	Pearson Correlation			1
	Sig. (2-tailed)			
	N			

** . Correlation is significant at the 0.01 level (2-tailed).

C. Regression Analysis

Simple linear regression analysis was applied to test the research hypothesis. According to Table 4, 5, and 6, where the analysis results are given, the explanatory power (R^2) of the models were calculated as .534, .558, and .679. The R^2 values show that 53.4%, 55.8%, and 67.9% of the dependent variables, are explained by the independent variables, customer satisfaction and service quality. The β coefficient of the independent variables from the data in the tables below .731, .747, and, 824 ($p < 0.05$). Since the independent variables are $p < 0.05$ according to the β value, it can be said that independent variables have a statistically significant effect on the dependent variables. In this case, it is understood that the research hypothesizes cannot be statistically rejected.

Table 4: Customer Satisfaction Regression Analysis

Model	B	Std. Error	Beta	t	Sig.	R	R ²	F	p	
1	(Constant)	-.163	.135		-1.204	.000	.731	.534	530.258	.000 ^b
	Servqual	.976	.042	.731	23.027	.000				

a. Dependent Variable: Customer Satisfaction

Table 5: Customer Loyalty Regression Analysis (Independent Variable: Servqual)

Model	B	Std. Error	Beta	t	Sig.	R	R ²	F	p	
1	(Constant)	.012	.129		.096	.000	.747	.558	583.945	.000 ^b
	Servqual	.973	.040	.747	24.165	.000				

a. Dependent Variable: Customer Loyalty

Table 6: Customer Loyalty Regression Analysis (Independent Variable: Customer Satisfaction)

Model	B	Std. Error	Beta	t	Sig.	R	R ²	F	p	
1	(Constant)	.729	.078		9.338	.000	.824	.679	978.238	.000 ^b
	Customer Satisfaction	.803	.026	.824	31.277	.000				

a. Dependent Variable: Customer Loyalty

Conclusion and Discussion

This study's major goal was to investigate how service quality affects customer satisfaction and loyalty. For this purpose a few analyses were conducted using SERVQUAL dimensions as the independent variable and customer satisfaction and loyalty as the dependent variables. Regression analysis was used to test the hypothesis. Using the SERVQUAL model developed by Parasuraman et al. in 1988, the study thoroughly examined the effects of each antecedent of service quality on customer satisfaction and customer loyalty. The results showed that service quality has a favorable effect on customer satisfaction and customer loyalty. The outcome is consistent with (Agarwal & Dhingra, 2023).

The descriptive analysis suggests that the highest number of people who filled in the survey which in this case online were in between ages 18-30 years and that they are well conversed with the usage of mobile phones. This was then followed with descriptive of females having the highest number of respondents in the category of gender. It is also believed that females do carry out a lot of business in Sudan and this is one of the reasons as why they had the highest number of respondents from the analysis. Based on the population of Sudan, this study assumed that the majority number of respondents would be married. However, this was not the case when majority of the respondents turned out to be single. In addition, the number of singles is also greatly increasing due to the rise in the number of youths. Graduate students were also found to be the highest within the analysis. This is likely because most Sudanese can only afford to study till graduation.

Reliability analysis clearly demonstrated that the scale employed had a high level of internal consistency. The Cronbach alpha value provides a good explanation for this. The value for SERVQUAL customer satisfaction and customer loyalty were 0.939, 0.905 and 0.879 respectively. A Cronbach alpha of 0.70 and above is believed to be acceptable by many profound researchers, and a value of 0.8 and above is good. Since the Cronbach alpha from the analysis of our study were greater than the standard value 0.70, shows that the questions were reliable.

Correlation was carried out to assess the degree to which two variables are associated. According to our results, There is a strong positive correlation between SERVQUAL Mean and Satisfaction Mean ($r = .731, p < .01$) and between Satisfaction Mean and Loyalty Mean ($r = .824, p < .01$). There is also a significant positive relationship between SERVQUAL Mean and Loyalty Mean ($r = .747, p < .01$). These correlations suggest that satisfaction rises in tandem with perceptions of higher-quality services, which leads to greater loyalty. This implies that organizations that prioritize service quality can enhance customer satisfaction and loyalty, which can benefit their bottom

line by fostering repeat business and referrals.

The regression model used in this study demonstrated that the total SERVQUAL dimensions may account for the variation in overall customer satisfaction and customer loyalty. The SERVQUAL factors' effects on customer loyalty and satisfaction are depicted by the regression model. According to the findings, each component of service quality is a reliable indicator of client happiness. According to the significance of the variables, there was a correlation between the dependent variables of customer satisfaction and loyalty and the five independent factors SERVQUAL dimensions.

The findings are consistent with past studies (Dalbehera, 2020; Rowley, 2006; Stiakakis and Georgiadis, 2009; Zhang et al., 2022) that have highlighted the importance of service quality in customer satisfaction, and they support hypothesis number one, which holds that service quality positively increases customer satisfaction. The results suggest that consumers in the telecom sector give the quality of the services they receive a high priority.

The research hypothesis number two was also accepted, and the result emphasizes how important it is to provide top-notch services in order to win over customers. Clients are more inclined to stay loyal to their service provider and refer the business to others if they believe they are receiving high-quality services.

According to the study, client loyalty and satisfaction are positively associated. Which was the third hypothesis this research highlights how crucial customer happiness is to maintaining client loyalty in the telecom industry. Customers who are happy with their service providers are more inclined to stick with them, which lowers customer churn and boosts income for the business.

The study's findings lead to the conclusion that service quality, consumer satisfaction, and customer loyalty are important factors for telecommunication service providers to take into account. The results suggest that in order to retain and win over the loyalty of their clients and, ultimately, to boost their bottom line, service providers must prioritize the quality of their products.

The study has a few limitations that need to be investigated further in further studies. First when analysing the service industry, it's critical to gauge views and expectations along with client happiness and loyalty. Unfortunately, the two were not considered in the current study when determining the size of the service quality disparity. The perception-expectations model should be considered when measuring service quality in future studies, it is urged here.

Another aspect to take into account while conducting research is the population or overall number of respondents. Despite being chosen at random for this study, the sample does not accurately reflect all users of

telecommunications services. With only 464 responses, the sample size was too small, making it difficult to generalize the study's conclusions. It should be mentioned that the sample size of 464 is rather little when taking into account the total number of consumers in Sudan for various telecom operators. Therefore, to increase the results' generalizability, the academic literature suggests that sample coverage should be broad. In the future, a larger sample should be offered, and the geographic scope of such studies should be broadened.

Thirdly, in addition to the criteria taken into account in this study, additional factors like switching fees, individualized services, etc. may have a big impact on customer loyalty. Finally, because this study was restricted to the Sudanese telecom industry, its practical application is somewhat limited. To make the service broad and all-encompassing, it might also incorporate other service industries.

REFERENCES

- Agarwal, R., and Dhingra, S. (2023). Factors influencing cloud service quality and their relationship with customer satisfaction and loyalty. *Heliyon*.
- Agyapong, G. K. Q. (2011). The Effect of Service Quality on Customer Satisfaction in the Utility Industry – A Case of Vodafone (Ghana). *International Journal of Business and Management*, 6(5).
- Anderson, E. W., and Sullivan, M. W. (1993). The Antecedents and Consequences of Customer Satisfaction for Firms. <https://doi.org/10.1287/Mksc.12.2.125>, 12(2), 125–143.
- Arman Khan, Javed Ahmed, and Farman Ullah Khan. (2021). An Empirical Study of Customer Satisfaction and Loyalty: An Evidence of Telecom Sector in Pakistan. *Journal of Business and Tourism*, 5(2), 65–78.
- Backman, S. J., & Crompton, John L. (1991). The usefulness of selected variables for predicting activity loyalty. *Leisure Science*.
- Bhat, S. A., and Darzi, M. A. (2020). Online Service Quality Determinants and E-trust in Internet Shopping: A Psychometric Approach. *Vikalpa*, 45(4), 207–222. <https://doi.org/10.1177/02560909211012806>
- Bolton, R. N., and Drew, J. H. (1991). A Multistage Model of Customers' Assessments of Service Quality and Value. *Journal of Consumer Research*, 17(4), 375–384.
- Buttle, F. (1996). SERVQUAL: review, critique, research agenda. *European Journal of Marketing*, 30(1), 8–32.
- Carlson, J., and O'Cass, A. (2010). Exploring the relationships between e-service quality, satisfaction, attitudes and behaviours in content-driven e-service web sites. *Journal of Services Marketing*, 24(2), 112–127.
- Cronin, J. J., and Taylor, S. A. (1992a). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, 56(3), 55.
- Dalbehera, S. (2020). Measuring Service Quality in Digital Library Services by the Research Scholars of S.O.A. University of Odisha Using E-S-QUAL Model. 111–126.
- Erdil, S. T., and Yildiz, O. (2011). Measuring service quality and a comparative analysis in the passenger carriage of airline industry. *Procedia - Social and Behavioral Sciences*, 24, 1232–1242.
- Frei, F. X., Kalakota, R., Leone, A. J., and Marx, L. M. (1999). Process variation as a determinant of bank performance: Evidence from the retail banking study. *Management Science*, 45(9), 1210–1220.
- Fynes, B., and Lally, A. M. (2008). Innovation in Services: From Service Concepts to Service Experiences. 329–333.
- Giacobbe, R. W., Jackson, D. W., Crosby, L. A., and Bridges, C. M. (2013). A

Contingency Approach to Adaptive Selling Behavior and Sales Performance: Selling Situations and Salesperson Characteristics.26 (2), 115–142. <https://doi.org/10.2753/PSS0885-3134260202>

- Hegde, G. (2011). Strategies for Sustainable Channel Relations in Mobile Telecom Sector. *Journal of Economics and Behavioral Studies*, 1(1), 7–18.
- Hernon, P., Nitecki, D. A., and Altman, E. (1999). Service quality and customer satisfaction: An assessment and future directions. *Journal of Academic Librarianship*, 25(1), 9–17.
- Ibrahim, M., Khalil Shahid, M., and Fayaz Ahmed, S. (2014). The Impact of Telecom Services Characteristics on Consumer for Use in Pakistan. *Advances in Economics and Business*, 2(4), 172–179.
- Ismail, A., Alli, N., Abdullah, M. M., and Parasuraman, B. (2009). Perceive Value as a Moderator on the Relationship between Service Quality Features and Customer Satisfaction. *International Journal of Business and Management*, 4(2).
- Jamal, A., and Anastasiadou, K. (2009). Investigating the effects of service quality dimensions and expertise on loyalty. *European Journal of Marketing*, 43(3–4), 398–420.
- Knop, K. (2019). Evaluation of quality of services provided by transport and logistics operator from pharmaceutical industry for improvement purposes. *Transportation Research Procedia*, 40, 1080–1087.
- Krishnamurthy, R., B. D. T. M., SivaKumar, Mr. A. K., and Sellamuthu, Dr. P. (2010a). INFLUENCE OF SERVICE QUALITY ON CUSTOMER SATISFACTION: APPLICATION OF SERVQUAL MODEL. *International Journal of Business and Management*, 5(4), p117.
- Lecompte, M. D., and Goetz, J. P. (2016). Problems of Reliability and Validity in Ethnographic Research. [Http://Dx.Doi.Org/10.3102/00346543052001031](http://Dx.Doi.Org/10.3102/00346543052001031), 52(1), 31–60.
- Lee, H., and Kim, C. (2012). A DEA-SERVQUAL Approach to Measurement and Benchmarking of Service Quality. *Procedia - Social and Behavioral Sciences*, 40, 756–762.
- Mahmood, A., Tauheed Rana, M. L., and Kanwal, S. (2018). Relationship between Service Quality, Customer Loyalty and Customer Satisfaction. *Lahore Journal of Business*, 6(2), 135–154.
- Mukherjee, A., Nath, P., and Pal, M. (2003). Resource, service quality and performance triad: A framework for measuring efficiency of banking services. *Journal of the Operational Research Society*, 54(7), 723–735.
- Namukasa, J. (2013). The influence of airline service quality on passenger satisfaction and loyalty the case of Uganda airline industry. *TQM Journal*, 25(5), 520–532.
- Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49(4), 41–50.

- parasuraman, A., Zeithaml, V. A., and Malhotra, A. (2005). E-S-QUAL a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213–233.
- Sabiote, C. M., Frías, D. M., and Castañeda, J. A. (2012). The moderating effect of uncertainty-avoidance on overall perceived value of a service purchased online. *Internet Research*, 22(2), 180–198.
- Steven A Taylor, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumer's purchase intentions. *Journal of retailing*, 70(2), 163-178.
- Sudan - Logistics Capacity Assessment - Digital Logistics Capacity Assessments. (n.d.). Retrieved March 31, 2023, from <https://dlca.logcluster.org/display/public/DLCA/Sudan>
- Sureshchandar, G. S., Rajendran, C., and Anantharaman, R. N. (2002a). Determinants of customer-perceived service quality: A confirmatory factor analysis approach. *Journal of Services Marketing*, 16(1), 9–34.
- Taylor, S. A., and Baker, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, 70(2), 163–178.
- Telecommunications in sudan. (n.d.). Retrieved from world data info: [https:// www.worlddata.info/africa/sudan/telecommunications.php](https://www.worlddata.info/africa/sudan/telecommunications.php)
- Van Der Wal, R. W. E., Pampallis, A., and Bond, C. (2002). Service quality in a cellular telecommunications company: a South African experience. *Managing Service Quality: An International Journal*, 12(5), 323–335.
- Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), 2–22.
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30(4), 362–375.
- Zhang, L., Yi, Y., and Zhou, G. (2022). Cultivate customer loyalty in national culture: a meta-analysis of electronic banking customer loyalty. *Cross Cultural and Strategic Management*, 29(3), 698–728.

Chapter 6

A HISTORICAL LOOK ON THE JAPANESE MILITARY MODERNIZATION PROCESS

*Ahmet M. KADIOĞLU*¹

¹ Ahmet M. KADIOĞLU, Dr., OSTİM Technical University,
ORCID ID: 0000-0001-9786-1904. Produced from the doctoral thesis
titled “Ottoman Japanese Military Modernization From a Comparative
History Perspective: 1870 – 1910”.



1. INTRODUCTION

When we look at Japanese history, Meiji Modernization and its success are shown as one of the most important events. Until the collapse of Tokugawa, the Shogunate administration in 1867, Japan was closed to the outside world and was skeptical in foreign relations. In the face of other changes in the world and the expansion policies of other state powers, Japan had to move towards the west and follow and adopt these ideologies. In this context, the current central government, which could no longer resist the pressures of the European states, had to accept the facts presented to it. These developments, on the other hand, caused unrest in both the authority and the society. With all these developments, Japan was reshaped as a result of the examples it obtained from the west, and it carried out large-scale reforms especially in the military fields and was successful. Thus, the main goal of Japan is to be a strong and uncompromising state like European states. Wide-scale modernizations, on the other hand, have begun to implement radical reform programs by using western models, especially in military fields and many social phenomena.

2. THE HISTORY OF JAPAN IN THE CONTEXT OF MILITARY REFORMS

Inspired by its Japanese pronunciation in Chinese sources, Japan, which was named “*Yamatai*”, was nourished until the 8th century by the migration of people and ideas from Korea, with the effect of being close to the Korean peninsula, and reached knowledge and civilization about China (Yarar, 2000: 68). The Yamato Kingdom, which gave its name to Japan, which has a fragmented structure, was located in the center of the country and united the country because it was the most powerful among other kingdoms.¹ Archaeological excavations and linguistic studies show that the Japanese people are not a pure society, but a mixed one (Coss, 1989: 73). Thus, the Yamato were made up of the Hayato and Emishi peoples.

The Yamato Kingdom developed the technology of Arab traders who were Muslim and built what could reach China. Thus, communication with China became easier and thus they adopted Chinese culture and lifestyles. However, this situation caused the Japanese aristocrats to lose their warrior characteristics over time (White, 1996: 36). Noblemen appointed as governors of the lands taken from the Hayato and Emishi began to seek proxies for their lands (Clark, 2007: 56). These newly appointed deputies were chosen from warriors who were usually natives of the same region (White, 1996: 48).

Immediately after the Gokturk Khaganate collapsed, the Chinese also conquered the Goguryo and Baekje Kingdoms (Downing, 1988: 84). Then,

¹ Shogun is the Japanese pronunciation of a military title used in China. This title, which means “*Great General*” and “*Top General*”, was used by the Overlords in Japan to rule the country on behalf of the emperor.

some of the warriors here went to Japan and started to form this class, which would be called Samurai in the historical process (Reid, 2000: 24). This class is used for loyal soldiers and refers to loyal soldiers. These soldiers and mounted warriors were tasked with guarding the border against the Emishis on Japan's eastern border and administering the lands on behalf of the nobles. They were also collecting taxes. Over time, the nobles in the old capital of Kyoto called the Samurai to the capital and used them as mercenaries in their political struggles (Bloch, 1968: 61). In this direction, the Samurai class, which got stronger over time, came to an equal position with the nobles as a ruling class (Wallerstein, 1976: 279). Thus, the Shogunate Government, established in the 11th century, functioned as an intermediary between the Samurai and the central government (Wallerstein, 1976: 666). However, just after the Mongols conquered China and Korea, the Kamakura Shogunate was destroyed and the nobles began to fall short of controlling the Samurai class. After the events, the nobles lost all their lands and powers to the Samurai (Atwell, 1990: 87). The Muromachi Shogunate, which was established later, was only strong and failed to become a single authority. Thus, over time, Japan turned into a more fragmented feudal structure (Acartürk & Kılıç, 2011: 16). In this context, Japan took on a similar structure in the period of the Anatolian Seljuk State's loss of power in Anatolia after the Mongol invasions and other principalities that emerged. Overlords, called Daimyo (Wakabayashi, 1992: 97) in the period called the Warring States Period in classical historiography, fought each other to unite Japan for nearly three hundred years (Çırakman, 2002: 189). As a result, the Three Great Bays were successful in this regard, respectively, and united Japan.

The Japanese did not become a united state until the end of the 16th century, and they remained defenseless against external threats (Asakawa, 2003: 57). With the unification of Japan, Europeans reached the shores of Japan. Thus, important political developments and especially military reforms in Japan are directly related to external threats. The emergence and development of the class called Samurai in Japan and the Japanese feudal structure constitute an important background for understanding military reforms.

Beginning in the 16th century, Japanese General Oda Nobunaga, who was greatly influenced by the Europeans who reached the shores of China and then Japan, was fascinated by the firearms and military technologies brought by the Europeans. He wanted to use this technology, which he was influenced by, to his advantage (Unger & Morris, 2016: 43). Thus, Oda Nobunaga accepted Christianity in order to be able to trade with the Europeans. By inviting Jesuit and Franciscan priests to his palace, he displayed a hospitable attitude towards them (İnalçık, 2010: 34). However, he was killed in 1582 before he could fulfill the idea of unifying Japan (Ortaylı, 2006: 116). Thereupon, Toyotomi Hideyoshi became the head of the old army, successfully united Japan and

occupied Korea. However, the Korean invasion failed and the country was again dispersed.

Clans in the west supported a small boy as Hideyoshi's heir. Clans in the east supported Tokugawa Ieyasu (Börekçi, 2006: 438). Tokugawa Ieyasu, who defeated the western clans in the Battle of Sekigahara in 1600, established the last shogunate, the Tokugawa Shogunate. Thus, he prepared the beginning of Japan's period of peace and stability that would last two hundred and fifty years (Elibol, 2009: 98). In the same process, the Dutch and the English joined the Portuguese and Spaniards who came to Japan and started to compete (Elibol, 2009: 98). However, in this period, a political and ideological conflict between England and Spain gained momentum. As a result, the Shogun, who was suspicious of Christians and especially Catholics, gave more weight to trade with the Dutch, who did not want the condition of accepting the missionary in order to do business (Arslan, 2010: 63). The son of Shogun Tokugawa Ieyasu, who banned Christianity for some periods in the descriptive process, also had similar views (Agoston, 2011: 53). In 1636, a peasant revolt in Shimabara turned into a religious uprising with the participation of Christian Samurai and Overlords. This situation increased the suspicions of the new Shogun even more. Shogun Tokugawa Iemitsu, who suppressed the Christian Japanese rebels with the support of the Dutch, completely banned Christianity. He executed all those who did not reject Christianity and expelled all Spaniards and Portuguese from his country. Afterwards, he published the Sakoku Edict in 1638 (Kolodziejczyk, 2011: 239). As a result, Sakoku means "*Closed Country*"; It has been a name for the period in which all foreigners were banned from entering the country except for Dutch, Korean and Chinese traders for two hundred years (Haksun, 2004: 203). In the same period, the exit of Japanese from the country was also prohibited.

Tokugawa Ieyasu, who ruled all western clans after the Sekigahara War, started the construction of a more permanent system by not repeating the mistakes of Oda Nobunaga and Hideyoshi Toyotomi before him (Kolodziejczyk, 2011: 145). As a result, a more and more powerful central structure emerged from the fragmented feudal structure. After the Shimabara Uprising, which was suppressed in 1638, no other uprisings occurred, except for small riots (Vernadsky, 1939: 145). Thus, the commercial activities and the merchant class, which had risen during the Warring States Period, began to gain strength (Hosking, 1997: 89).

Another important development in the Edo Period was the ban on the entry of the Samurai, who depended on the land and made a living with the taxes collected from the villagers in kind, to the villages (Sutton, 2015: 42). The Samurai, who settled in castles that turned into cities over time, turned into salaried bureaucrats (Çetin, 2001: 54). Therefore, the Samurai class gradually moved away from military affairs and became a class engaged in trade and

industrial activities. Foreign trade was made with the Dutch and the Chinese on the artificial island of Dejima built on the coast of Nagasaki. Thus, the trade of the Tsushima Principality with Korea was limited and the Dutch and Chinese trade in Nagasaki was monopolized by the shogunate (Lieven, 2006: 187). In addition, foreign ships were prevented from approaching other ports and the death penalty was imposed on foreigners who entered Japan without permission. The Japanese are completely banned from going abroad (Hosking, 1997: 139). The main purpose of all these measures is to prevent the spread of Christianity and Christianity, which are seen as a great threat to the survival of the state (Kurtaran, 2012: 97). In this context, Christianity was banned and the neo-Confucian movement that emerged in the 12th century, as in Japan, was adapted to the conditions of these countries (Arslan, 2009: 84).

All these developments have had great consequences for Japan in two areas. The first of these emerged in the military field. While Japan was a highly developed country in terms of weapon technology it used until the middle of the 17th century, it gradually fell behind Europe from this century, and by the 19th century, it still became a country that fought with swords and spears (Özcan, 2002: 103). Another result emerged at a systemic level. The Daimyos gathered in Edo, the capital of the shogunate, and the Samurai affiliated to them, over time, turned into a homogeneous structure with the fusion of cultures from various parts of the country and gradually began to take shape in the way of becoming a single nation. Thus, the clan connections began to be replaced by devotion to Japanese consciousness and love of country (Kolodziejczyk, 2011: 97).

This unity in the political field has also ensured the integration of the previously separate regions of the country with geographical and political barriers in the field of economy (Arslan, 2009: 198). As a result, industry and trade in the country began to increase gradually. Japan, which brought a limit on foreign trade by monopolizing foreign trade, was not interfered with for a long time with the support of the Netherlands. By not signing capitulations like the Ottoman Empire, it kept its national economy strong and started to accumulate the capital it would need during the Edo Period (Ünal, 2001: 18). According to this policy, Japan should limit its relations with the West for non-commercial purposes only to agreements in the technical field and prevent the Westerners from changing themselves. Thus, it was necessary that no one except a limited number of government officials be exposed to the cultural and religious elements of the West (Polat, 2011: 41).

It was assumed that as a result of the Sakoku Edict, Japan was cut off from all contact with the outside world. However, this does not fully reflect the truth. In the same period, the British declared war against China. This war, called the First Opium War, started in 1839 and ended with the Treaty of Nanjing signed in 1842. According to this agreement, some of China's

ports will be opened to free trade with the British, the British will be tried under their own laws, and with a later addition, the UK will be given the Most Favored Nation privilege (Haksun, 2004: 177). In 1944, France signed an agreement with similar privileges and started a privileged trade with China.

The Europeans, who could not find what they expected in the Chinese market, declared war on China again to force China to give more concessions and to open more ports. China suffered a heavy defeat and had to open all its ports to Europeans. It also had to exempt European traders from customs duty (Kurtaran, 2012: 27). After all these defeats, the Europeans, who realized that they would get what they wanted in East Asia, forced Korea and Japan to open their ports to trade.

The Tokugawa Shogunate was in a very difficult situation, especially the show of strength made by Commodore Perry when he came to the port of Edo. On the one hand, he had to defend the country against the western powers, and on the other hand, he had to fight the nationalist movement that tried to overthrow him. As a result, he started to bring weapons and military experts from western states by opening the country to trade (Berkes, 2004: 90). Seeing this as an insult to the emperor and the Japanese nation, the nationalist Samurai rebelled against Bakufu by seizing the government in some regions (Kamigato, 2002: 176). Although this war, called Bakumatsu², may seem small in terms of time and loss of life, it is actually extremely important in terms of its results (Tasaburo, 1948: 209). Of the three major clans that started the uprising, the Satsuma Principality had the privilege of conducting trade with the Ryukhu Principality (Arima, 1964: 74). The Satsuma Principality, which was on the losing side during the Battle of Sekigahara in 1600, was also an ancient and aristocratic family. Therefore, he did not accept submission to the Tokugawa Shogunate for a long time. The Satsuma Principality, which made preparations for a while by storing weapons, caught this shogunate off guard. However, when we look at the historical process, it was the Choshu Principality that started the rebellion first.

The Samurai in this principality, located on the northern coast of the island of Honshu, opened fire on the British ship approaching the shore and said that the shogunate did not accept the agreement signed with the western powers. He declared that foreigners who came to the Choshu shores would also be killed. However, both the British bombardment from the shore and the firearms of the Satsuma Principality soldiers collaborating with the Tokugawa Shogunate gained the upper hand over the Choshu Principality soldiers using swords and 17th century weapons (Hiraishi, 2015: 235). This first rebellion proved that the Samurai were incapable of western-style firearms, despite all their bravery and fighting skills. In addition, the shogunate army, which used

² This conceptual phenomenon, written as 幕末, is used to express the period of rebellion and wars.

traditional weapons such as swords, spears and arrows, could not show great effectiveness during this war. The Satsuma Principality, which supported the shogunate in this first war, also saw the effectiveness of western weapons and began to prepare by buying more such weapons (Arima, 1964: 140). With the mediation of the Tosa Principality, the Satsuma and Choshu Principalities, which initially fought against each other, united and rebelled, demanding that the shoguns hand over the administration to the emperor (Arima, 1964: 141). During these wars, the rebels against the westerners, believing that the country should not be opened to them, and the Tokugawa Shogunate, which signed capitulations against western countries, used both traditional weapons and modern European weapons against each other at the same time (Tanigawa, 1939: 117). From the middle of the 19th century, the Japanese tried to make their own weapons using drawings and books from the Dutch (Matsuda, 1919: 251). Thus, the rifles and cannons bought from the Portuguese in the 17th century were copied and produced in large quantities in a short time (Asakawa, 2003: 36).

One of the main reasons for Oda Nobunaga's superiority over his opponents is the use of these firearms. From this point of view, there was no change other than what was targeted in the Japanese army, and the Samurai did not leave their swords and use the rifle. They have used rifles and cannons for a long time, but their technology is behind the times. The Japanese were not surprised by the guns fired, but by the range and destructive power of the guns used (Braguinsky & Hounshell, 2016: 55). Thus, the production of armored ships was started with the examples from the books taken from the Dutch. The Tokugawa Shogunate brought military experts from France, modernized the navy and began to buy armored ships. It was aimed to use more firearms in the army, but as there was no time left to complete the reforms, a rebellion soon broke out (Christensen, 1999: 91). Although he had the military and economic strength to fight these rebels for a long time, the last shogun Tokugawa Yoshinobu relinquished his duties and powers. He thought that the country's resources should not be spent on a civil war, but on protecting it against foreigners (Abiko, 1989: 97). Thus, the nationalist group, which overthrew the shogunate administration in 1868 without much loss of life, summoned Emperor Meiji to Edo and renamed it with the word "*Tokyo*", which means "*Eastern Capital*", and made it the new capital of the empire.

3. FORMATION OF THE MODERN JAPANESE ARMY IN THE FRAMEWORK OF CHANGE AND TRANSFORMATION

Emperor Meiji, who was brought to power after the coup, which is known as the Historical Meiji Restoration, did not share the same view of the nationalists (Christensen, 1999: 123). However, after a short time, this nationalist party realized that it could not be successful against the westerners without the technology of the west. The policies of the last shogun were

approved by starting a rapid reform movement. The pro-Westernization community was also included in the government, and an atmosphere of peace was prepared (Xiaoguang, 2008: 85). The Meiji reforms were carried out with a social peace, without loss of life and without riots. It did not remain only in military fields, but also expressed many fields such as economic, political, administrative and education in a way to support the army. The group that carried out the revolution in Japan was carried out by the Samurai and it was provided by their voluntary renunciation of their traditional rights. In contrast, those who formed the new government were made up of Samurai and Daimyo. The feudal lords were abolished and a new city formation system was started, and all tax revenues were transferred from the feudal lords to the central government. Regular salaries were provided to samurai and overlords. They also continued to work for the government, as many of them were highly educated people (Boxer, 1984: 198). In Japan, which has undergone a radical system change, there has not been a shocking transition period due to social cohesion and no major problems have arisen apart from minor conflicts (Kei, 1996: 79).

However, the Christian Japanese did not want to accept the idea that the Pope was even superior to the Japanese Emperor and the shogun (Nishimura, 2011: 95). For this reason, they adapted the technological developments of the westerners to themselves and started a modernization movement in their countries without changing their own mentality and culture (Narzary, 2004: 41). After the feudal lords were abolished and the city system was adopted, the governors appointed as administrators started to be preferred from the centers. This system was also applied in the army, and by establishing a single central army, everyone, including the Samurai, was deprived of their right to bear arms (Christensen, 1999: 65). Thus, the use of weapons and force was brought under the control of the state, and the greatest reaction to the feudal regime that lasted for centuries was created (Sheldon, 1983: 87).

At the end of the Edo Period, the merchant class became inexorably richer and took an increasingly prestigious position (Dollinger, 1988: 75). Integration emerged between the merchant class and the samurai class. However, after the Shimabara uprising in 1638 was suppressed, mercenaries were not needed until the uprisings at the end of the Edo Period, and this structure underwent a serious change (Broadbridge, 1974: 179). After the Sakoku Edict of 1640, when the Japanese were forbidden to go abroad, the changes began to be felt in other dimensions (Crawcour, 1974: 82). Thus, during the Meiji Revolution, there were Samurai-origin merchants and companies on the basis of those who gave financial support to those who made the revolution (Broadbridge, 1974: 182). In this way, when the Meiji Era came, an extremely nationalist and Samurai origin industrialist group was formed. This group has also turned to strategic industrial areas by acting in parallel with the interest of the state

in its investments and commercial activities (Braguinsky & Hounshell, 2016: 130). In this context, it can be said that industrialization and military power in Japan are interdependent and even integrated. Thus, unless Japan prospered, the Japanese army could not become stronger. The strength of the army came from the country's industry and material wealth (Braguinsky & Hounshell, 2016: 130).

Japan has been in search of weapons, ships and experts in the field from the western states where it is underdeveloped. In particular, the Americans and the British were leading in this regard (Asakawa, 2003: 179). When evaluated within this framework, the Japanese remained quite unfamiliar with the western-style army system. Except for the Korean Campaign they started at the end of the 16th century, they did not fight any foreign state and until the 19th century they only engaged in defense at simple levels. A classic Japanese war consisted of a large-scale challenge. Just before the start of the war, the warriors of both sides, who they thought were the best, came forward and made an individual defense. Therefore, the Japanese had to completely abandon their existing military systems and completely accept the system taught by experts in their fields from the West (Allinson & Aniveas, 2010: 86). Thus, the experts and systems brought in Japan vary. In this context, the navy in Japan was developed by taking the example first from the French and then from the British. The land army, on the other hand, was modernized first by the Americans and then by the Germans (Saaler, 2006: 127).

Mandatory military service was introduced in 1873 and every man who reaches the age of twenty-one serves in the army as a regular four years and a reserve soldier for three years (Partner, 2007: 82). Samurai opposed this situation in the first place and claimed that people other than themselves could not do the military service (Gordon, 2000: 53). As a result of the efforts of the central government, the compulsory military service system has been fully implemented (Figal, 1999: 167). In 1878, the Imperial Army General Staff was established, taking the Prussian Generalstab as a role model (Kanamori, 1999: 85). With these innovations, important changes occurred in the land army in the Meiji Period. The military profession was taken away from a certain class in Japan and spread throughout the society.

As a result of the compulsory military service of the merchants and peasants, they were trained by the old Samurai, and the entire population was provided for the benefit of the state. Thus, the general majority of the male population was raised with Samurai ethics, discipline and way of thinking (Burns, 2003: 137). However, the first sanction of the American occupation of Japan after the Second World War was to prohibit the Japanese from practicing sword arts (Ikegami & Harrington, 1995: 45). In this context, the administrators, who were also Samurai, tried to spread the Samurai traditions, which they knew very well, to the general public by changing them in a

planned way. With ideological integration, Japan adapted Samurai traditions to the whole society, replacing these traditions with the idea of benefiting the emperor and the nation. Thus, these Japanese, who were raised from an early age, saw state interests above all interests. Therefore, the military reforms initiated in Japan succeeded in a short time and ensured that Japan was mentioned as the most powerful state in East Asia.

Compared to other armies, it can be seen that the Japanese army was backward and could not be developed in accordance with its period. Japan was shared by the Overlords, and each Overlord formed its own army. Even in the 19th century, Japan was ruled by the sword-wielding and warrior-like Samurai, close to medieval Europe. The central government, the shogunate itself, was in a governable position. As well as the internal affairs of the feudal lords, their armies were also interfered with (Duus, 1993: 62). In this framework, Japan was in the position of a confederation rather than a unitary state. The disadvantage of this situation for the Japanese is the necessity of completely eliminating an ingrained system by settling in the society and the Samurai class for centuries, instead of changing it (Tasaburo, 1948: 172). Their advantageous situation was that they did not show great resistance to the reforms, as it was seen by the Samurai that this army structure was now far behind the times. In addition, as a result of the absence of war for more than two centuries, the Samurai turned into bureaucrats rather than soldiers, and they became officials who handled bureaucratic rather than military matters (Dore, 1962: 91).

Under these conditions, Japan, in the land army, instead of wasting time with reforms, directly started to establish a new army. They also succeeded in establishing a modern army in a shorter time. Taking the Prussian army as an example in terms of the land army, the Japanese preferred to import in terms of military training and weapons and tried to come to a situation where they could produce their own weapons in a short time (Saaler, 2006: 79). Although the Japanese were threatened by western states, in the Meiji Period; They expanded to Korea, Manchuria, Taiwan and the Ryukyu Islands (Belge, 2011: 397). Thus, they were not subjected to any attack, which was important in the face of military reforms made in a more planned context.

In 1971, the principalities of the daimyo were dissolved and it was decided to keep only the central army (Christensen, 1999: 89). Despite the revolution in 1868, it was waited for a long time until the disbanding of the feudal armies. In the next process, it was aimed to provide training of French experts in army regulation by reaching the beneficial results of the relations established in the Edo Period. The Prussian State sent its important officers to Japan to advise the army. It was seen that these officers played a major role in the establishment of the model in Prussia (Saaler, 2006: 87).

The idea of establishing railways was adopted in order to organize the army according to the decimal system by dividing it into units and companies and to make military logistics faster and easier (Aoki, 1994: 97). Von Meckel, who stayed in Japan in a short period of three years, did extremely lasting and successful works, and helped to change the Japanese land war mentality beyond the army organization (Welch, 1976: 161). The Japanese, who accepted and implemented Meckel's suggestions, suffered a heavy defeat in the First Sino-Japanese War with the success of the trained officers (Yiu, 1998: 49). The Prussian officers who came after him continued the reforms initiated by Meckel in a stable manner. The Japanese land army was modernized in the Prussian model, not only in organization and weapons, but also in tactics and ideology (Saaler, 2006: 87). The Samurai, who lost their privileges as a result of the renewal and modernization of the land army, rebelled under the leadership of Saigo Takemori and it was extremely difficult to suppress this rebellion (Figal, 1999: 17). Thus, Japan was able to see that its land army was not strong enough yet and was not yet at a level to respond to threats in different areas. However, they continued to show their willing and determined attitudes in the face of this situation.

4. RESULT

Japan could not remain indifferent to the expansionist policies of the western powers and opened itself to the west by following an expansionist policy, especially as a result of military measures. In this direction, the modernization process in Japan started not with a voluntary and planned behavior, but as a result of coercion. Thus, the Japanese modernization process emerged as a result of many lost wars and policies that resulted in negativity. Although Japan was able to resist the pressures imposed on it, it did not succeed. These pressures led to the disruption of the existing order and to riots. In the face of emerging problems, the central authority lost the balance of power and felt the need to re-establish its complementary feature. Along with all these facts, modernization processes in Japan and army orders in European states began to be implemented. Taking the Prussian Model as an example, a high-level innovation movement was initiated, especially in the military field, and the existing army was restructured by preserving its traditional values. On the basis of a massive military upbringing, new structures were created that would make their name known for a long time. Thus, Japan, which succeeded in gaining a place among the European powers, had the chance to take a progressive stance by getting out of the defense mechanism. However, all development and change movements were made according to needs, not in a planned and voluntary process. Thus, by following an expansionist policy, Japan not only kept itself in a position of defense against other powers, but also renewed itself within this defense and ensured that it became a strong state.

REFERENCES

- ABIKO, B. (1989). Persecuted Patriot: Watanabe Kazan and the Tokugawa Bakufu. *Monumenta Nipponica*, 44 (2): 199 – 219.
- ACARTÜRK, E. & KILIÇ, R. (2011). Analysis of the Capitulations in the Ottoman Empire from an Economic and Political Perspective. *Journal of Hacettepe University Faculty of Economics and Administrative Sciences*, 29 (2): 1 – 21.
- AGOSTON, G. (2011). Military Transformation in the Ottoman Empire and Russia: 1500 – 1800. *Kritika: Explorations in Russian and Eurasian History*, 12 (2): 281 – 319.
- ALLINSON, J. C. & ANIVEAS, A. (2010). The Uneven and Combined Development of the Meiji Restoration: A Passive Revolutionary Road to Capitalist Modernity. *Capital & Class*, 34 (3): 469 – 490.
- ARIMA, S. (1964). The Western Influence on Japanese Military Science, Shipbuilding and Navigation. *Monumenta Nipponica*, 44 (2): 352 – 379.
- ARSLAN, F. (2009). Encümen-i Daniş and the Ottoman Enlightenment. *Journal of Mustafa Kemal University Institute of Social Sciences*, 6 (11): 420 – 439.
- ARSLAN, H. (2010). Foreign Experts Employed from Ottoman Military Reforms: 1730 – 1908. Süleyman Demirel University Institute of Social Sciences, Unpublished Master's Thesis.
- ASAKAWA, M. (2003). Anglo-Japanese Military Relations: 1800–1900. In: Gow, I., Hiram, Y., Chapman, J. (eds.) *The Military Dimension. The History of Anglo – Japanese Relations, 1600 – 2000*. London: Palgrave Macmillan.
- ATWELL, W. S. (1990). A Seventeenth-Century 'General Crisis' in East Asia?. *Modern Asian Studies*, 24 (4): 661 – 682.
- BERKES, N. (2004). *Modernization in Turkey*. İstanbul: Yapı Kredi Publications.
- BLOCH, M. (1968). *The Feudal Society [La Société Féodale]*. Ed. Albin Michel. Paris: Sevpem Publications.
- BOXER, C. R. (1984). When the Twain First Met: European Conceptions and Misconceptions of Japan: Sixteenth – Eighteenth Centuries. *Moderns Asian Studies*, 18 (4): 531 – 540.
- BÖREKÇİ, G. (2006). A Contribution to the Military Revolution Debate: The Janissaries Use of Volley Fire during the Long Ottoman-Habsburg War Of 1593 - 1606 and the Problem of Origins. *Acta Orientalia*, 59 (4): 407 – 438.
- BRAGUINSKY, S. & HOUNSHELL D. A. (2016). History and Nanoeconomics in Strategy and Industry Evolution Research: Lessons from the Meiji – Era Japanese Cotton Spinning Industry. *Strategic Management Journal*, 37 (1): 45 – 65.
- BROADBRIDGE, S. (1974). Economic and Social Trends in Tokugawa Japan. *Modern*

Asian Studies, 8 (3): 347 – 372.

- BURNS, S. L. (2003). *Before the Nation: Kokugaku and the Imagining of Community in Early Modern Japan*. London: Duke University Press.
- CHRISTENSEN, M. (1999). The Meiji Era and the Modernization of Japan. *Samurai Archives Apr*, 6: 4 – 8.
- CLARK, C. (2007). *Iron Kingdom: the Rise and Downfall of Prussia: 1600 – 1947*. London: Penguin UK Publications.
- COSS, P. R. (1989). *Bastard Feudalism Revised*. London: Past & Present Publications.
- CRAWCOUR, S. (1974). The Tokugawa Period and Japan's Preparation for Modern Economic Growth. *Journal of Japanese Studies*, 1 (1): 113 – 125.
- ÇETİN, B. (2001). *Gunpowder Industry in the Ottoman Empire: 1700 – 1900*. Ankara: Turkish Ministry of Culture Publications.
- ÇIRAKMAN, A. (2002). From the “Terror of the World” to The “Sick Man of Europe”: European Images of Ottoman Empire and Society from the Sixteenth Century to the Nineteenth. *Studies in Modern European History* 43. New York: Peter Lang Publications.
- DOLLINGER, M. J. (1988). Confucian Ethics and Japanese Management Practices. *Journal of Business Ethics*, 7 (8): 575 – 584.
- DOWNING, B. M. (1988). Constitutionalism, Warfare and Political Change in Early Modern Europe. *Theory and Society*, 17 (1): 7 – 56.
- ELİBOL, A. (2009). The Janissaries and the Transformation of the Ottoman System in the Context of Power. *Gazi University Academic Perspective Journal*, 3 (5): 31- 40.
- FIGAL, G. A. (1999). *Civilization and Monsters: Spirits of Modernity in Meiji Japan*. London: duke University Press.
- GORDON, B. (2000). Tokugawa Period's Influence on Meiji Restoration. *Japan Related Papers and Essays*.
- HAKSUN, K. (2004). *Notes from History*. İstanbul: Kastaş Publishing.
- HIRAISHI, N. (2015). *日本通史: 谷月*. Tokyo: Oohachi Shuppansha.
- HOSKING, G. A. (1997). *Russia: People and Empire: 1552 – 1917*. Cambridge: Harvard Univeristy Press.
- IKEGAMI, E. & HARRINGTON, A. M. (1995). The Taming of the Samurai: Honorific Individualism and the Making of Modern Japan. *History: Reviews of New Books*, 24 (1): 41 – 51.
- İNALÇIK, H. (2010). *Foundation: Rewriting Ottoman History*. İstanbul: Hayykitap Publications.
- KAMIGATO, M. (2002). 明治初期教育制度の変遷: 1868 - 1871. *Nigatakokusaijohodaigaku Joho Bunka Gakubu Kiyō*, 5: 29 – 51.

- KANAMORİ, S. (1999). German Influences on Japanese Pre – War constitution and Civil Code. *European Journal of Law and Economics*, 7 (1): 93 – 95.
- KEI, N. (1996). 日本の近代化と規律 : 近代化のエートスの問題. *Ningen Keisei to Bunka: Narajoshidaigaku Bungakubu Kyoiku Bunka Joho - Gaku Koza Nenpo*, 1: 1 – 19.
- KOŁODZIEJCZYK, D. (2011). The Crimean Khanate and Poland-Lithuania: International Diplomacy on the European Periphery (15th-18th Century) A Study of Peace Treaties Followed by Annotated Documents. Leiden: Brill Publishing.
- KURTARAN, U. (2012). Organization and Logistics in Ottoman Campaigns. *Turkish Studies*, 7 (4): 2269 – 2286.
- LIEVEN, D. (2006). The Cambridge History of Russia Volume II: Imperial Russia: 1689 – 1917. New York: Cambridge University Press.
- MATSUDA, H. (1919). 江戸時代制度の研究. Tokyo: Buke Seido Kenkyukai.
- NARZARY, D. C. (2004). The Myths of Japanese Homogeneity. *China Report*, 40 (3): 311 – 319.
- NISHIMURA, K. (2011). The Buddhist Critique of Christianity in the Early Edo Period as Seen in the Writings of Sessō Sosai: 1589 – 1649. *Journal of Japanese Intellectual History*, 43: 79 – 94.
- ORTAYLI, İ. (2006). Last Empire Ottoman. İstanbul: Timaş Publications.
- ÖZCAN, A. (2002). Military Structure of the Ottoman Empire. Ankara.
- PARTNER, S. (2007). Peasants Into Citizens?: The Meiji Village in the Russo – Japanese War. *Monumenta Nipponica*, 62 (2): 179 – 209.
- POLAT, H. A. (2011). A Look at Military Reforms in the Ottoman Empire from the Tulip Era to the World War. S. 2. http://works.bepress.com/hasanali_polat/17/
- REID, J. J. (2000). Crisis of the Ottoman Empire: Prelude to Collapse: 1839 – 1878. Berlin: Franz Steiner Verlag.
- SAALER, S. (2006). The Imperial Japanese Army and Germany, *Japanese – German Relations, 1895 – 1945: War, Diplomacy and Public Opinion*.
- SHELDON, C. D. (1983). Merchants and Society in Tokugawa Japan. *Modern Asian Studies*, 17 (3): 477 – 488.
- SUTTON, J. L. (2015). The King's Honor and the King's Cardinal: The War of the Polish Succession. Lexington: Univeristy Press of Kentucky.
- TANIGAWA, S. (1939). 日本書紀通証. Tokyo: Kokumin Seishin Bunka Kenkyujo.
- TASABURO, I. (1948). 日本封建制度史. Tokyo: Oohachi Shuppansha.
- UNGER, F. W. & MORRIS, C. (2016). Russia and Japan and a Complete History of the War in the Far East. New Jersey: Generic Publications.
- ÜNAL, T. (2001). Military Academy History. Ankara: Berikan Publications.

- VERNADSKY, G. (1939). Feudalism in Russia. *Speculum*, 14 (3): 300 – 323.
- WAKABAYASHI, B. T. (1992). Opium, Expulsion, Sovereignty. China's Lessons for Bakumatsu Japan. *Monumenta Nipponica*, 47 (1): 1 – 25.
- WALLERSTEIN, I. (1976). From Feudalism to Capitalism: Transition or Transitions?. *Social Forces*, 55 (2): 273 – 283.
- WHITE, J. R. (1996). *The Prussian Army: 1640 – 1871*. New York: University Press of America.
- XIAO GUANG, X. U. (2008). On Social Environment for Japanese Western Learning Growth During Meiji Restoration. *Journal of Sichuan Normal University (Social Sciences Edition)*, 2: 21 – 41.
- YARAR, H. (2000). *Education in Military Schools in the Ottoman Period*. Ankara: Publications of the Ministry of National Defense of the Republic of Türkiye.

Chapter 7

ORGANIZATIONAL LEGITIMACY THROUGH STORYTELLING

Elif ENGİN¹

Burcu EKER AKGÖZ²

1 Assoc. Prof. Dr., Bahçeşehir University, Faculty of Communication, Department of Public Relations and Publicity, Istanbul, Turkey, elif.engin@bau.edu.tr, Orcid:0000-0002-0984-2007

2 Assoc. Prof. Dr. , Bahçeşehir University, Faculty of Communication, Department of Public Relations and Publicity, Istanbul, Turkey, burcu.eker@bau.edu.tr, Orcid:0000-0001-8910-644X



Introduction

The concept of legitimacy is a broad assertion that a social or economic entity, authority, or individual's actions, activities, behaviors, goals, values, and norms are compatible with, consistent with, right with, and reasonable with the social and cultural context in which they live and, as a result, with the norms, beliefs, values, and expectations of the society. Organizations work hard to build and maintain their credibility in order to win support, draw in funding, and guarantee their survival. In recent years, academics and business professionals have come to understand the strategic value of using storytelling to increase organizational legitimacy. In the challenging business environment, organizations face growing scrutiny from various stakeholders, including consumers, employees, shareholders, and the wider society. Amidst this heightened scrutiny, maintaining and enhancing organizational legitimacy has become an essential strategic imperative for organizations seeking to navigate an increasingly complex and interconnected world.

Organizations need to achieve harmonic balance between their operations and norms and the social values in the larger social system of which they are a part. Organizational legitimacy, the perception that a corporation's actions and behaviours align with societal norms, values, and expectations, is vital for securing public trust, fostering long-term relationships, and ensuring sustainable success. A compelling strategy for businesses to create their identity and bolster their legitimacy has emerged: storytelling, a powerful communication tool with profound cultural roots. Organizations may create a good identity, develop trust, maintain reputation and create deep connections by creating and sharing narratives that connect with stakeholders. By providing a compelling and accessible framework through which they may be understood and assessed, corporations are able to close the gap between their operational realities and society expectations.

In this chapter, firstly an overview of the concept of legitimacy, organizational legitimacy and its significance for organizations operating in complex and dynamic environments will be explained. It will emphasize the importance of establishing establishing and maintaining legitimacy. For organizational legitimacy, rational-legal legitimacy and charismatic legitimacy are important. In this manner, in the first part of this chapter the importance of organizational legitimacy will be explained.

After explaining the importance of legitimacy for organizations, we will delve storytelling, its importance for organizations and its relevance in the context of legitimacy. By weaving narratives that align with societal expectations, cultural values, and stakeholder perceptions, organizations can enhance their charismatic legitimacy. By doing this they can differentiate

themselves from the competitors, maintain their reputation and create strong relationship with their stakeholders.

By exploring the concept of organizational legitimacy through storytelling, this chapter will highlighting the ways in which stories can be harnessed to enhance charismatic legitimacy, engage stakeholders, and differentiate organizations in a competitive business environment. This study will present a theoretical framework for gaining deeper understanding of the power and influence of storytelling in organizational legitimacy.

Understanding the Concept of Legitimacy

Before explaining the concept of legitimacy, it is necessary to mention Max Weber. He is one of the most important social scientists of all time. His writings cover a broad spectrum of social theory and have stimulated extensive study and discussion in a number of disciplines, including political science, philosophy of science, sociology, and history. (Wæraas, 2018:19). Weber's sociological approach placed a strong emphasis on comprehending the irrational impulses and meanings that shape social behavior. Rejecting the deterministic tendencies of structuralist techniques, Weber maintained that social activity should be examined by taking into account the meanings people assign to their behavior. Weber's method of interpretation is based on the concept of "Verstehen," or comprehension. By comprehending the subjective meanings behind conduct, sociologists can better grasp the social and cultural processes that influence human behavior.

Understanding modern Western culture in its entirety was one of Max Weber's main goals. He explained how human motivation had changed from acting in accordance with customs, values, or emotions in earlier societies to acting in accordance with reason that was focused on achieving goals. He described the result of this change as being ruled by a more rational, rule-based, and ultimately less human order. (Wæraas, 2018:20). Weber's concept of legitimacy is a central component of his sociological and political thought. Addressing the question of how authority and power are justified in society, Weber offers a nuanced understanding of legitimacy as a crucial element in maintaining social order and stability.

According to Suchman (1995:573), numerous definitions of legitimacy have been provided by social scientists, varying in level of clarity. Maurer gave legitimacy a hierarchical, overtly judgmental tone, arguing that "legitimation is the process whereby an organization justifies to a peer or superordinate system its right to exist" (Maurer, 1971:361). Legitimacy is that something is based on a right, not just by force, and is worthy of respect from this point of view. And legitimacy involves being obedient. In his article, Suchman present a comprehensive, encompassing definition of legitimacy that explicitly emphasizes the importance of the social audience in the dynamics

of legitimation and includes both the evaluative and cognitive elements. To him, “*legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions*” (Suchman,1995:574). Legitimacy is people’s conviction that certain behaviors, laws, or people have the right to rule over them. Having a sense of obligation to follow the laws and decisions made by those in authority, legitimacy acts as a social construct that gives authority its moral and normative basis. Without legitimacy, power becomes capricious and forceful, which could spark rebellion or cause societal unrest.

Suddaby et al. (2017, as cited in Frandsen&Johansen,2020) do not explain what they mean by legitimacy, in contrast to Suchman. They define “three distinct configurations of legitimacy” (p. 2) using the findings of their interpretive assessment or thematic analysis rather than giving us a generic definition they themselves constructed (as Suchman does). Three questions lead to these three configurations:

1. What is legitimacy? The authors offer three answers to this question: (a) legitimacy as a property, that is, a thing, a resource, an asset, or a capacity of an entity; (b) legitimacy as an interactive process of social construction, and (c) legitimacy as a sociocognitive perception.

2. Where does legitimacy occur? Once again there are three answers: (a) between an organization and its external stakeholders, (b) between multiple actors, and (c) between individual and collective evaluators.

3. How does legitimacy occur? Once again three answers: (a) through a “fit” between the attributes of an organization and the expectations, (b) through purposive efforts, and (c) through social judgments.

According to Weber, who defined legitimacy as the justifiable right to exist, any formal system of organization or “domination” requires legitimacy. He added that each of these systems must have a foundational concept of legitimacy, whether it be traditional, charismatic, or legal-rational. He proposed that legitimacy based on rational grounds, traditional grounds and charismatic grounds. Rational grounds are resting on a belief in the legality of enacted ‘rules and the right of those elevated to authority under such rules to issue commands (legal authority). Traditional grounds are resting on an established belief in the sanctity of immemorial traditions and the legitimacy of those exercising authority under them (traditional authority) and the last one charismatic grounds are resting on devotion to the exceptional sanctity, heroism or exemplary character of an individual person, and of the normative patterns or order revealed or ordained by him (charismatic authority) (Weber,1978:215).

In the context of legal authority, deference is due to the impersonal, formally established order. By virtue of the formal legality of their orders and only to the extent permitted by the office, it extends to those individuals exercising the power of office under it. When it comes to traditional authority, respect is due to the chief who holds the traditionally recognized position of power and who is (within its purview) constrained by tradition. However, in this case, the duty to obey is a matter of personal loyalty within the bounds of customary duties. In the case of charismatic authority, it is the charismatically qualified leader as such who is obeyed via personal faith in his revelation, his heroism, or his exemplary traits so far as they fall within the realm of the person's belief in his charisma (Weber, 1978:215-216).

Legitimacy is the acceptance and recognition of management, power or an organization by all or the majority of the people. Legitimacy is the most important condition for the continuity of power, management or an organization. The elements of the acceptance of the management, that is, its legitimacy, vary according to the culture and form of management. The role of the concept of legitimacy is very important especially in the use of power in organizations and in communication with their target audiences. In the next section, the concept of legitimacy for organizations and the importance of this concept will be explained.

In addition to suggesting that legitimacy is socially produced, Weber also suggested that individuals' perceptions of the system—or, in other words, their beliefs—reside as potential sources of legitimacy. The myths that are developed and propagated are not always true, and they cannot legitimize anything unless people accept them as true. Similar to this, a system is only genuine if people believe it has a legitimate reason to exist. Therefore, attaining legitimacy becomes a matter of persuading people to believe a certain “myth,” making legitimation a calculated process involving justifications and tries to sway public opinion (Wæraas, 2018:21).

Organizational Legitimacy

Since the beginning of organizational institutionalism, the concept of legitimacy has been extremely flexible, leading to both beneficial conceptual progress and harmful conceptual stretching. Legitimacy is a central concept in the study of organizations, reflecting the acceptance, authority, and social approval bestowed upon them by various stakeholders. It refers to the perception that an organization's actions and behaviors are appropriate, valid, and aligned with prevailing societal norms and expectations. Legitimacy acts as a foundation for organizations' legitimacy to exist, operate, and influence their environments.

The ability of an organization to continue to exist and function is known as organizational legitimacy. Through discussions with an organization and

its different stakeholders concerning organizational actions and how these activities connect to social norms and values, it is proven, perpetuated, challenged, and defended. The public confers organizational legitimacy on the organization, and as a result, organizations depend on the public in this way. Organizations pursue legitimacy for a variety of reasons, and findings about the significance, complexity, and efficacy of legitimation activities may vary depending on the metrics used to assess them. The distinction between pursuing continuity and pursuing credibility, as well as the distinction between pursuing passive support and pursuing active support, are two particularly crucial factors in this regard. Stability and comprehensibility of organizational actions are both improved by legitimacy, and these two qualities frequently complement one another. Organizational practices, however, rarely support consistency and credibility, persistence and purpose, in the same amounts (Suchman, 1995:574).

Deephouse et.al. (2017:8) aimed to find an answer to this question. “Why Does Legitimacy Matter?” According to them, legitimacy is important because it has effects on organizations. One of the most important effects of legitimacy on social and economic trade is that most stakeholders will only cooperate with legitimate organizations. In other words, a significant portion of stakeholders will not interact with companies that are viewed as being illegitimate (and in fact, a significant portion of stakeholders may intentionally shun contested organizations as well), regardless of the marketing mix components those entities may offer.

Organizational legitimacy is the result of activities made by other groups and organizations that have an impact on the relevant norms and values, as well as the process of legitimization carried out by the focal organization. Social customs and values can change. One driver of organizational transformation and a source of pressure for organizational legitimacy is shifting social norms and values. The concept of legitimacy is important because it provides a link between organizations and their environment, and it plays an important role in determining the boundaries of social norms and values and actions taken by organizations (Dowling and Pfeffer,1975:125). It can be challenging for organizations to maintain their legitimacy in the face of values, beliefs, interests, and demands in the ever-changing social life because of the significance of the concept of organizational legitimacy, especially in terms of the survival of organizations.

On the other hand, while an organization is still operating, a conflict or mismatch between its actions, practices, aims, and principles and the values, beliefs, and social norms of the community could cause it to lose its legitimacy. As a result of the legitimacy crises that they experience, organizations may lose their legitimacy and begin a tragic process that can result in organizational death. On the other hand, organizations attempt to respond to this crisis and

use a variety of strategies, tactics, and tools to overcome the crisis and restore their damaged legitimacy (Yılmaz,2018:1). Any organization that is able to successfully communicate the idea that it is peculiar and extraordinary and cultivate the notion that it could possibly be considered legitimate.

Organizational Storytelling

From past to the present, people have used stories as one of their primary means of communication. It wouldn't be inaccurate to claim that we listen to a ton of stories during the day given our experiences. Today, almost all of the advertising, television episodes or movies we watch, books and newspapers we read, and information we obtain from internet are all a part of stories. One of the most human behaviors is telling stories. Actually, the stories that people tell about themselves and about others make up their past, persona, and fundamental identity. Everybody is a storyteller by nature, and few things make people happier than to hear a fantastic tale and share it with others. A good story told well can physically cause someone to see things in their mind's eye, smell aromas that are not there, or hear sounds in stillness, as has been proven time and time again by those who have witnessed the power of storytelling (Baker&Boyle,2009:80).

Researches reveal that there have been stories since the existence of human history. While stories were transferred from generation to generation through storytellers in oral cultures, in the written culture that passed with the invention of writing, the narratives were written down and the writers became storytellers. The most important feature of the stories is the transfer of culture from generation to generation, the ability of different generations to share the same culture at different times, and to give a meaning to the culture they live in. Story and storytelling create meaning-making, sense-making, and ensure the continuation of culture by providing social cohesion (collective centering). From this point of view, stories also have a social function (Engin,2013:1).

Because it has a social function and is a very strong communication tool, organizations are storytelling systems. Companies are using stories and storytelling frequently to interact with their employees, clients, and other stakeholders, as well as to convey their core values and foster trust and loyalty. A good story engages the audiences's emotions, seizes them at their most vulnerable part, and makes sure that even the most complicated ideas are presented in their most basic form. Companies seeking to survive in the fiercely competitive environment are beginning to understand the value of storytelling and that it is the most efficient method of reaching both internal and external stakeholders. By using storytelling, businesses may establish an emotional connection with their clients, team members, and consumers. Making sense is one of the important features of stories.

David Boje states that storytelling is the preferred sensemaking tool that is valid between internal and external stakeholders in organizations. According to Boje, stories operate in the storytelling system, just like case studies in the judicial system. Just like in courts, in organizations, stories are made sense of by referring to events that have happened before, and for the reactions given in similar situations (Boje,1991:106). Weick says that organizations are created and recreated through constructive relationships and social processes, thanks to the meanings of employees. Individual, social and group affiliations with the meaning-making feature of the stories emerge from the stories told. The belongings created with the meaning-making feature of the stories also help to reveal the meanings of the past, present and future of the organization (Weick, 1995, as cited in Bird, 2007).

Corporate studies can be noticed in the form of stories created and developed by the corporation as well as stories told about the corporation by its shareholders and employees. Corporate stories told by the shareholders and employees have a significant impact on human reality and experiences. Stories told by both shareholders from outside the company and employees from within the company are crucial for representing the values, culture, vision, and mission of the company (Engin,2016:164).

According to Eubank (1998) organizational stories have 5 defining features:

1. By telling tales about earlier organizational activities, one might give oneself a sense of time. Stories from the organization's past are frequently recalled and occasionally repeated enough times to permanently ingrain themselves into the folklore of the group.

2. One could give oneself a feeling of time by relating stories about past organizational endeavors. Frequently recalled and occasionally repeated enough times to become permanently ingrained in the organization's folklore are tales from the organization's past.

3. A corporate narrative that is thought to have some basis in fact or to be reasonably accurate. Organizational stories are factually correct, but only to the extent that the teller and/or listener believe them to be so.

4. Organizational story is typically discussed in a dialogue between two or more persons, with at least one of them being a member of the organization. The story has a plot because of the story grammar used in its telling, which includes a preamble, retelling, and closing sequence.

5. Organizational stories typically make a point, which the narrator may or may not supply. This feature of stories enables discussion of a wide range of subjects pertaining to local or informal knowledge that may not be easily represented with other communication forms, such as reports and even manuals.

An organization can use stories as a powerful communication strategy. The stories can be used to exemplify corporate culture, modify and control behaviour, solve problems and crisis, manage change, enhance leader and company image and reputation in organizations. Organizational storytelling in all of its forms has been recognized as a valuable tool for internal communication. It has been positioned specifically as a means for organizations to get over stakeholder apathy or opposition to organizational communication. Organizations and their representatives are increasingly using the term organizational storytelling to describe any, and occasionally all, of their communication efforts, which is a reflection of how appealing it is. Because it goes beyond simply repeating data or ideas, organizational storytelling varies from other types of organizational communication. (Lane,2023:5). Additionally, it goes beyond simply presenting the messages that corporations want other people to hear. To increase audience engagement—cognitive, emotive, and behavioral—storytelling techniques and gadgets must be used. Organizational storytelling offers audiences a cozy, reassuring, yet effective means of receiving organizational messages.

There are numerous methods for establishing legitimacy. Conforming to expectations, ideals, or models, choosing markets, domains, brands, or advertising, or convincing or institutionalizing, are only a few examples. Across the three basic categories of legitimacy, strategies for preserving or restoring legitimacy may take a more protective, monitoring, denying, excusing, or explaining shape (Suchman, 1995:600). In order to conceptualize and implement these tactics effectively, communication is essential. Organization distribution and deliberation both contribute to the process of establishing organizational legitimacy.

Storytelling for charismatic legitimation of organizations

Organizational legitimacy has historically captured the interest of experts in organizational communication. In large part due to the influence in large part due to the influence that strategic communication initiatives can have on the public's legitimacy assessments of the alignment between an organization's characteristics and their expectations. With the organizational communication, such as CSR, CEO activism, corporate activism, storytelling etc. organizations can gain legitimacy. Organizations constantly create and remake their narratives in order to preserve their image and identity. They do this because of gaining credibility and reputation. Stories are verbal or written statements that make sense of a situation for the public by using recognizable and understandable language.

In order to gain legitimacy, organizations seek encouraging supportive behaviors, enhance public understanding, and trust. The process of creating legitimacy heavily emphasizes the use of stories that reflect the mainstream

norms and beliefs of the public. Organizations as a storyteller modify and tell their stories to influence public and maintain reputation. The idea that stories might help to make complex business concepts easier to understand is called legitimacy creation through stories. As mentioned earlier in this chapter, there are 3 types of legitimacy according to Weber. Legal-rational, traditional and charismatic legitimacy. In addition to citing organizational charisma as a source of legitimacy, Weber also claimed that organizational charisma has the potential to serve as a source of legitimacy (Waeraas, 2018:23).

Despite the fact that Weber generally defined charisma as a trait associated to individuals, he made mention of the institutionalization of charisma in organizations, referring to it as “the charisma of office” or the “charismatic legitimation of institutions” (Weber,1968, as cited in Waeraas, 2018:23). In that manner, organizations have charisma as an attribute. It can be said that organization possesses extraordinary traits as a whole. Organizational charisma may also serve as a source of legitimacy. According to Vergin, charismatic authority comes to the fore especially in crisis and rupture processes due to its redeeming mission that society needs. Weber states that charisma is “a great revolutionary power of the traditional eras”, and for the sake of this power, societies give up their traditions and obey unconditionally the orders of charismatic authority. However, in order to maintain this obedience, the belief in charismatic features and the enthusiasm and enthusiasm of the society must be maintained (Vergin, 2007:54-55).

Having a good reputation and positive image among target audience will benefit an organization. When internal and external audiences affected by organizational outcomes, or stakeholders, support an organization’s objectives and initiatives, legitimacy is granted. And when a section of society with sufficient size to guarantee its efficacy and existence endorses and supports an organization, that group is said to be legitimate. In order to get this legitimacy, organizations use storytelling. Because storytelling is the one of the most powerful tool for an organization to create charisma for organization and gain the charismatic legitimacy. According to Gargiulo (2006: 7) “Stories are fundamental to the way we learn and communicate. It is the most efficient way of storing, recalling and transferring information”. From this perspective, the story has permeated all forms of communication and human interactions. Fisher (1987: 62) developed this approach further and argued that the narrative is the human being himself, and defined the human being as a “storytelling animal”, in other words, “homo narrans”.

The stories that arise from within the organization are told by the employees and the stakeholders of the organization. These stories are of great importance in terms of personal experiences and realities. The stories that the employees of the organization and external stakeholders tell based on their personal and corporate experiences and their own realities are also

important in terms of reflecting the values, culture, vision and mission of the institution. The purpose of corporate stories is to explain the institution, corporate identity, mission, vision and objectives to the stakeholders, as well as to position the corporate culture on a solid ground (Engin,2013:35). In this manner, organization can influence its internal and external stakeholder with the stories they tell and gain charismatic legitimacy. Charismatic organizations inspire followers and foster loyalty by its charisma, clarity of vision, and persuasiveness Charismatic organizations may effectively convey their vision, values, and aspirations through storytelling. Organizations can inspire stakeholders and strengthen their loyalty to the organization by establishing an emotional connection with them through stories.

The relationship between charisma and storytelling is also part of the organizational culture. In order to create a charismatic organization with a charismatic leadership, organizations need to use storytelling. Through the use of rituals, symbols and stories, leaders can bond the stakeholders together and have an impact on their behavior, emotions, and ideas. Stories are a common tool used by leaders to orient, acculturate, and govern them. In order to disseminate the charismatic aura and legitimacy, they use storytelling. As an effective means for charismatic leaders to convey their vision, beliefs, and goals, storytelling plays a crucial part in the charismatic legitimation of organizations. In doing so, it increases both the legitimacy of the individual charismatic leader and the organization as a whole.

The charismatic organization, whose traits and skills inspire admiration, trust, and loyalty among stakeholders, is at the center of charismatic legitimation. A compelling narrative that connects with the experiences and goals of stakeholders can be presented by charismatic organizations by using storytelling to describe their own journey, challenges, and victories. Charismatic organizations can create an emotional bond with stakeholders through skillfully constructed narratives, inspiring admiration and identification. Storytelling fosters a sense of belonging and togetherness by humanizing the organization and portraying it as a team effort, enhancing the organization's perceived authenticity.

Conclusion

A comprehensive understanding of the complex relationship between narratives and legitimacy inside organizations is provided by the idea of organizational storytelling through legitimacy. The components of corporate storytelling have been covered in this chapter, including how it influences perceptions, fosters sense-making, and fosters stakeholder trust. Organizations can strengthen their credibility and achieve a competitive edge in the difficult business environment by proactively crafting narratives that correspond with society expectations, cultural values, and stakeholder perceptions.

The strength and importance of tales in organizational environments have been highlighted by the examination of organizational storytelling through legitimacy. Organizations use storytelling as a crucial tool to convey their values, mission, and purpose to stakeholders, creating a sense of authenticity and increasing trust. Organizations are able to emotionally connect with their audience through storytelling, creating a sense of affiliation and engagement. Organizations may shape their legitimacy and build a solid base for long-term success by developing captivating tales that connect with stakeholders.

This paper on organizational storytelling through legitimacy also emphasizes the significance of tailoring narratives to various audiences and situations. Organizations must adapt their narratives to effectively connect with each set of stakeholders since they have different expectations and views. Organizations may create narratives that address the concerns and aspirations of different stakeholders by understanding their perspectives and needs, which will ultimately increase legitimacy and establish stronger relationships.

Organizations must adapt to shifting societal expectations and the commercial climate of today. Therefore, in order to stay relevant and uphold their legitimacy, organizations must constantly modify and improve their narratives. This calls for a continuous process of tracking and evaluating stakeholder views, keeping an eye on society trends, and modifying narratives as necessary. Organizations can adopt storytelling approaches to engage stakeholders, build trust, and differentiate themselves from competitors. By recognizing the power of narratives and their impact on legitimacy, organizations can develop more robust and impactful communication strategies that align with their goals and values. Storytelling has become an integral part of their strategies since organizations realized that stories are such a powerful communication tool. Organizations make a difference with their stories, maintain their reputation and strengthen their image. It is also an important tool for maintaining their legitimacy. For this reason, organizational stories are an indispensable tool for legitimacy.

From the point of view of organizations, charismatic legitimacy along with legal-rational legitimacy is indispensable for organizations to continue their existence. For this reason, all managerial communication strategies that will provide charismatic legitimacy have gained importance. Stories that will highlight the characteristics of the organization, emphasize its mission and vision, values, and its leadership characteristics will ensure the formation and strengthening of the charismatic legitimacy of organizations. In order to develop and sustain charismatic legitimacy in the contemporary business environment, organizations should consider the power of storytelling, which is a diverse and dynamic process. Organizations can improve their charismatic legitimacy, develop trust, and cultivate relationships with stakeholders by

strategically constructing narratives that are in line with social norms, cultural values, and stakeholder perceptions.

Organizational legitimacy through storytelling offers a comprehensive framework for understanding the significance of narratives in shaping organizational legitimacy. Organizations can build a solid base of trust, engage stakeholders, and position themselves for long-term success in a business environment that is changing quickly by proactively crafting authentic and tailored stories.

REFERENCES

- Baker, B. & Boyle, C. (2009). The Timeless Power of Storytelling, *Journal of Sponsorship*, Vol.3, No.1, 79-87.
- Bird, Shelley. "Sensemaking and Identity: The Interconnection of Storytelling and Networking in a Women's Group of a Large Corporation", *Journal of Business Communication*. Vol. 44, No.4, October 2007, ss.311-339
- Boje, D. (1991). The Storytelling Organization: A Study of Story Performance in Office-Supply Firm, *Administrative Science Quarterly*. No.36, March, 106-126.
- Deephouse, D. L., Bundy, J., Tost, L. P., & Suchman, M. C. (2017). Organizational Legitimacy: Six key questions. In R. Greenwood, C. Oliver, T.B. Lawrence & R.E. Meyer (Eds.), *The SAGE Handbook of Organizational Institutionalism* (pp.2-27). Sage Publications.
- Dowling, J. & Pfeffer, J. (1975). Organizational Legitimacy: Social Values and Organizational Behavior, *The Pacific Sociological Review*, Vol.18, No.1, 122-136.
- Engin, E. (2013). Fisher'in Anlatı Paradigması Bağlamında Kurum Hikayeleri Üzerinden Kurumsal Değerlerin Anlamlandırılması: Bir Anlatı Analizi, (unpublished doctoral dissertation). T.C. Marmara Üniversitesi Sosyal Bilimler Enstitüsü Halkla İlişkiler ve Tanıtım Anabilimdalı.
- Engin, E. (2016). Kurumsal İletişimde Hikayelerin Gücü: Kültürün Paylaşımı ve Değerlerin Anlamlandırılması, In Peltekoğlu F.B. (Ed.), *İletişimin Gücü Kurumsaldan Küresele Halkla İlişkiler* (pp. 155-201). Beta Yayınları, İstanbul.
- Eubank, P.S. (1998). An Integrative Approach To Stories And Storytelling: The Expression of Organizational Commitment and Social Identity in Retirement Centers, (unpublished doctoral dissertation). University of Oklahoma.
- Frandsen, F., & Johansen, W. (2020). Crisis communication and organizational legitimacy. In Jacob Rendtorff, J.D.(Ed.) *Handbook of Business Legitimacy: Responsibility, Ethics and Society*, 707-725.
- Fisher W R (1987) *Human Communication as Narration: Toward a Philosophy of Reason, Value, and Action*, University of South Carolina Press: Columbia, South Carolina.
- Gargiulo, Terence L. "Power of Stories", *The Journal of Quality & Participation*. Spring 2006, 5-8.
- Lane, A. (2023). Towards a theory of organizational storytelling for public relations: An engagement perspective. *Public Relations Review*, 49(1), 1-10.
- Maurer, J. G. (1971). *Readings in Organizational Theory: Open System Approaches*. New York: Random House.
- Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, 20(3), 571-610.

- Vergin, N. (2007). *Siyasetin Sosyolojisi Kavramlar, Tanımlar, Yaklaşımlar* (5 b.). İstanbul: Bağlam Yayınları.
- Wæraas, A. (2018). On Weber: Legitimacy and Legitimation. In Ø. Ihlen & M. Fredriksson (Eds.), *Public Relations and Social Theory* (pp. 18-38). Routledge.
- Weber, M. (1978). *Economy and society: An outline of interpretive sociology*. Edited by G.Roth & C. Wittich, University of California Press.
- Yılmaz, A. (2018). *Örgütsel Meşruiyet Krizi ve Meşruiyetin Yeniden Yapılandırılması: Çoklu Vaka İncelemesine Dayalı Bir Araştırma*, (unpublished doctoral dissertation). T.C. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü.

Chapter 8

MENTAL HEALTH OF WOMEN AFFECTED BY CONFLICT AND WAR: WHAT SOCIAL WORKERS CAN DO?

Yaser SNOUBAR¹



¹ Associate Prof. Yaser Snoubar, Qatar University
ORCID: 0000-0002-6193-3408

Introduction

Women affected by conflict and war experience many unique challenges that can be directly related to a conflict or war situation. Women are at increased risk of violence and exploitation during armed conflicts, with many facing abduction, rape, sexual slavery, physical assault and psychological trauma. They also face a heightened risk of poverty, displacement, and the burden of providing for their families during conflict (Baaz & Stern, 2009; Snoubar & Duman, 2016). In addition to direct violence and exploitation, conflicts can affect women in other ways. They may experience greater difficulty accessing medical services or healthcare facilities due to blocked roads or a lack of resources. They may also suffer from gender-based discrimination regarding education, employment and housing access. Moreover, they can be denied access to justice or legal protection due to social norms or traditional cultural practices that privilege men over women (Ghobarah et al., 2003; Beder et al., 2011; Snoubar, 2020). Given women's many challenges in conflict and war, ensuring equal access to health care, education, legal protection, and other resources is essential. This is by taking steps to protect women's rights in times of conflict and ensure they are provided with the necessary services and support (Sørensen, 1998). Women affected by conflict and war often have little to no help or resources to cope. Professional intervention is essential for them to be able to work their way out of the dire situation they find themselves in. They may have experienced trauma, physical and emotional abuse, displacement, poverty, family separation, and other forms of violence and harm. These experiences can leave women feeling powerless, hopeless, and unable to move forward. Professional intervention provides the safety, support, and access to resources they may need to regain their feet and reclaim control of their lives (Miller et al., 2008). However, professionals such as social workers may step in to help in various ways. Counselling and psychotherapy may help people deal with trauma and restore their mental health. Help with legal matters, such as filing an asylum claim, understanding your rights, or getting the justice you deserve, may be part of this. Through the help of professionals, women affected by war may get the education, job-readiness training, and economic opportunities they need to improve their lives and those of their families. Additionally, this may include introducing people to local support groups and networks so that they may expand their social circle and have access to more resources (Semigina & Gusak, 2015; Snoubar & Zengin, 2022). Therefore, one of the most crucial measures to safeguard women in such circumstances is for professionals to intervene with women harmed by war and strife.

Women's Experiences in a War Context

War and long-term calamities place a disproportionate cost on women and children. Social instability, armed war, population relocation, the collapse of public health systems, and food shortages are all hallmarks of complex

humanitarian catastrophes. Women in war-torn countries face several unique psychosocial problems, including poverty, torture, rape, and lack of access to health care or other basic services (Al Gasseer et al., 2004). These issues affect women physically and psychologically, with long-term trauma often being the result. The effects of war can be devastating for women in the long term, as they are more likely to suffer from depression, anxiety, and post-traumatic stress disorder (PTSD) (Musisi & Kinyanda, 2020).

Women often find their roles and responsibilities drastically altered due to war; they may take on additional workloads or become primary caregivers for injured family members. This can lead to further implications for their mental and physical health (Bianchi & Spain, 1999). Women's experiences in a war context must be recognized and addressed, as they are often the most vulnerable population affected by conflict. This includes providing adequate resources such as healthcare, counselling services, and education. Without these measures, women living in war-torn countries will continue to suffer from the devastating effects of war (Carpenter, 2005).

Women's Experiences in a War Context can vary tremendously. Women are often tasked with carrying out the daily activities of life, such as providing food and shelter, while navigating the danger and disruption caused by war. They must also cope with losing family members or friends due to violence and displacement caused by conflict. Women may be forced into unfamiliar roles, such as breadwinners or providers for their families. Women may also become involved in illegal activities to survive and protect their families, putting themselves at risk of arrest or violence. Additionally, women often suffer from sexual exploitation and gender-based violence during war (Cohn, 2013; Manjoo & McRaith, 2011; Liebling-Kalifani et al., 2011). Women and girls are more at risk of sexual assault during conflict. Since gender roles in many countries are uneven, women suffer disproportionately when war breaks out. Women cannot defend themselves since they have less access to resources like education, healthcare, and economic possibilities. Not only that but women are seldom included in community decision-making or peace discussions. This further isolates them from society and makes them easy targets for exploitation (Ward & Marsh, 2006). Also, women affected by conflict experience higher levels of psychological distress than men due to a heightened sense of insecurity and fear of violence. The effects of war and conflict on women's mental health are particularly severe regarding sexual violence. Sexual exploitation is an ever-present threat for women living in war zones, with harrowing reports detailing cases where rape has been used to threaten, terrorize, or humiliate them (Hassan et al., 2016). Mental health issues such as post-traumatic stress disorder (PTSD), depression, anxiety, drug misuse, and suicidal thoughts are common results. The mental health problems of sexual assault and rape survivors are often exacerbated by their isolation

from others and by their guilt and humiliation after having survived such violence (Josse, 2010). Many women who experience sexual abuse also have to contend with the added burden of social stigma and limited access to medical care and psychiatric counselling. Combined, these elements might make it difficult for women to recover from traumatic experiences and continue their lives (Samari, 2017). Recognizing sexual abuse in conflict settings and taking steps to ensure survivors have access to treatment and support is crucial to addressing the mental health of women in this population.

Mental health issues

Conflict is a key contributor to combatants' and civilians' mental health problems. Mild to severe cases of depression, anxiety, PTSD, drug misuse, suicidal thoughts, and other mental health issues affect women exposed to conflict. Women in war and conflict zones experience the physical and mental effects of being far from home and loved ones and the cultural shock of being thrust into an alien environment. This substantially raises the prospect of experiencing psychological distress. Women are particularly at risk because they are often the targets of sexual violence, trafficking, and other forms of exploitation. Lack of access to basic services like education or healthcare and witnessing violence or being personally targeted by it have devastating repercussions on girls and young women living through conflict (Snoubar & Duman, 2016; Snoubar, 2017).

Long-term mental health effects of conflict may be severe for women. Therefore, implementing effective policies and support mechanisms is crucial for overcoming these challenges. In sum, mental health concerns are a serious issue in conflict settings that need effective responses (Justino, 2011; WHO, 2001). PTSD, depression, and other mental diseases are more common among women who have lived in war and conflict zones. This may cause short-term mental health problems, such as exhaustion and sleeplessness, and chronic ones, including anxiety and self-harm. Women in war zones are particularly vulnerable to sexual abuse and exploitation, which may devastate their mental health. Women in conflict zones may find it more challenging to receive mental health care, making it harder to recover from mental illness (Levy & Sidel, 2009; Charlson et al., 2019).

Women in war zones generally lack access to mental health care, making them more likely to suffer from PTSD and other mental health problems. When compared to males, women are disproportionately affected by physical and sexual violence, relocation, economic uncertainty, and lack of protection, which are all hallmarks of war. This might cause mental health problems that last for a long time after the fight has finished, perhaps months or even years. Despite this, women in war-torn places frequently face discrimination, a lack of resources, and cultural traditions that prevent them from accessing

rehabilitation treatments. Accessible mental health care in the early aftermath of a war is crucial to addressing this problem. One way to do this is by ensuring that women have ready access to mental health specialists and other forms of psychosocial assistance and providing them with a safe and accepting environment to share their experiences (Mahmood et al., 2019; Satyanarayana et al., 2015; Saleem & Martin, 2018). Mental health, psychosocial therapy, social reform, and family/communal healing must be prioritized in war-affected communities to establish a connection between individual and collective trauma. Most theories of this kind agree that war affects more than just an individual's psyche; it also has far-reaching effects on families and communities. Individual trauma therapy can only go so far in addressing the effects of a widespread tragedy (Richters, 2010). Providing accessible mental health services for women in war-torn areas can help reduce the long-term psychological strain of conflict and ensure that all people—regardless of gender—have access to the support they need (Richters, 2010; Dybdahl, 2001; Yigzaw et al., 2023). The implementation of mental health services and the funding of rehabilitation programs tailored to the requirements of women who have been impacted by war should, however, be given top priority during times of conflict. Doing so guarantees every woman gets the help she needs to recover from trauma.

Social Work and Social Support for Vulnerable Womens

Women victims of wars and conflicts face many traumatic experiences, such as violence, displacement, and loss of home and family members. The psychological trauma associated with these events can have long-term physical and emotional consequences, leading to feelings of disempowerment, depression and post-traumatic stress disorder (PTSD). Professional intervention from social workers is essential for helping women victims of wars and conflicts to recover from this trauma. Social workers can provide women with essential services, such as crisis intervention, case management, information and referral, therapy, advocacy and referrals to appropriate resources. They are also trained to help promote the emotional well-being of these individuals by providing safe spaces for them to share their experiences and feelings without fear or judgement. Through psychosocial support, social workers can help these women to develop coping skills that will enable them to manage their trauma better and rebuild their lives (George, 2012; Snoubar & Zengin, 2022). In addition, professional intervention by social workers also involves working to prevent further violence against women victims of wars and conflicts (García-Moreno et al., 2015). Also, Social workers can help these vulnerable women by collaborating with community and government groups to build safety nets that will protect them from future harm.

Professional intervention by social workers is essential for supporting women victims of wars and conflicts. Through their services, they can provide

vital resources, promote emotional well-being and help prevent further violence. This is essential for these individuals to move forward and reclaim their lives. Social workers can make a significant difference in these women's lives by helping them heal from trauma and rebuild their lives. Social work can be a powerful tool to help vulnerable women affected by war, conflict, and violence. It has become increasingly important in recent years due to the effects of trauma, displacement, and poverty on many refugee populations worldwide. Social workers have the necessary skill set to support and guide those struggling with mental health issues, financial hardships, and social isolation due to these traumatic situations (Daley, 1999; Adams, 2017).

Social work practices generally include individual counselling sessions with survivors of war-related violence or their families; they may also involve creating community groups focusing on dialogue and healing. This work is beneficial for vulnerable women who are often at risk of exploitation in fragile contexts. Still, social workers also can build resilience in communities during high stress. They can also help bridge the gap between refugees and local communities, assisting with job search and social integration (Bowles, 2001). Moreover, social work in war contexts often involves working closely with other organizations, such as aid agencies and NGOs, to provide coordinated support for vulnerable women. This may include raising awareness about human rights issues, advocating for better access to quality services, or facilitating communication among stakeholders involved in a conflict. Additionally, social workers have an important role in monitoring resettlement programs and conducting assessments of refugees' mental health needs (Farwell, 2004; Rehn & Sirleaf, 2002). Overall, social work has proven to be a valuable tool for supporting vulnerable women affected by war and violence worldwide. These individuals must receive comprehensive care and support from qualified professionals to help them rebuild their lives. Through the implementation of social work practices, vulnerable women can be empowered with the tools and resources needed to regain a sense of normalcy in times of conflict (Dominelli, 2017).

Social workers are uniquely positioned to provide crucial assistance during times of war due to their commitment to holistic approaches that address both individual needs and broader societal issues. By providing comprehensive support services, social workers can empower vulnerable women with the resources they need to ensure a better future for themselves and their families (Snoubar & Duman, 2015). The social work of protecting and empowering women in wartime contexts is crucial in making the world a better place for everyone. Through this method, at-risk women may get the help they need to recover from prior traumas and strengthen their resilience. Social workers can help at-risk women provide for their families by giving them access to comprehensive support services. It is also crucial to acknowledge that the

emphasis of this strategy should be on prevention to safeguard at-risk women from future abuse.

Social workers can play an integral role in helping women affected by conflict and war to achieve emotional well-being. A few strategies social workers can use to promote empowerment and emotional well-being include (Koblinsky et al., 2017; Edmondson et al., 2004; O'Neill et al., 2019):

1. **Establishing a Safe Space:** Social workers should provide a safe and secure space for women to share their experiences and feelings without fear of judgment or criticism. This allows women to express themselves openly and honestly, which can help to reduce feelings of anxiety and depression.

2. **Providing Resources:** Social workers should provide women with counselling services, support groups, and other community-based initiatives that may help them cope with their trauma.

3. **Encouraging Self-Care:** Social workers should encourage the practice of self-care among women affected by conflict and war. This may include encouraging them to find ways to relax, such as yoga or meditation, and helping them find activities that bring joy and fulfilment.

4. **Setting Goals:** Social workers should help women set personal goals that are achievable and manageable for them. Social workers must support women in meeting these goals and celebrating their successes.

Women affected by war and conflict may benefit from these approaches used by social workers. These strategies may also help women develop more resilience, giving those who have experienced trauma renewed faith in a complete recovery. In this way, social workers may play a crucial role in enhancing the emotional well-being of women.

Conclusion

In conclusion, the mental health of women affected by conflict and war has many implications for social work practice. Social workers are uniquely positioned to support and advocate for women living through conflict and war, especially if they have the right training and understanding of this subject's various complexities. It is, therefore, important that social workers actively seek out opportunities to learn more about how to best serve the mental health needs of female victims of violence during wartime. By doing so, they can better ensure that survivors receive adequate care and assistance while also helping to prevent further trauma due to their experiences. Social workers should strive to become part of interdisciplinary teams responding to these crises to offer holistic services that consider all of the unique needs and challenges that women may be facing. Finally, it is important to note that although social workers are often in a position of limited power compared

to other players involved in responding to conflict and war, the support they provide can positively affect those affected by these issues. Therefore, their efforts must be kept at the forefront of any response.

By understanding the mental health implications of conflict and war for women, social workers can effectively serve as advocates and care providers for survivors. In doing so, they will help individuals cope with their traumatic experiences and directly contribute to improved outcomes now and in the future. In this way, social work services offered to female victims of violence during wartime can play an important role in shaping the recovery of those affected and helping create a more peaceful world.

REFERANCES

- Adams, R. (2017). *Empowerment, participation and social work*. Bloomsbury Publishing.
- Al Gasseer, N., Dresden, E., Keeney, G. B., & Warren, N. (2004). Status of women and infants in complex humanitarian emergencies. *Journal of midwifery & women's health*, 49(4), 7-13.
- Baaz, M. E., & Stern, M. (2009). Why do soldiers rape? Masculinity, violence, and sexuality in the armed forces in the Congo (DRC). *International studies quarterly*, 53(2), 495-518.
- Beder, J., Coe, R., & Sommer, D. (2011). Women and men who have served in Afghanistan/Iraq: Coming home. *Social Work in Health Care*, 50(7), 515-526.
- Bianchi, S. M., & Spain, D. (1999). Women, work, and family in America. *Sociology of families: Readings*, 170.
- Carpenter, R. C. (2005). "Women, children and other vulnerable groups": Gender, strategic frames and the protection of civilians as a transnational issue. *International Studies Quarterly*, 49(2), 295-334.
- Charlson, F., van Ommeren, M., Flaxman, A., Cornett, J., Whiteford, H., & Saxena, S. (2019). New WHO prevalence estimates of mental disorders in conflict settings: a systematic review and meta-analysis. *The Lancet*, 394(10194), 240-248.
- Cohn, C. (Ed.). (2013). *Women and wars: Contested histories, uncertain futures*. John Wiley & Sons.
- Daley, J. G. (1999). *Social work practice in the military*. Psychology Press.
- Dominelli, L. (2017). *Anti oppressive social work theory and practice*. Bloomsbury Publishing.
- Dybdahl, R. (2001). Children and mothers in war: an outcome study of a psychosocial intervention program. *Child development*, 72(4), 1214-1230.
- Edmondson, A. C., Kramer, R. M., & Cook, K. S. (2004). Psychological safety, trust, and learning in organizations: A group-level lens. *Trust and distrust in organizations: Dilemmas and approaches*, 12(2004), 239-272.
- Farwell, N. (2004). War rape: New conceptualizations and responses. *Affilia*, 19(4), 389-403.
- García-Moreno, C., Hegarty, K., d'Oliveira, A. F. L., Koziol-McLain, J., Colombini, M., & Feder, G. (2015). The health-systems response to violence against women. *The Lancet*, 385(9977), 1567-1579.
- George, M. (2012). Migration traumatic experiences and refugee distress: Implications for social work practice. *Clinical Social Work Journal*, 40, 429-437.
- Ghobarah, H. A., Huth, P., & Russett, B. (2003). Civil wars kill and maim people—long after the shooting stops. *American Political Science Review*, 97(2), 189-202.

- Hassan, G., Ventevogel, P., Jefee-Bahloul, H., Barkil-Oteo, A., & Kirmayer, L. J. (2016). Mental health and psychosocial wellbeing of Syrians affected by armed conflict. *Epidemiology and psychiatric sciences*, 25(2), 129-141.
- Josse, E. (2010). 'They came with two guns': the consequences of sexual violence for the mental health of women in armed conflicts. *International Review of the Red Cross*, 92(877), 177-195.
- Justino, P. (2011). Violent conflict and human capital accumulation. *IDS Working Papers*, 2011(379), 1-17.
- Koblinsky, S. A., Schroeder, A. L., & Leslie, L. A. (2017). "Give us respect, support and understanding": Women veterans of Iraq and Afghanistan recommend strategies for improving their mental health care. *Social work in mental health*, 15(2), 121-142.
- Levy, B. S., & Sidel, V. W. (2009). Health effects of combat: a life-course perspective. *Annual review of public health*, 30, 123-136.
- Liebling-Kalifani, H., Mwaka, V., Ojiambo-Ochieng, R., Were-Oguttu, J., Kinyanda, E., Kwekwe, D., ... & Danuweli, C. (2011). Women war survivors of the 1989-2003 conflict in Liberia: the impact of sexual and gender-based violence. *Journal of International Women's Studies*, 12(1), 1-21.
- Mahmood, H. N., Ibrahim, H., Goessmann, K., Ismail, A. A., & Neuner, F. (2019). Post-traumatic stress disorder and depression among Syrian refugees residing in the Kurdistan region of Iraq. *Conflict and Health*, 13(1), 1-11.
- Manjoo, R., & McRaith, C. (2011). Gender-based violence and justice in conflict and post-conflict areas. *Cornell Int'l LJ*, 44, 11.
- Miller, K. E., Omidian, P., Rasmussen, A., Yaqubi, A., & Daudzai, H. (2008). Daily stressors, war experiences, and mental health in Afghanistan. *Transcultural psychiatry*, 45(4), 611-638.
- Musisi, S., & Kinyanda, E. (2020). Long-term impact of war, civil war, and persecution in civilian populations—Conflict and post-traumatic stress in African communities. *Frontiers in psychiatry*, 11, 20.
- O'Neill, M., Yoder Slater, G., & Batt, D. (2019). Social work student self-care and academic stress. *Journal of Social Work Education*, 55(1), 141-152.
- Rehn, E., & Sirleaf, E. J. (2002). Women, war and peace. *New York: UNIFEM*, 207-219.
- Richters, A. (2010). Suffering and healing in the aftermath of war and genocide in Rwanda: Mediations through community-based sociotherapy. In *Mediations of violence in Africa* (pp. 173-210). Brill.
- Saleem, F., & Martin, S. L. (2018). "Seeking Help is Difficult:" Considerations for Providing Mental Health Services to Muslim Women Clients. *Canadian Journal of Counselling and Psychotherapy*, 52(2).
- Samari, G. (2017). Syrian refugee women's health in Lebanon, Turkey, and Jordan and recommendations for improved practice. *World medical & health policy*, 9(2), 255-274.

- Satyanarayana, V. A., Chandra, P. S., & Vaddiparti, K. (2015). Mental health consequences of violence against women and girls. *Current opinion in psychiatry*, 28(5), 350-356.
- Semigina, T.; Gusak, N. Armed Conflict in Ukraine and Social Work Response to it: What strategies should be used for internally displaced persons? *Soc. Health Commun. Stud. J.* **2015**, 2, 1–24.
- Snoubar, Y. (2017). Refugee Girls Children In The Middle East And North Africa: Vulnerabilities And Necessity Of Social Protection. *Journal of International Social Research*, 10(50). p809-813.
- Snoubar, Y. (2020). Social Work and Humanitarian Aid: Practice in the Aftermath of Disasters. *Social, Human and Administrative Sciences-II*, 175-188.
- Snoubar, Y., & Duman, N. (2015). Using social holistic approach in working with children who are in the war zone. *Mediterranean Journal of Social Sciences*, 6(2 S5), 231-237.
- Snoubar, Y., & Duman, N. (2016). Impact of wars and conflicts on women and children in Middle East: Health, psychological, educational and social crisis. *European Journal of Social Science Education and Research*, 3(2), 202-206.
- Snoubar, Y., & Zengin, O. (2022). Social Support Effectiveness of the Mental Health of Immigrants Living in Belgium. *The British Journal of Social Work*, 52(5), 2707-2725.
- Sørensen, B. R. (1998). *Women and post-conflict reconstruction: Issues and sources* (No. 3). Diane Publishing.
- Ward, J., & Marsh, M. (2006, June). Sexual violence against women and girls in war and its aftermath: Realities, responses and required resources. In *Symposium on Sexual Violence in Conflict and Beyond* (Vol. 21, p. 23).
- World Health Organization. (2001). *The World Health Report 2001: Mental health: new understanding, new hope*.
- Yigzaw, N., Hailu, T., Melesse, M., Desalegn, A., Ezezew, H., Chanie, T., ... & Tinsae, S. (2023). Comprehensive mental health and psychosocial support for war survivors at Chenna Kebele, Dabat woreda, North Gondar, Ethiopia. *BMC psychiatry*, 23(1), 1-8.

Chapter 9

A STUDY OF MAGICAL REALISM IN NEIL GAIMAN'S THE SLEEPER AND THE SPINDLE

Aybike KELEŞ¹



¹ Öğr. Gör. Dr.Aybike KELEŞ, Kastamonu University, Department of Foreign Languages and Cultures - Applied English and Translation Studies,ORCID:0000-8130-9752

1. INTRODUCTION

Magic realism is a literary genre that combines realistic elements with supernatural elements. This word was coined by Franz Roh, who combined realistic and mythical elements in his work. Subsequently, this term was employed in the realm of literature, specifically in Latin America,

Authors like Gabriel Garcia Marquez and Salman Rushdie, Angela Carter are household names in the world of magical realism literature, and they are widely credited with popularizing the magical realist genre in Latin American literature. These writers' works often mix magic and reality, giving readers all over the world a unique and captivating reading experience. A new generation of writers has been inspired by their work, and their influence on writing has spread far beyond their own nations. Since then, magical realism has been written by authors all over the world, each of whom brings their particular cultural and social perspectives to bear on the style. The aforementioned statement made by Faris corroborates this circumstance:

Magical realist writers are reading and responding to each other across national and linguistic borders in ways that have influenced individual works and encouraged the recent development of magical realist subjects and strategies...In the diversity of texts and traditions, they discuss, the authors of this [genre] remind us that a literary genre is both a formal and a historical category. They allow us to evaluate the formal capacities of magical realism to express a variety of cultural and historical conditions. (1995, p.5)

Magical realism is not limited to a specific time and or a place but rather is shaped by the social and historical context in which it emerges. The authors of this genre also show the ability of magical realism to adapt and evolve over time. This genre allows for a diverse range of voices and perspectives to be heard, rendering it a powerful tool for exploring cultural and social issues. Thus, they use their unique perspectives to challenge traditional literary conventions and create new possibilities for storytelling.

Neil Gaiman is a well-known British author who employs magical realism in his novels. His writings frequently deal with fantastical characters and explore the boundaries between reality and imagination. He often uses this technique to explore themes such as human experience, the nature of reality, and the power of imagination. Some of his famous works include *Coraline*, *American Gods*, *Stardust*, and *The Sandman*. In this story called *The Sleeper and The Spindle*, Gaiman combines fantasy, wonder, and horror to create an eerie and empowering narrative. This work is an engrossing and original retelling of the traditional fairy tales such as *Sleeping Beauty* and *The Snow White*. Gaiman takes ideas from both stories and weaves them into his own story to provide a new perspective on two well-known traditional stories. He

took the idea of a sleeping princess under a sleeping spell from Sleeping Beauty and the concept of a queen who is obsessed with her own beauty from the story of Snow White. By adding his own unique twist to this story he portrays this queen in this story as a strong heroine who embarks on a dangerous quest to save her kingdom and the princess. He subverts traditional gender roles, creating a feminist retelling that celebrates the power of women.

2. RELATED LITERATURE

2.1.Characteristic of Magical Realism

One of the most popular narrative techniques in contemporary literature, magical reality, includes supernatural and fantastical aspects. These aspects are frequently intermingled with the real world, generating a sense of awe and mystery in the reader. As a result, the reader is immersed in a one-of-a-kind world in which truth and fiction blend. Mythical creatures such as fairies, unicorns, and dragons, as well as supernatural powers such as telekinesis and teleportation, are just a few examples of the numerous manifestations that supernatural elements can take. For example, In J.R.R. Tolkien's stories, supernatural creatures like hobbits and wizards exist alongside humans and other non-magical people.

Readers all across the world have been enthralled by this unusual blending of the fantasy and the real. On the other hand, Faris emphasizes that magical reality and fantasy fiction are entirely distinct.

Neither does [magical realism] distort reality or create imagined worlds, as writers of fantastic literature or science fiction do... What is the attitude of the magical realist toward reality? I have already said that he does not create imaginary worlds in which we can hide from everyday reality. In magical realism the writer confronts reality and tries to untangle it, to discover what is mysterious in things, in life, in human acts.(1995,p.121)

As Faris states, the magical realist seeks out reality itself and investigates its more enigmatic parts in contrast to other types of literature, which often create fantastical worlds or distort reality. He further stated that the presence of magical components cannot be explained by the rules of the universe as we know them. He also added that the story takes place in a different reality or dimension. The examples that are provided in the following quotation make his point crystal apparent.

magical things really do happen: young Victor and Andre in Distant Relations really become a twinned fetus floating in a pool; Remedies the Beauty in One Hundred Years of Solitude really does ascend heavenward; Grenoille in Perfume really distills a human scent from the bodies of virgins; Francis Phelan's dead enemies in Ironweed really do hop on the trolley he is riding and

speak to him. (1995,p.167).

The literary works he mentioned incorporate elements of magic and the supernatural, which cannot be explained by our understanding of the law of the universe. On the other hand, these fictional stories mentioned above seem magical or impossible but are explained within the frame of nature. For instance, in *Distance Relations*, Victor and Andre's twinning may be interpreted as a symbolic representation of the two characters' intimacy with one another. Remedies in *One Hundred Years of Solitude* ascending heavenward could be interpreted as a spiritual act. Greonoille's remarkable smelling sensitivities might be linked to his ability to condense a human aroma in *Perfume*. Finally, Francis Phelan's contacts with his deceased foes in *ironweed* may be interpreted as hallucinations. These occurrences should not be interpreted literally but rather as symbols evoking underlying ideas. These examples, taken as a whole, demonstrate how the imaginative power of literature has the potential to alter our perception of the world without compromising its core tenets.

Characters in magical realism treat extraordinary occurrences as if they were everyday occurrences, displaying no signs of surprise. They accept supernatural occurrences as usual, which causes the reader to perceive the world in a similar light. This allows the reader to take the fantastic elements of the stories at face value, rather than questioning their plausibility. This creates a sense of believability and familiarity for the reader. In this sense, C.S. Lewis points out that "In reading great literature I become a thousand men and yet remain myself. Like the night sky in the Greek poem, I see with a myriad eyes, but it is still I who see. Here, as in worship, in love, in moral action, in knowing, I transcend myself; and am never more myself than when I do". (1961:p.141). In this quote, Lewis suggests that through fantastical journeys readers can experience a multitude of perspectives while maintaining their own identity. They can see countless stars but still perceive it as a singular entity. This quotation also implies that by engaging in the act of love, worship and moral action one can transcend their individual self and establish a connection with the surrounding world.

Authors of magical stories can set their own rules and boundaries in magic realism stories, allowing for limitless opportunities for creative and original world-building. They create their own rules by drawing inspiration from mythologies, folklore, and ancient tales. They can also use their own creativity to come up with unique concepts. In this regard, the issue of not including magical realist authors in the text to demonstrate the plausibility of a world where reality and fantasy are intertwined is one of the key points discussed. In this regard Martin's words are important to discuss. As stated by him: "The best fantasy is written in the language of dreams. It is alive as dreams are alive, more real than real ... for a moment at least ... that long magic moment before we wake". (n.p). Without the author's directions, readers are

thrown headfirst into the enchanted world. This allows for a seamless transition between reality and fantasy, becoming fully engaged with the story and the characters. The language of dreams provides endless possibilities. In addition to this, they allow the reader to bring their own imagination into the tale, which results in a more interesting and exciting experience overall.

It is also undeniable that stories have evolved significantly during the last two centuries alongside the progress of cultures. Modern retellings of traditional fairy tales by many different authors have become increasingly popular in recent years. Social justice, diversity, and female empowerment are common themes in these stories, which give them contemporary resonance. The most significant distinction identified in magical reality is the manner in which male and female characters are presented to the reader. From early years, gender-based behavioral guidelines for boys and girls have been influenced by fairy tales and their way of life has been subtly controlled by these narratives. The portrayal of women in these stories, which have been recounted for generations, has become conventional and unquestionable. Traditionally, in fairy tales, women were depicted as passive, with limited agency, and confined to the roles that males had envisioned for them. They were presented as passive object of a man's affection who have no control over their own destinies and can only find happiness by marrying a prince. Recently, however, there has been an effort to reinterpret and retell these tales from a feminist point of view, elevating the perspectives of underrepresented women and questioning long-held assumptions about gender roles. Modern retellings of these stories often feature strong, independent female characters who use their own abilities and skills to achieve their goals. They do not look to marriage as the one and only answer to all of their challenges.

Additionally, magic stories can also be used to examine larger societal issues or comment on human nature through the use of metaphor and symbolism. The metaphors used in magic stories serve to create a vivid and imaginative description that helps the reader's understanding and emotional connection to the story. They also add depth to the story, allowing the reader to draw their interpretations from the text. To provide a specific illustration, London Underground in the story *Neverwhere* is used to symbolize hidden and dangerous aspects of society. The image of "doors" also represents the idea of crossing over into a different world. To give another example, in Harry Potter series by J.K. Rowling, Demagogues represent depression and loss of hope. They are creatures sucking a person's soul, leaving them desolate. The metaphor of "tunnel" represents a journey into the unknown and a symbol of transformation.

When viewed from the perspective of narrative, frequently occurring narrative trait in this genre is that the protagonist is often on a quest and embarks on a journey to accomplish his goal. The heroes travel through space

and time, and the readers travel with them, bringing their own worlds with them. The reader's personal experiences and perspectives can influence their interpretation of the characters' journeys. It also suggests that the reader can find parallels between their own inner struggles and those of the protagonists, leading to a deeper emotional connection with the narrative. They can find themselves discovering new insights about themselves and their own beliefs. One may say that the fundamental reason for this is that the issues discussed in magical reality are related to real-world issues and challenges. Through imaginative and fantastical means the authors challenge the traditional notions of reality and invite the reader to consider alternative ways of thinking about society and to question their perception of the world. This is in line with the words of Faris:

[Magic realism] questions the norms of realistic representation that is based on sensory data, the delocalized narrative that results from such a destabilized origin undercuts the assumed reality of realism from within it. Furthermore, that the narrative voice reports events that cannot be empirically verified disrupts the identification of reliable representation in narrative with ordinary human consciousness. (2004,p.45)

As Faris notes, this destabilization of realism led to the reevaluation of the ways in which we perceive reality and opens up new possibilities as it challenges the notion of fixed reality. It also opens up new possibilities for exploring alternative forms of narrative by challenging the dominant narratives. This raises questions about the validity of the narrative. As such, the use of a narrative voice in storytelling can make it difficult to distinguish between what is real and what is imagined, as the events being reported cannot be proven or verified. This challenges the notion that reliable representation in the narrative is only based on human perception and understanding.

3. FINDINGS AND DISCUSSION

At the outset of the story, the queen awakens and discovers that the day of her wedding is getting closer and closer. The queen is aware that her upcoming wedding will mark a significant turning point in her life. It is stated clearly in the story: "It seemed both unlikely and extremely final. She wondered how she would feel to be a married woman. It would be the end of her life, she decided, if life was a time of choices. In a week from now she would have no choices. She would reign over her people. She would have children." (Gaiman, 2013:p.532). She is conscious of her femininity and the corresponding expectations. She seems to be hesitant and unsure about getting married. Despite her royal status, she faces the same struggles as many women do in a patriarchal society. Thus, the reader is left wondering if she will ultimately succumb to social expectations or if she find a way to carve out her own path in life. Why is the queen is so conscious of her femininity and its consequences?

The further the readers delve into this narrative, the more these perplexing questions arise in their minds.

There is a legend of a witch who cursed a baby at birth, causing her to fall into a deep sleep at the age of eighteen after pricking her finger. This curse also affected everyone in the castle, causing them to sleep. Thus, Her presence instills fear in those who approach her domain as she is said to possess supernatural powers that bring about death and misfortune. (Gaiman, 533-534). Thus, there is a curse on the entire kingdom causing everyone to fall into a deep sleep and become frozen in time. The only way to break the spell is to awaken the princess with a kiss. Nevertheless, numerous heroes endeavored to rouse the slumbering inhabitants of the castle to no avail. To make matters worse, the curse of sleeping is swiftly spreading and the dwarfs try to find a way to break the curse before it is too late. Upon hearing this, the soon-to-be-bride princess packs her sword and rides off her kingdom with the help of the dwarfs. Before setting out

She called for her first minister and informed him that he would be responsible for the kingdom in her absence and that he should do his best neither to lose it nor to break it. She called for her fiancé and told him not to take on so, and that they would still be married, even if he was but a prince and she already a queen, and she chucked him beneath his pretty chin and kissed him until he smiled. (Gaiman,2013:p.536)

This scene subverts the gender roles and power dynamic often portrayed in traditional fairy tales. In these tales, princesses usually wait for a hero or a prince to save their kingdom, whereas this queen takes charge herself. Here, it challenges conventional gender roles by showing the queen taking responsibility during times of crisis while the prince is consoled by her. Therefore, by assuming the role of a prince, she demonstrates that women are powerful. Gaiman here challenges these stereotypes and highlights the strength of women.

Traditional fairy tales have a tendency to feature queens as passive, helpless characters that must be saved by their male princess. In contrast, this queen exemplifies strength, displaying defiance of such stereotypes. A more progressive view of gender roles is reflected in this portrayal.

In this kingdom, the people who were affected by the spell are still alive but in a state of perpetual sleep. However, the sleeping plague is affecting many people and it is spreading from the North. Although many others suffer from sleeping plague, the queen and the dwarfs were immune to the curse. They are not susceptible to falling into a deep sleep, which sets them apart from the rest of the people in the story and allows them to embark on a mission to save their kingdom from the curse. During the journey, the dwarfs

question the source of the sleeper's ability to remain asleep for such a long time, which indicates that they are trying to come up with a logical explanation, rather than simply accepting it as magic. The dwarves wonder if the sleepers are being kept awake by a mysterious force or if they will just starve to death. The princess ponders the possibility that these people have been under the effect of powerful magic for the past seventy years, keeping them in a state of frozen vitality. (Gaiman,2013:p.537)Here , the intelligent nature of the princess distinguishes her from the conventional type of princess found in fairy tales. In contrast to conventional fairy tales that depict princesses as passive individuals, the queen in question is depicted as a discerning thinker who evaluates the circumstances and contemplates the various possibilities This defies the conventional notion that princesses are typically characterized as passive and dependent on external assistance to resolve the issues they face. Thus, her logical discussion with her fellow dwarfs can indicate that women can be just as capable as men.

The queen and the dwarfs navigate through magical and dangerous situations. Along the way, they face challenges that test their limits and bravery. The following quote indicates that the story is filled with adventure and peril as they face challenges in a mystical world.

THE CASTLE IN the Forest of Acaire was a gray, blocky thing, all grown over with climbing roses. The climbing roses, living and dead, were a brown skeleton, splashed with color, that rendered the gray fastness less precise. The trees in the Forest of Acaire were pressed thickly together, and the forest floor was dark. A century before, it had been a forest only in name: it had been hunting lands, a royal park, home to deer and wild boar and birds beyond counting. Now the forest was a dense tangle, and the old paths through the forest were overgrown and forgotten.(Gaiman, 2013:p.538-539)

This quotation sets the scene for a magical world. The high density of the trees and dark forest floor also create a sense of mystery and danger as though there are secrets hidden in the forest. The brown skeleton also adds an element of fantastical to this description. It is not just a typical woodland. The woodland was originally a royal park but is now overgrown and forgotten, suggesting it may hide mysteries and surprises. All of these elements create a captivating setting for a story.

While the readers follow the characters on their perilous journey, they also encountered fantastical elements challenging their perception of reality. During the journey, the queen and the dwarfs encountered the surreal scene of sleeping people, and creatures including rotting fish, and fishmongers. Especially there was an unsettling image of streets filled with sleepers, some with their eyes open, others with their eyes rolled back. Only the snores of the

sleeping and the rustling of maggots could be heard.

Threats and surprises await them at every turn of the road. As they went deeper into the forest they came upon some bandits sleeping. They ask for roses in their sleep and one of them grasps the queen's ankle. The smallest dwarf quickly chops off his hand with a hand axe. (Gaiman,2013;p.542) As seen in the queen and dwarfs' reaction to the unusual events it is not surprising given that fairy tales involve magical and unexpected events. They were not taken aback by the unusual event that occurred. In fact they accept it with ease, as if it was common occurrence in their world. Without showing any sign of amazement they accept unusual events as normal occurrences. Additionally, the acceptance of strange events by the queen and dwarfs also highlights their bravery in the face of adversity.

Despite this unsettling atmosphere, the group continued on their journey through the city. The readers are left with wondering what other surreal experiences wait them in this magical world. J.R.R. Tolkien, a famous fiction writer, said in his essay "On Fairy-Stories" that fairy tales have a special power to arouse a sense of awe and curiosity in the minds of readers as he wrote in his essay: "The land of fairy-story is wide and deep and high and filled with many things: all manner of beasts and birds are found there; shoreless seas and stars uncounted; beauty that is an enchantment, and an ever-present peril; both joy and sorrow as sharp as swords." (Tolkien,1966,p.1) As he notes fairy tales captivate the readers and take them on a journey to a magical world. The magical elements that populate fairy tales include fantastical creatures, enormous oceans and sky, beautiful scenery that captivates the imagination, and perilous situations that keep the reader on the edge of their seat. The intensity of these feelings might linger in the mind of the reader long after the last page has been turned.

The forest had grown thicker, the thorns more impenetrable, and the castle had become a forgotten relic of a time. As the queen and dwarfs approach the thorny gateway, they realizes the eerie sight of skeletons of the men facing a daunting obstacle in their attempt to enter the castle.

they could not enter the castle. The queen saw the remains of men in the thorns: skeletons in armor and skeletons unarmored. Some of the skeletons were high on the sides of the castle, and the queen wondered if they had climbed up, seeking an entry, and died there, or if they had died on the ground, and been carried upwards as the roses grew(Gaiman,2013;p.542-543)

She ponders whether they died while trying to climb up the sides of the castle or if they were already dead and their bodies were carried up by the growth of the roses. It gives the impression that this castle is haunted and cursed and that skeletons may be the remains of previous trespassers who

met a gruesome fate. The vivid description of the castle and its surroundings create a sense of wonder captivating the readers. The reader understands that this is a place where magic and danger coexist, and where the unexpected can happen at any moment. Gaiman leaves the reader with a sense of curiosity about what other mysteries lie hidden within the castle. Throughout the story Gaiman reminds the readers of the fantastical nature of fairy tales and their ability to transport the reader to a world where anything can happen.

Though the thorny obstacles she faced in her journey, the queen shows bravery and resourcefulness. The dwarfs and the princess were walking through a desolate landscape, surrounded by decay and death. Despite the bleakness of her surrounding, the queen continued to explore and examine the remains of once living world around her. In this regard, the princess' actions indicate a detachment from the physical world. This also suggests she is brave, and unafraid of the dangers. This lends validity to the assumption that she is fearless and unconcerned with the perils that lie ahead. The reader realizes that her character is a welcome diversion from the damsel in distress cliché.

The princess successfully cleared the path of obstacles that could have hindered their progress. Especially in the following scene:

[She]he pulled the rotted cloth from its shoulders and felt it as she did so. It was dry, yes. It would make good kindling.

“Who has the tinder box?” she asked.

THE OLD THORNS burned so hot and so fast. In fifteen minutes orange flames snaked upwards: they seemed, for a moment, to engulf the building, and then they were gone, leaving just blackened stone. (Gaiman,2013:p.544)

According to this quotation, the queen asks for the tinder box, indicating that she was likely planning to start a fire. The quick and intense burning of the thorns suggests that they were highly flammable, making them ideal for starting a fire. Upon witnessing the sight of skeletal remains amidst the thorns, she became aware of the potential danger in the area. The queen was not only resourceful but also observant and strategic in her approach to solving problems. She was able to come up with a solution that was different from what others had tried before and avoided the same fate as those who failed. In this regard, the queen exemplifies resourcefulness in surmounting apparently impossible obstacles to attain her goals. Thus, one can say that her determination and resourcefulness serve as an inspiration to readers to approach their own problems with a similar mindset. Compared to traditional fairy tales, where princesses were often portrayed as helpless and in need of rescue by a brave knight, this princess takes care of things herself and proves that she is capable of overcoming obstacles on her own. By emphasizing the strength and intelligence of women, this message instills confidence in young girls and

empowers them.

After removing the barriers encircling the castle, the princess and the dwarfs are able to successfully enter the castle. However, they proceed with caution because they believe that the elderly woman encounter inside to be a magician. Upon encountering a young girl lying a bed, the queen presumes her to be the princess who has been under the spell for an extended time and bestows a kiss on her. The concept of the “true love’s kiss,” which the main characters in all fairy tales are led to believe in is another example of traditional judgments being demolished in this story. In the story, the queen kissed the princess in an attempt to wake her up like men do but the witch was the one who was actually sleeping. “She lowered her face to the sleeping woman’s. She touched the pink lips to her own carmine lips and she kissed the sleeping girl long and hard”(2013:p.546). These lines confound the readers’ expectations. Here, neither the scene where the princess kisses the sleeping beauty nor the scene girl waking up as a witch are what the reader would expect from a typical fairy tale. It serves as a reminder that heroes and heroines can take on surprising guises. The queen’s kiss symbolizes the shift away from the traditional male hero’s role to a more feminine power dynamic. As Jack Zipes notes in his book called *Breaking the Magic Spell*. “All great fantasy works [are] linked to their capacity to subvert accepted standards and to provoke readers to think their state of being”(2002:p.230). This subversion of expectations is evident in this scene where the queen kisses the sleeping princess. Thus, the subversion of traditional fairy tale tropes adds depth and complexity to the story, challenging readers to question their assumptions about previous stories.

Subsequently, the elderly woman whom they encountered upon entering the castle commenced recounting the tale. From her mouth, it can be understood that once upon a time an old woman gave her a spindle to hold and pricked her thumb with it until blood flowed. The witch then used the blood to touch the thread. (Gaiman,2013:p.547). The girl who was actually a witch used a sinister method to steal the youthfulness of the girl who is an old woman now. It can be understood that the princess and the enchantress are joined together by a magical spindle and yarn, which enables the princess to continue living while also granting the enchantress eternal youth and beauty.

I take your sleep from you, girl, just as I take from you
 your ability to harm me in my sleep, for someone needs to be
 awake while I
 sleep. Your family, your friends, and your world will sleep too.
 And then I lay down
 on the bed, and I slept, and they slept, and as each of them slept
 I stole a little of
 their life, a little of their dreams, and as I slept I took back my

youth and my

beauty and my power. I slept and I grew strong. I undid the ravages of time and I

built myself a world of sleeping slaves. (Gaiman,2013:p.547)

In these lines, the witch describes how she gains strength and power by stealing from others while they sleep. Each victim she robs gives her the strength to continue to create a society populated by sleeping slaves and reversing the effects of aging on herself. Since her power to manipulate time and aging is impossible in the actual world, it lends an air of the supernatural to the plot.

In traditional fairy tales, the concept of beauty is often used as a symbol of goodness and purity. This concept is not typically attributed to witches. In fact they are old, ugly, and evil. On the other hand, this narrative attributes certain characteristics such as beautiful, young, golden haired-girl, childlike, and innocent. This signifies a change from the usual representation of witches and challenges the idea that all witches are ugly. Thus, in this story, the concept of beauty is stripped away and used as a tool for the witch's power. Thus, this situation leaves the reader with a sense of discomfort as it defeats their assumptions about what is right and wrong.

the witch in this story is portrayed as a multidimensional character with her own motivations and struggles. The enchantress explains:

I have my youth—so much youth! I have my beauty. No weapon can harm me. Nobody

alive is more powerful than I am...Ruling the world will not be easy. Nor will maintaining order among those of the Sisterhood who have survived into this degenerate age...(Gaiman,2013:548).

The hidden meaning of the sorcerer's remarks suggests that attractiveness and strength are on equal with one another. Her use of beauty as a power could be perceived as a strategic move to manipulate those around her. It could also be seen as a way to assert her dominance and control over others, especially in a world where physical appearance was highly esteemed.

At the end of the tale, the queen hands the spindle to the elderly princess, who then inserts it into the bosom of the young girl. The once-princess-turned-elderly woman stuck a spindle into the breast of a girl with golden hair, in other words, enchantress. This caused a drop of red blood to run down the girl's chest and stain her white dress red. (Gaiman,2013:p.549). The fact that her blood soaked into the thread symbolizes the connection between the girl's magic and the old woman's spinning. The old woman had been under a curse for many years, unable to sleep. The girl's blood which touched the spindle broke the curse and allowed the old woman to finally rest. The enchantress had been sustaining her youth and power through the curse. With the curse

lifted, she is now vulnerable and mortal like any other human being. She returns to her true form. Sleeping citizens of the city awaken as the enchantress nears death and finally, the spell is lifted and she is reduced to “a tumble of bones, a hank of hair as fine and as white as fresh-spun cobwebs, a tracery of gray rags across it, and over all of it, an oily dust”(2013:p.550).

The fact that the elderly princess, who had been awake for years but had never been able to sleep, finally succumbs to exhaustion and falls asleep when the spell is broken is yet another element that subverts the reader's expectations in this narrative. Furthermore, the elderly princess's murdering the witch also challenges the reader's perception that princesses are helpless and defenseless. This unexpected turns add depth and complexity to the plot, challenging standard fairy tale cliches and bringing a new perspective on a traditional narrative.

As is seen this brave young queen stood face to face with the evil sorceress who was terrorizing the kingdom for many years. The sorceress had cast a spell on all the inhabitants of the land, causing them to fall into a deep sleep. But now, with her courage she managed to break through the witch's defenses and confront her directly. Towards the end of the story, the queen's words are worth mentioning.

The queen drew her sword (the blade edge was notched and damaged from the thorns) but instead of striking, she took a step backwards.

“Listen! They are waking up,” she said. “They are all waking up. Tell me again about the youth you stole from them. Tell me again about your beauty and your power. Tell me again how clever you were, Your Darkness.”(Gaiman,2013: p.550)

The queen and her companions then continue their journey, leaving the kingdom behind. Rather than simply returning to her kingdom and marrying the prince, she chooses to go on her own adventure. “There are choices, she thought, when she had sat long enough. There are always choices. She made her choice.”(Gaiman, p.551). She is not bound by traditional expectations and chooses to go in a different direction than what is expected of her, which is a refreshing change from the traditional fairy tale endings. It throws a wrench into all of the fairy tales with happy endings, in which a prince and a princess are married and live happily ever after. In this respect, M.O. Grenby's comments are essential to the unveiling the queen's transformed self.

The journey to another world, or another time, decontextualizes the protagonists, removing them from the structures, that locate and bind them into a particular role within the family, the school, or the larger society. Then they have to discover afresh who they are, and, usually, can return to their reality at the end of the

novel with a stronger sense of themselves.(2008:164)

This quote highlights the importance of experiencing new situations to gain a deeper understanding of himself. By removing himself from familiar environments and social structures, the individual are forced to confront their own identity without the constraints of their usual roles. As is seen, this process helps the queen gain a greater understanding of who she is.

Gaiman in this story describes the queen as a woman who uses her intelligence to challenge difficulties rather than relying on traditional feminine traits like weakness and beauty. Additionally, the queen's initiative in this story shows that women can be powerful by challenging the typical damsel in distress featured in traditional fairy tales. This subversion of gender roles adds a fresh twist to the plot and challenges traditional notions of femininity. The epigraph, which is included at the very beginning of the book called *Caroline* by Neil Gaiman serves as a kind of summary for this story. "Fairy tales are not true not because they tell us that dragons exist, but because they tell us that dragons can be beaten".

3. CONCLUSION

Throughout the story, the reader is taken on a journey filled with suspense and adventure where the characters are pushed to their limits. Despite the challenges she faced the queen realized that she was capable of creating her own destiny and shaping her future. She elevated herself to the role of protagonist in her own narrative, which was the most significant achievement of all. The queen's courage and determination make her a role model for young girls who aspire to be fearless and empowered. The queen overcomes obstacles through her bravery while the witch gains power through magic. Thus, the queen's journey to defeat the witch highlights the importance of inner strength and resilience.

Overall, this tale presents a refreshing take on traditional storytelling and encourages readers to question their own values. By comparing and contrasting modern and classic fairy tales, Gaiman allows the reader to gain a better understanding of how these stories have evolved and adapted to the changing values and beliefs of society

BIBLIOGRAPHY

- C.S. Lewis (1961) *An Experiment in Criticism*. Cambridge: Cambridge University Press.
- Faris, Wendy.(2004).*Ordinary Enchantments. Magical Realism and Remystification of Narrative*.USA:Vanderbilt University Press.
- Faris, Wendy.(1995).*Magical Realism*.USA:Duke University Press.
- Gaiman, Neil. (2013). *The Neil Gaiman Reader: Selected Fiction*. New York: Harper Collins Publishers
- Grenby, Matthew O.(2008). *Children's Literature*.Edinburg: Edinburg University Press Ltd.
- Martin, George. R.R. Retrieved June 26, 2023, from <https://georgermartin.com/about-george/on-writing-essays/on-fantasy-by-george-r-r-martin/>
- Tolkien, J.R.R. (1966)“On Fairy-Stories.” *The Tolkien Reader*. Ballantine Books.
- Zipes, Jack. (2002).*Breaking the Magic Spell: Radical Theories of Folk and Fairy Tales*. University Press of Kentucky.

Chapter 10

FLEXIBLE WORK ARRANGEMENTS IN THE ERA OF DISASTERS AND TECHNOLOGY

Ramazan Özkan YILDIZ¹

Handan AKKAŞ²

1 Asst. Prof. Dr. Ramazan Özkan YILDIZ, Iskenderun Technical University, Barbaros Hayrettin Naval Architecture and Maritime Faculty, Maritime Business Management Department, 0000-0002-4382-2480, rozkan.yildiz@iste.edu.tr

2 Asst. Prof. Dr. Handan AKKAŞ, Ankara Science University, Faculty of Humanities and Social Sciences, Management Information Systems Department
orcid.org/0000-0002-2082-0685, handan.akkas@ankarabilim.edu.tr



Introduction

Flexible work arrangements refer to alternative work schedules and arrangements that allow employees to have greater control over when, where, and how they work. These arrangements encompass a range of options, including flexible scheduling, telecommuting, job sharing, and reduced work-time options (Čiarnienė et al., 2018; Conradie and Klerk, 2019). The concept of flexible work arrangements is multidimensional, involving various aspects and dimensions that impact both employees and organizations. Flexible work arrangements system has three important dimensions which are essential for an in-depth understanding of the concept.

The first dimension of flexible work arrangements is boundary flexibility, which refers to the extent to which individuals can adjust the boundaries between their work and personal life (Rau and Hyland, 2002). This dimension encompasses the ability to work outside of standard work hours and the freedom to choose when and where to work (Čiarnienė et al., 2018). Another dimension is boundary permeability, which relates to the ease with which individuals can transition between their work and personal roles (Rau & Hyland, 2002). This dimension includes factors such as the availability of technology that enables remote work and the level of support from supervisors and colleagues (Spreitzer et al., 2017). The last dimension, role conflict, another dimension of flexible working arrangements, focuses on the extent to which individuals experience conflict or incompatibility between their work and personal lives. This dimension considers the impact of flexible work arrangements on interrole conflict, which refers to the challenges individuals face when fulfilling multiple roles simultaneously (Rau and Hyland, 2002).

Flexible work arrangements have become increasingly prevalent in today's workforce, offering employees greater control over when, where, and how they work. These arrangements encompass a range of options, including remote working, reduced hours working, flexible scheduling, and job sharing. They can be understood through various dimensions and factors that impact both employees and organizations. In order for the flexible working arrangements system to function smoothly and completely, its components must be used in coordination with each other. The most important of these components can be listed as follows:

Flexible Work Arrangement Components

Remote Working: Remote working is a key component of flexible work arrangements, allowing employees to work from home or other locations outside of the traditional office setting (Kelliher and Anderson, 2009). This arrangement provides individuals with the flexibility to choose their work environment and eliminates the need for daily commuting. Remote working has been associated with increased job satisfaction, improved work-life balance, and reduced stress levels (Beckel and Fisher, 2022).

Reduced Hours Working: Reduced hours working refers to working fewer hours than the standard full-time schedule (Kelliher and Anderson, 2009). This component allows employees to have more control over their work-life balance and allocate time for personal commitments. Reduced hours working can contribute to increased job satisfaction and employee well-being (Persellin et al., 2019).

Employee Choice: A central feature of flexible work arrangements is that employees have the autonomy to choose their working arrangement (Kelliher and Anderson, 2009). This component empowers individuals to tailor their work schedules and arrangements to suit their specific needs and preferences. Employee choice is crucial for fostering a sense of ownership and engagement among the workforces.

Work-Life Balance: Work-life balance is a fundamental component of flexible work arrangements (Vandello and Bosson, 2013). These arrangements aim to enable individuals to effectively manage their personal responsibilities while fulfilling work obligations. By providing flexibility in work schedules and locations, organizations support employees in achieving a better balance between their work and personal lives. Work-life balance is associated with increased job satisfaction, reduced stress levels, and improved overall well-being (Haar et al., 2014).

Job Satisfaction: Flexible work arrangements have been linked to increased job satisfaction among employees (Persellin et al., 2019). The ability to have control over one's work schedule and location can lead to a greater sense of autonomy and work-life integration. This, in turn, contributes to higher levels of job satisfaction and overall employee well-being. Organizations that prioritize flexible work arrangements are more likely to attract and retain top talent, leading to positive impacts on employee morale and productivity.

Organizational Support: Organizational support is a critical component for the successful implementation of flexible work arrangements (Çemberci et al., 2022). Employers need to provide the necessary resources, policies, and infrastructure to support employees in their flexible work arrangements. This includes technological support for remote work, clear guidelines for flexible scheduling, and training for managers to effectively manage and support flexible work arrangements. Organizational support is essential for creating a culture that values and promotes flexibility, ensuring the success and sustainability of these arrangements.

In order to understand the subject in more detail, in addition to the information given above, its benefits for companies, the challenges on its implementation, its function during disasters and its relationship with technology should also be explained.

The Benefits of Flexible Work Arrangements

It has been verified by academic studies that flexible working practices provide significant benefits for both companies and employees. Summarizing some of the benefits it brings with the findings of previous studies will help us understand the issue from a broader perspective.

Carlson et al. (2010) suggests that flexible work arrangements, such as schedule flexibility, can yield benefits for both work-related and family-related role performance and quality. Meanwhile, Kim et al. (2019) found that flexible schedules have benefits for work-related well-being, including job satisfaction, job stress, daily fatigue, and work-to-family conflict. Butler et al. (2009) highlights that workplace flexibility programs, including flexible work arrangements, can contribute to employee well-being and work-life balance. Lott (2015) indicates that flexible working-time arrangements lead to job satisfaction and improved mental health. Golden (2009) suggests that flexible daily work schedules, such as flexible starting and ending times, are more prevalent in managerial and professional roles and offer advantages in terms of work-life balance. Houghton et al. (2018) acknowledges the benefits of flexible work arrangements but also highlights potential challenges and impacts on organizational culture, employee loyalty, customer service, and occupational health and safety. Kossek and Kelliher (2022) emphasizes the importance of work-life equality and equal access to flexible working arrangements as a rising form of job inequality. Li et al. (2022) discusses the potential benefits of flexible work arrangements in reducing burnout by providing opportunities for work-life balance and reducing overall work hours. Last but not least, Gašić and Berber (2021) suggests that flexible work arrangements can contribute to work-life balance, employee engagement, increased productivity, employee satisfaction, and improved financial performance.

When we evaluate the above findings, it is understood that the benefits of flexible working arrangements should be examined under two main headings as employee benefits and company benefits.

Benefits for Employees:

Work-Life Balance: Flexible work arrangements allow employees to have greater control over their work schedules, enabling them to better balance their personal and professional lives. This can lead to reduced stress levels and improved overall well-being (Çemberci et al., 2022).

Increased Productivity: Flexibility in work arrangements can enhance productivity as employees have the opportunity to work during their most productive hours or in environments where they can focus best. This can result in higher job satisfaction and better quality of work (Carlson et al., 2010).

Commute Reduction: With flexible work options such as remote work

or flexible hours, employees can avoid or reduce commuting time and associated costs. This not only saves time but also reduces traffic congestion and contributes to a more sustainable environment (Choi et al., 2022).

Enhanced Autonomy: Flexible work arrangements often grant employees more autonomy and control over their work, allowing them to take ownership of their tasks and make decisions independently. This can foster a sense of empowerment and job satisfaction (Menezes and Kelliher, 2017).

Benefits for Employers:

Improved Employee Retention and Recruitment: Offering flexible work arrangements can attract top talent and enhance employee retention rates. It demonstrates a commitment to work-life balance and accommodates diverse needs, making the organization more appealing to potential candidates (Weale et al., 2017).

Increased Productivity and Engagement: Studies have shown that employees who have the flexibility to manage their work schedules and environments are often more engaged and motivated. This can lead to higher levels of productivity and overall performance (Hung et al., 2012).

Cost Savings: Flexible work arrangements can reduce costs for employers, such as office space expenses, utilities, and equipment. Companies may also see lower absenteeism rates and reduced employee turnover, resulting in savings associated with recruitment and training (Boštjančič et al., 2018).

Access to a Larger Talent Pool: By offering flexible work options, employers can tap into a larger talent pool that includes individuals who may not be able to work traditional schedules due to personal obligations, disabilities, or geographical constraints. This widens the talent pool and increases the chances of finding highly qualified candidates (Piszczyk et al., 2021).

In summary, flexible working arrangements appear to positively impact improved work-life balance, increased job satisfaction, reduced job stress and fatigue, improved well-being, and greater employee engagement, leading to positive organizational outcomes such as increased productivity and financial performance. However, to ensure that flexible working arrangements are effectively implemented and managed, it is important to consider the potential challenges and impacts associated with these arrangements.

The Challenges on Flexible Work Arrangements

While flexible work arrangements offer numerous benefits, they also present challenges for both employees and organizations. The following studies provide insights into the challenges associated with flexible work arrangements.

Chung and Lippe (2018) highlights the importance of examining the context, including family, organizational, and country context, in understanding the gendered outcomes of flexible working. The intersection between gender and class is also a crucial consideration. Groen et al. (2018) emphasizes the challenges faced by managers in managing employees using flexible work arrangements, particularly in the case of teleworking. Little research has been conducted on how managers address these challenges. Kelly and Moen (2007) points out that many employees still do not have access to flexible work arrangements, which limits their potential effects. The increasing prevalence of work-life conflicts presents both a challenge and an opportunity for organizations. Pasewark and Viator (2006) suggests that while offering flexible work arrangements can mitigate certain effects of work-family conflict, their utilization is not without problems. Utilizing flexible work arrangements can lead to lower perceptions of long-term career potential. Bjärntoft et al. (2020) highlights that while flexible work arrangements can have positive effects on work-life balance (WLB), they can also present challenges in setting boundaries between work and personal life. Poor WLB may lead to adverse health-related outcomes and job dissatisfaction. Cui et al. (2020) discusses the potential role of flexible work arrangements in helping passionate workers cope with health-related problems or limitations, which may affect their early retirement intentions. Choi (2018) emphasizes that while flexible work arrangements bring benefits, they also pose various challenges. The study examines the relationship between telework and employee turnover intention and the roles of institutional and managerial support in moderating this relationship. Ewald et al. (2020) calls for an interdisciplinary approach to understanding the issue of fathering and flexible working arrangements, highlighting the need for a more integrated perspective. Dawes et al. (2021) discusses the impact of the COVID-19 pandemic on the mental health and well-being of parents with young children. Flexible working arrangements and support are identified as potential strategies to relieve stress and increase productivity. Achour et al. (2017) suggests that while flexible work arrangements can help individuals integrate work and family demands, management and supervisory support are crucial in achieving work-family balance and well-being.

While flexible work arrangements come with numerous benefits, they can also present certain challenges. With the help of the above findings, it will be possible to list some of the main challenges on flexible work arrangements.

Communication and Collaboration: When employees work remotely or have flexible schedules, it can sometimes be challenging to maintain effective communication and collaboration among team members. Miscommunication, delays in responses, or difficulties in coordinating schedules can arise, requiring the implementation of clear communication

channels and collaborative tools (Hartner-Tiefenthaler et al., 2022).

Monitoring and Performance Evaluation: Assessing the performance and productivity of employees working in flexible arrangements can be more challenging than in a traditional office setting. Establishing effective metrics and evaluation methods becomes crucial to ensure that employees are meeting their goals and delivering results (Stamarski and Hing, 2015).

Work-Life Balance Boundaries: While flexible work arrangements aim to improve work-life balance, it can sometimes blur the boundaries between personal and professional life. Employees may find it difficult to disconnect from work, leading to potential burnout and decreased well-being. Setting clear expectations and encouraging employees to establish boundaries can help mitigate this challenge (Wheatley, 2012; Scurry and Clarke, 2022).

Maintaining Company Culture: Building and maintaining a strong company culture can be more challenging when employees work remotely or have varying schedules. In-person interactions and spontaneous conversations may be limited, potentially impacting team cohesion and a sense of belonging. Employers need to find creative ways to foster a strong company culture and promote team bonding, even in flexible work arrangements (Vo and Hannif, 2013).

Technology and Infrastructure: Flexible work arrangements heavily rely on technology and infrastructure to facilitate remote work and communication. Challenges may arise if employees lack access to reliable internet connections, necessary software, or appropriate equipment. Employers should ensure that employees have the tools and resources they need to perform their work effectively (Becerra-Astudillo et al., 2022).

Legal and Compliance Considerations: Implementing flexible work arrangements requires organizations to navigate legal and compliance considerations. Different jurisdictions may have specific regulations regarding remote work, data security, and employee rights, which employers must understand and comply with to avoid legal issues (Williams, 2019).

In sum, the challenges of flexible work arrangements include managing gendered outcomes, addressing managerial challenges, ensuring equal access to arrangements, mitigating career perception issues, setting boundaries between work and personal life, and providing adequate support and resources. Organizations need to address these challenges to effectively implement and manage flexible work arrangements and maximize their benefits. It's also important for organizations to proactively address these challenges by establishing clear policies, providing necessary support and resources, and fostering a culture of trust and open communication. Flexibility should be balanced with effective management practices to ensure the success of flexible work arrangements.

Thanks to advances in technology and both theoretical and practical developments in the discipline of human resource management, companies have developed strategies to overcome these obstacles. The most important of these strategies are listed below.

Communication and Collaboration Tools: Implementing effective communication and collaboration tools can help overcome the challenges of remote working and reduced face-to-face interaction Greer and Payne (2014). Utilizing technologies such as video conferencing, project management software, and instant messaging platforms can facilitate communication and collaboration among team members.

Clear Expectations and Guidelines: Establishing clear expectations and guidelines for flexible work arrangements can help address coordination and motivation challenges (Dyne et al., 2007). Clearly defining work hours, deliverables, and communication protocols can ensure that employees understand their responsibilities and can effectively contribute to team goals.

Training and Support: Providing training and support to both employees and managers can help them navigate the challenges of flexible work arrangements (Grzywacz et al., 2008). Training programs can focus on time management, remote collaboration, and maintaining work-life balance. Managers can receive training on effectively managing remote teams and providing support to employees in flexible work arrangements.

Flexibility Policies and Procedures: Developing and implementing flexible work policies and procedures can ensure equal access to flexible work arrangements and address potential biases (Lott, 2015). These policies should outline the eligibility criteria, application process, and guidelines for flexible work arrangements. Regularly reviewing and updating these policies can help address emerging challenges and ensure their effectiveness.

Boundary Management Strategies: Encouraging employees to establish clear boundaries between work and personal life can help mitigate the challenges of work-life balance (Pedersen and Lewis, 2012). Providing guidance on setting boundaries, such as defining dedicated workspaces and establishing designated work hours, can help employees maintain a healthy work-life integration.

Flexitime and Schedule Flexibility: Implementing flexitime arrangements and providing schedule flexibility can help employees manage their work schedules and personal commitments (Wickramasinghe, 2007). Flexitime allows employees to choose their start and end times within certain parameters, providing them with greater control over their work hours.

Gender-Inclusive Approaches: Recognizing and addressing gender-related challenges in flexible work arrangements is crucial (Khlif and

Achek, 2017). Organizations should ensure that flexible work arrangements are accessible and beneficial for all employees, regardless of gender. This may involve addressing gender biases, promoting equal opportunities, and providing support for work-life balance for both men and women.

Performance Management and Evaluation: Developing performance management systems that account for the unique challenges and dynamics of flexible work arrangements can help ensure fairness and effectiveness (Klindžić and Marić, 2019). This may involve setting clear performance goals, providing regular feedback, and evaluating performance based on outcomes rather than hours worked.

Health and Well-being Initiatives: Implementing health and well-being initiatives that cater to the specific needs of employees in flexible work arrangements can help address potential challenges (Olsen et al., 2018). These initiatives may include promoting physical activity, providing resources for stress management, and offering mental health support.

Person-Environment Fit: Considering the fit between individuals and their work environment is essential in designing and implementing flexible work arrangements (Weale et al., 2017). Understanding the needs and preferences of employees and aligning the work environment to support their flexibility requirements can contribute to successful outcomes.

By implementing these strategies, organizations can overcome the challenges associated with flexible work arrangements and create a supportive and productive work environment for their employees.

The Relation of Flexible Work Arrangements with Technology

Technology plays an important role in enabling and supporting flexible working arrangements. The use of digital technologies such as telecommuting tools, video conferencing platforms, cloud computing and collaborative software has facilitated the implementation and effectiveness of flexible working arrangements (Knoll et al., 2022; Balasubramanian and Aziz, 2022). These technologies have enabled employees to work remotely, communicate effectively with coworkers, and access necessary resources and information (Onyekwelu et al., 2022).

However, the relationship between technology and flexible work arrangements is not without challenges. The intensification of work, increased connectivity, and constant availability due to technology can lead to work overload and potential negative impacts on work-life balance and well-being (Kelliher and Anderson, 2009; Fabrellas, 2022). The blurring of boundaries between work and personal life, as well as the reliance on technology-mediated communication, may hinder employees' willingness and ability to address critical issues and voice concerns (Knoll et al., 2022).

Organizations need to consider the role of technology in supporting flexible work arrangements while also managing the potential negative consequences. Providing training and support to employees and managers on effectively utilizing technology for remote work can help overcome challenges and maximize the benefits of flexible work arrangements. Additionally, organizations should ensure that employees have access to the necessary technology and resources to effectively carry out their work responsibilities (Onyekwelu et al., 2022).

The COVID-19 pandemic has further highlighted the importance of technology in enabling flexible work arrangements. Many organizations have transitioned to digital technologies to continue operating and maintain productivity during the crisis (Balasubramanian and Aziz, 2022). The adoption of digital tools and platforms has allowed employees to work remotely and collaborate virtually, ensuring business continuity (Naidu and Hoque, 2022).

Ultimately, technology plays a crucial role in enabling and supporting flexible work arrangements (Knoll et al., 2022). It provides the necessary infrastructure for remote work, communication, and collaboration. However, organizations must also be mindful of the potential challenges and negative impacts associated with technology use, such as work intensification and work-life imbalance. By effectively managing and leveraging technology, organizations can optimize the benefits of flexible work arrangements while mitigating potential drawbacks.

The Function of Flexible Work Arrangements in Disasters

Flexible work arrangements play a crucial role in disaster situations by providing organizations and individuals with the ability to maintain operations and adapt to challenging circumstances. The studies provided below shed light on the function of flexible work arrangements in disasters.

Mahmud et al. (2020) highlight the potential of flexible work arrangements, such as working from home (WFH), in ensuring work continuity during crises like financial crises, pandemics, and natural disasters. Tripathi and Singh (2022) suggest that flexible work arrangements, including remote work and flexible schedules, can help individuals cope with crises like the COVID-19 pandemic by providing them with greater flexibility, work-life balance, and opportunities for personal growth. Birkmann et al. (2016) discuss the importance of resilience and transformation in urban areas during disasters. Flexible work arrangements can contribute to resilience by allowing organizations to adapt their work practices and continue operations in the face of disruptions. Moos and Skaburskis (2008) highlight the role of flexible work arrangements, such as telework and telecommuting, in reducing traffic congestion and promoting sustainability. These arrangements can also enhance business continuity and resilience in the event of natural disasters or terrorist attacks.

In the light of the above findings, it would not be wrong to summarize the issue as follows: Flexible work arrangements during disaster situations can enhance individuals' ability to cope with and recover from the aftermath of natural disasters or terrorist attacks. For example, remote work options can ensure continued productivity and income even if physical office spaces are damaged or inaccessible. Additionally, flexible work arrangements may allow for more time and energy to be devoted to recovery efforts, as individuals can adjust their schedules based on their needs and priorities.

Moreover, work arrangements that prioritize mental health and well-being can also contribute to overall resilience in the face of disaster. This may include providing access to counseling services or allowing for time off to address personal needs. Furthermore, collaborative work arrangements that foster a sense of community and support can help individuals feel less isolated and more connected during difficult times. In order to ensure the effectiveness of these arrangements, it is important for employers and employees alike to establish clear communication channels and contingency plans. By prioritizing flexible, supportive work arrangements during disaster situations, individuals can better navigate the challenges of recovery and emerge stronger in the aftermath.

Conclusion

Flexible work arrangements have emerged as a significant aspect of modern work environments, offering employees greater control over their work schedules, locations, and methods. Through an analysis of various references, this book chapter has provided a comprehensive understanding of flexible work arrangements, including their components, benefits, challenges, and implications.

The components of flexible work arrangements encompass remote working, reduced-hour working, employee choice, work-life balance, job satisfaction, and organizational support. These components contribute to creating a more adaptable and inclusive work environment that promotes employee well-being and organizational success.

The benefits of flexible work arrangements are numerous. They include improved work-life balance, increased job satisfaction, reduced job stress and fatigue, enhanced well-being, and greater employee engagement. Flexible work arrangements also offer advantages for organizations, such as increased productivity, employee retention, and financial performance.

However, flexible work arrangements are not without challenges. These challenges include managing gendered outcomes, addressing managerial concerns, ensuring equal access to arrangements, mitigating career perception issues, setting boundaries between work and personal life, and providing

adequate support and resources. Organizations need to implement strategies such as effective communication and collaboration tools, clear expectations and guidelines, training and support, flexibility policies and procedures, and health and well-being initiatives to overcome these challenges.

The relationship between flexible work arrangements and technology is significant. Technology plays a crucial role in enabling and supporting flexible work arrangements by providing the necessary infrastructure for remote work, communication, and collaboration. However, organizations must also be mindful of potential challenges associated with technology use, such as work intensification and work-life imbalance.

In evaluating the existing literature, it is important to acknowledge the limitations and gaps in the research on flexible work arrangements. Further research is needed to explore the long-term effects of flexible work arrangements on employee well-being, organizational outcomes, and the broader societal implications. Additionally, more attention should be given to intersectionality of flexible work arrangements, considering factors such as gender, class, and cultural contexts.

Overall, flexible work arrangements have become an integral part of modern work environments, offering numerous benefits for employees and organizations. By understanding the components, challenges, and implications of flexible work arrangements, organizations can create a work environment that promotes employee well-being, satisfaction, and productivity. The effective implementation and management of flexible work arrangements require a holistic approach that considers the needs of employees, the support of technology, and the alignment with organizational goals and values.

In conclusion, flexible work arrangements have the potential to transform the way we work, providing individuals with greater autonomy and work-life integration. By embracing and effectively managing flexible work arrangements, organizations can foster a culture of flexibility, adaptability, and employee well-being in the ever-evolving landscape of work.

REFERENCES

- Achour, M., Khalil, S. A., Ahmad, B., Nor, M. R. M. and Yusoff, M. Y. Z. B. M. (2017). Management and Supervisory Support as a Moderator of Work–family Demands and Women’s Well-being: A Case Study of Muslim Female Academicians in Malaysia. *Humanomics*, 33(3), 335-356.
- Becerra-Astudillo, L., Vargas-Díaz, B., Molina, C., Serrano-Malebrán, J. and Garzón-Lasso, F. (2022). Teleworking in Times of a Pandemic: An Applied Study of Industrial Companies. *Frontiers in Psychology*, 13(1), 1-9.
- Beckel, J. L. O., Fisher, G. G. (2022). Telework and Worker Health and Well-being: A Review and Recommendations for Research and Practice. *International Journal of Environmental Research and Public Health*, 19(7), 1-32.
- Birkmann, J., Agboola, J. I., Welle, T., Ahove, M. A., Odunuga, S., von Streit, J. and Pelling, M. (2016). Vulnerability, Resilience and Transformation of Urban Areas in the Coastal Megacity Lagos: Findings of Local Assessments and a Household Survey in Highly Exposed Areas. *Journal of Extreme Events*, 03(3), 1-24.
- Bjärntoft, S., Hallman, D., Mathiassen, S. E., Larsson, J. and Jahncke, H. (2020). Occupational and Individual Determinants of Work-life Balance among Office Workers with Flexible Work Arrangements. *International Journal of Environmental Research and Public Health*, 17(4), 1-15.
- Boštjančič, E., Antolović, S. and Erčulj, V. (2018). Corporate Volunteering: Relationship to Job Resources and work Engagement. *Frontiers in Psychology*, 9(1), 1-10.
- Butler, A. B., Grzywacz, J. G., Ettner, S. L. and Liu, B. (2009). Workplace Flexibility, Self-reported Health, and Health Care Utilization. *Work and Stress*, 23(1), 45-59.
- Carlson, D. S., Grzywacz, J. G. and Kacmar, K. M. (2010). The Relationship of Schedule Flexibility and Outcomes via the Work-family Interface. *Journal of Managerial Psychology*, 25(4), 330-355.
- Çemberci, M., Civelek, M. E., Ertemel, A. V. and Cömert, P. (2022). The Relationship of Work Engagement with Job Experience, Marital Status and Having Children among Flexible Workers after the Covid-19 Pandemic. *PLoS ONE*, 11(17), 1-23.
- Choi, H., Lee, J., Choi, Y., Juan, Y. and Lee, C. (2022). How to Enhance Smart Work Effectiveness as a sustainable HRM Practice in the Tourism Industry. *Sustainability*, 14(4), 1-16.
- Choi, S. (2018). Managing Flexible Work Arrangements in Government: Testing the Effects of Institutional and Managerial Support. *Public Personnel Management*, 47(1), 26-50.
- Chung, H., van der Lippe, T. (2018). Flexible Working, Work–life Balance, and Gender Equality: Introduction. *Social Indicators Research*, 151(2), 365-381.
- Čiarnienė, R., Vienožindienė, M. and Adamonienė, R. (2018). Implementation of

- Flexible Work Arrangements for Sustainable Development. *European Journal of Sustainable Development*, 4(7), 11-21.
- Conradie, W.J. and Klerk, J.J.D. (2019). To Flex or Not To Flex? Flexible Work Arrangements Amongst Software Developers in an Emerging Economy. *SA Journal of Human Resource Management*, 17(1), 1-12.
- Cui, G., Wang, F., Cheng, Y. and Zhang, Y. (2020). Understanding the Work Goals–early Retirement Intention Relationship: The Mediating Role of Work Passion and Moderating Role of Hr Practices' Flexibility. *Personnel Review*, 50(4), 1148-1167.
- Dawes, J., May, T. W., McKinlay, A., Fancourt, D. and Burton, A. (2021). Impact of the Covid-19 Pandemic on the Mental Health and Wellbeing of Parents with Young Children: A Qualitative Interview Study. *BMC Psychology*, 9(1), 1-13.
- Dyne, L. V., Kossek, E. E. and Lobel, S. A. (2007). Less Need to Be There: Cross-level Effects of Work Practices that Support Work-life Flexibility and Enhance Group Processes and Group-level OCB. *Human Relations*, 60(8), 1123-1154.
- Ewald, A., Gilbert, E. and Huppertz, K. (2020). Fathering and Flexible Working Arrangements: A Systematic Interdisciplinary Review. *Journal of Family Theory and Review*, 12(1), 27-40.
- Gašić, D. and Berber, N. (2021). The Influence of Flexible Work Arrangement on Employee Behavior during the Covid-19 Pandemic in The Republic of Serbia. *Management Journal of Sustainable Business and Management Solutions in Emerging Economies*, 26(3), 73-88.
- Golden, L. (2009). Flexible Daily Work Schedules in U.S. Jobs: Formal Introductions Needed? *Industrial Relations: A Journal of Economy and Society*, 48(1), 27-54.
- Greer, T. W. and Payne, S. C. (2014). Overcoming Telework Challenges: Outcomes of Successful Telework Strategies. *The Psychologist-Manager Journal*, 17(2), 87-111.
- Groen, B., van Triest, S., Coers, M. and Wtenweerde, N. (2018). Managing Flexible Work Arrangements: Teleworking and Output Controls. *European Management Journal*, 36(6), 727-735.
- Grzywacz, J. G., Carlson, D. S. and Shulkin, S. (2008). Schedule Flexibility and Stress: Linking Formal Flexible Arrangements and Perceived Flexibility to Employee Health. *Community, Work and Family*, 11(2), 199-214.
- Haar, J. M., Russo, M., Suñe, A., & Ollier-Malaterre, A. (2014). Outcomes of work–life balance on job satisfaction, life satisfaction and mental health: A study across seven cultures. *Journal of Vocational Behavior*, 85(3), 361-373.
- Hartner-Tiefenthaler, M., Loerinc, I., Hodzic, S. and Kubicek, B. (2022). Development and Validation of a Scale to Measure Team Communication Behaviors. *Frontiers in Psychology*, 13(1), 1-17.
- Houghton, K., Foth, M. and Hearn, G. (2018). Working from the other Office: Trialling Co-working Spaces for Public Servants. *Australian Journal of Public*

Administration, 77(4), 757-778.

- Kelliher, C. and Anderson, D. (2009). Doing More with Less? Flexible Working Practices and the Intensification of Work. *Human Relations*, 63(1), 83-106.
- Kelly, E. L. and Moen, P. (2007). Rethinking the Clockwork of Work: Why Schedule Control May Pay off at Work and at Home. *Advances in Developing Human Resources*, 9(4), 487-506.
- Khelif, H. and Achek, I. (2017). Gender in Accounting Research: A Review. *Managerial Auditing Journal*, 32(6), 627-655.
- Kim, J., Henly, J. R., Golden, L. and Lambert, S. J. (2019). Workplace Flexibility and Worker Well-being by Gender. *Journal of Marriage and Family*, 82(3), 892-910.
- Klindžić, M. and Marić, M. (2019). Flexible Work Arrangements and Organizational Performance – The Difference between Employee and Employer-driven Practices. *Drustvena istrazivanja: Journal for General Social Issues*, 28(1), 89-108.
- Knoll, M., Feldt, M., & Zacher, H. (2022). Effects of Technology-Enabled Flexible Work Arrangements on Employee Voice: Toward a Nuanced Understanding. *Mrev Management Revue*, 33(3), 303-334.
- Kosseck, E. E. and Kelliher, C. (2022). Making Flexibility More I-deal: Advancing Work-life Equality Collectively. *Group and Organization Management*, 48(1), 317-349.
- Li, S., ten Berge, J. and Kristiansen, M. H. (2022). Burnout and its Antecedents: Considering both Work and Household Time Claims, And Flexibility in Relation to Burnout. *Frontiers in Public Health*, 10(1), 1-10.
- Lott, Y. (2015). Working-time Flexibility and Autonomy: A European Perspective on Time Adequacy. *European Journal of Industrial Relations*, 21(3), 259-274.
- Mahmud, R., Lim, B. F. Y., Pazim, K. H., Lee, N. F. C., Mansur, K. and Abdullah, B. (2020). A Review of Working from Home (Wfh) and Work Productivity. *BIMP-EAGA Journal for Sustainable Tourism Development*, 9(1), 1-6.
- Menezes, L. and Kelliher, C. (2017). Flexible Working, Individual Performance, and Employee Attitudes: Comparing Formal and Informal Arrangements. *Human Resource Management*, 56(6), 1051-1070.
- Moos, M. and Skaburskis, A. (2008). The Probability of Single-family Dwelling Occupancy: Comparing Home Workers and Commuters in Canadian Cities. *Journal of Planning Education and Research*, 27(3), 319-340.
- Olsen, H. A., Brown, W. J., Kolbe-Alexander, T. and Burton, N. W. (2018). Physical Activity and Sedentary Behaviour in a Flexible Office-based Workplace: Employee Perceptions and Priorities for Change. *Health Promotion Journal of Australia*, 29(3), 344-352.
- Pasewark, W. R. and Viator, R. E. (2006). Sources of Work-family Conflict in the Accounting Profession. *Behavioral Research in Accounting*, 18(1), 147-165.

- Pedersen, V. K. and Lewis, S. (2012). Flexible Friends? Flexible Working Time Arrangements, Blurred Work-life Boundaries and Friendship. *Work, Employment and Society*, 26(3), 464-480.
- Persellin, J. S., Schmidt, J. J., Vandervelde, S. D. and Wilkins, M. J. (2019). Auditor Perceptions of Audit Workloads, Audit Quality and Job Satisfaction. *Accounting Horizons*, 33(4), 95-117.
- Piszczek, M., Martin, J., Pimputkar, A. and Lauhié, L. (2021). What does Schedule Fit Add to Work–family Research? the Incremental Effect of schedule Fit on Work–family Conflict, schedule Satisfaction, and Turnover Intentions. *Journal of Occupational and Organizational Psychology*, 94(4), 866-889.
- Rau, B. L. and Hyland, M. (2002). Role Conflict and Flexible Work Arrangements: The Effects on Applicant Attraction. *Personnel Psychology*, 55(1), 111-136.
- Scurry, T. and Clarke, M. (2022). Navigating Dual-careers: The Challenge for professional Couples. *Personnel Review*, 51(7), 1823-1840.
- Spreitzer, G.M., Cameron, L. and Garrett, L.E. (2017). Alternative Work Arrangements: Two Images of the New World of Work. *Annual Review of Organizational Psychology and Organizational Behavior*, 4(1), 473-499.
- Stamarski, C. and Hing, L. (2015). Gender Inequalities in the Workplace: The Effects of Organizational Structures, Processes, Practices, and Decision Makers' Sexism. *Frontiers in Psychology*, 6(1), 1-18.
- Tripathi, C. M. and Singh, T. (2022). Sailing through the Covid-19 Pandemic: Managing Expatriates' Psychological Well-being and Performance during Natural Crises. *Journal of Global Mobility*, 10(2), 192-208.
- Vandello, J. A. and Bosson, J. K. (2013). Hard Won and Easily Lost: A Review and Synthesis of Theory and Research on Precarious Manhood. *Psychology of Men and Masculinity*, 14(2), 101-113.
- Vo, A. and Hannif, Z. (2013). The Reception of Anglo Leadership Styles in a Transforming Society: The Case of American Companies in Vietnam. *The International Journal of Human Resource Management*, 24(18), 3534-3551.
- Weale, V., Wells, Y. and Oakman, J. (2017). Flexible Working Arrangements in Residential Aged Care: Applying a Person-environment Fit Model. *Asia Pacific Journal of Human Resources*, 55(3), 356-374.
- Wheatley, D. (2012). Work-life Balance, Travel-to-work, and the Dual Career Household. *Personnel Review*, 41(6), 813-831.
- Wickramasinghe, V. (2007). Towards Workplace Flexibility: Flexitime Arrangements in Sri Lanka. *Employee Relations*, 29(6), 554-575.
- Williams, P. (2019). Support for Supervisors: HR Enabling flexible work. *Employee Relations*, 41(5), 914-930.