

ASSIGNMENT 2 – INDIVIDUAL CASE STUDY

BUSA8030: Management of Data, Analytics and Change

Name: Mai Vy (Vivian) Nguyen

Student ID: 47554029

Unit Convenor: Dr. Ali Eshraghi

Class Time: Monday 3.00 pm to 6.00 pm

Part 1:

Question 1:

Although journalists have made arguments pointing out that AutoFair 2.0 impacts judges' decision-making and fairness of defendants, the benefits of AutoFair would exceed the disadvantages.

The benefits of AutoFair 2.0 for the legal systems include:

- **Increase the efficiency of operations:** By applying big data analytics, AutoFair 2.0 can be easier to collect and arrange data that help the legal system optimize case processing time systematically and faster.
- Enhance accuracy and limit human bias in making legal decisions: the new eJudge's
 system collects data from a variety of sources enabling more detailed information for
 judges to make decisions based on data-driven decisions, limiting subjective judgments.

The benefits of the AutoFair 2.0 for the individuals/defendants:

- Ensure transparency: The system collects all data based on individual demographics and official information so that defendants have a clear view of AutoFair 2.0 judgments about criminality based on transparency information, therefore, it supports building trust between individuals and the legal system.
- Guarantee fairness: Based on AutoFair 2.0's objective analysis, judges have more data
 to deliver fair judgments to defendants. This is important in reducing the impact of
 human biases on legal decisions, especially for minorities and disadvantaged groups in
 society.

Question 2:

In the investigative journalism report, AutoFair 2.0 is suspected of causing concerns in making predictions that are discriminatory to minority groups as well as prediction inaccuracies that could negatively affect the judge's rulings. There would be several measures that support eJudge in solving these concerns:

• Standardize the rule in data collection: Algorithms in AutoFair 2.0's system need to be clearly defined with special emphasis on data transparency. Legal experts can easily control the data to assess transparency as well as limit human bias in predicting the likelihood of an individual's crime.

- Have regular meetings with legal professionals: Legal experts will assist the company in developing and implementing crime prediction and legal decision-making. This can help AutoFair 2.0 ensure that the fair system is consistent with the applicable legal system.
- Verify information sources regularly: Before making predictions, eJudge should create a process to test the data again to make sure the data is sourced from the correct official sources.

Question 3:

When applying big data analytics to eJudge individual crime prediction, several ethical considerations such as privacy, transparency, and fairness should be kept in mind.

- **Privacy**: the company should pay attention to the rights and protection of personal data when collecting information
- **Transparency:** The use and analysis of data should be transparent. Because when AutoFair 2.0 makes predictive conclusions about criminality, it can affect the rights and obligations of both the court and the accused.
- **Fairness**: Analytical information needs to be objective to minimize biases and not lead to discrimination against any group in society.

Ethical considerations may vary depending on the legal and regulatory nature of each country and region using AutoFair 2.0 to support the legal system. In addition, the culture of each region also influences the ethical considerations in using AutoFair 2.0 big data.

Question 4:

AutoFair 2.0 is a decision support system by applying big data analytics to forecast the defendant's likelihood.

- **Volume:** There is a huge volume of data in the legal ecosystem, including criminal records, and demographic reports, legal documents. Auto Fairs takes advantage of big data analytics to collect more data from official resources.
- **Veracity:** To ensure authenticity in the legal system, AutoFair 2.0 is a solution that automates data collection to limit human errors such as manual data entry and storage.
- **Velocity:** Data is updated continuously from official resources in AutoFair 2.0. The old information system recorded data in traditional ways taking a long time to check a defendant's background. AutoFair 2.0 takes advantage of big data analytics to store and

- make arrangements for related data. That makes it easier for legal professionals to analyse important and relevant information.
- Variety: In the legal industry, there are different types of data including both structured and unstructured data. AutoFair 2.0 collected and stored structured data such as police or court reports and unstructured data such as witness statements.

Part 2:

Digital Transformations for Traditional Organizations: Rethinking Change Management with a case study on Domino's

ABSTRACT

The purpose of this study is to evaluate a digital transformation model that traditional organisations may use and investigate the opportunities and challenges that managers face in implementing digital transformation. Through the analysis of Domino's, this work demonstrates how traditional companies can apply digital transformations to obtain competitive advantages and create more value. Furthermore, conventional businesses may comprehend the problems of the digital transition and get ready before implementing the business strategy in the current digital era. In order to adopt digital transformation, traditional organizations might face challenges, therefore, focusing on change management could be a key solution that can support them to ensure consistency between the digital transformation formulation and strategy implementation. The proposed solutions based on analysis from a real case of Domino's digital transformation and evaluation of existing studies may be useful for conventional businesses to reach out for changes to be suitable for the current market. By using the secondary research method, the research can support traditional firms apply the digital transformation model to get more benefits. The findings of the paper have meaningful implications for managers of traditional organizations to change business operations which is suitable for the current trending development.

Keywords: Digital Transformation, Change Management, Traditional Organizations

1. INTRODUCTION AND BACKGROUND

1.1. Introduction

In recent years, digital transformation has been one of the most important manifestations of a number of social changes. Therefore, researchers and experts have carefully studied this phenomenon to identify the necessary factors that can support traditional firms to have more advantages (Vial, 2019). Businesses have undertaken a digital transformation in order to improve customer experience, minimise expenses, and raise production. As for traditional businesses, digital transformation creates challenges for management. Therefore, change management is the priority of these kinds of companies in the digital transformation process. Hence the question arising is how can traditional companies adopt digital transformation and how important is change management during this period?

This paper is organized into four main sections. Section 1 introduces the problems and involved background concepts. Section 2 explains how Domino's overcame challenges to adopt digital transformation. Before offering findings and viewpoints in section 4, proposed solutions are offered in section 3.

1.2. Background

From a managerial perspective toward Industry 4.0, digital transformation models may be evaluated as change initiatives (Bellatunuon et al. 2021). Furthermore, Loonam et. al (2018) mentioned that change management might be judged essential to guarantee effective digital transformation for conventional organizations. This part will examine the pertinent literature review on digital transformation and change management.

1.2.1. Digital transformation

Digital transformation is the priority process that every traditional organization should go through to be suitable with the trending current economic development. Firms are trending from product-centric business to digital transformation services that make changes in process structure, functions and business models to provide better services and improve customer experience (Vial, 2019; Kolagar et al. 2021). From the existing business perspective, digital

transformation deals with technological changes and affects all business segments (Kraus et al., 2021). According to Pereira et al. (2022), digital transformation affects business strategies are tied to improvements in aspects of the organisation including agility, resilience, and especially new competitiveness. Furthermore, the adoption of digital technologies (IoT, big data and cloud computing) is at the core of digital transformation and supports a more sustainable circular economy. Digital transformation is a process that benefits businesses by improving operational processes and meeting customer expectations, however, it takes a lot of work to apply with success, especially for traditional businesses.

1.2.2. Change management

As for traditional companies, change management should be the first action that the company is concerned about if they want to start the digital transformation. Bellantuono et al. (2021) reported that in order to assess digital transformation models, change management might be used as the priority solution. Indeed, change management refers to a group of techniques, procedures, guiding concepts, and practises used to control the digital transformation from a current state to a desired future state (Kamdjoug, 2023). Therefore, there is no doubt of any traditional organisation's importance in managing the changes needed to achieve digitalization.

2. A CASE ILLUSTRATION

Domino's is an established food company that was founded in 1960 and started franchising in 1967. The 2008 financial crisis made Domino's worst times and near bankruptcy. Realising the benefits of digital transformation, Domino took a venture capital investment when it released its mobile app in 2009. And quickly proving effective according to Blumberg's report (2017), Domino's stock price beat well-known tech giants like Amazon, Facebook and Google in the decade from 2010 to 2017. Therefore, Domino's is selected real case study in my study to analyze digital transformation in traditional companies.

2.1. The previous challenges of Domino's

Along with the economic downturn of 2008, Domino's faced challenges when sales plummeted and customer complaints about pizza quality and delivery experience. The impact of these challenges directly affects Domino's revenue and reputation. Customers were not satisfied with Domino's service and quality while competitors took advantage of customer concerns about Domino's to offer better choices to customers. Domino realized that conventional marketing strategies are not enough to create a competitive advantage for Domino at that time. Therefore, the company has focused on developing comprehensive digital transformation strategies to improve the customer experience and operational efficiency.

2.2. Domino's digital transformation solutions

Domino's focuses on comprehensive digital transformation to change the way a traditional company operates to meet the needs of customers and especially to increase competitive advantage in today's digital era. The company has applied digital transformation through technological innovation, product innovation and organizational transformation.

Technological innovation: Due to new digital revolutions, customer behaviour is always evolving (Loonam et al. 2018). Therefore, as a traditional business, Domino's invests the highest budget to research, develop and update its applications and services to meet the client's demand. Around 60% of Domino's revenue frond digital channels. Furthermore, the company spend more money on hiring top-notch employees who are more open to using new technologies such as statisticians and business analysts who work in a digital environment.

Product innovation: Domino's invests heavily in digital growth such as innovation in ordering and delivery. Domino's introduced "Pizza Tracker" technology in 2008 so that consumers could track the whole progress of their pizza orders. The company has set itself apart from the competition by using voice commands and one-touch technology allowing customers to order pizza easily and conveniently. Domino's advances in digital outreach can drive seamless customer experiences that lead to long-term customer retention (Kraus et al. 2021).

Organizational transformation: Pereira et al. (2022) demonstrated that digital transformation would support companies reduce labour costs by replacing human labour with robots or virtual assistants and lowering the information supply chain by using AI and blockchain. According to Domino's report, about half of its staff work in software and analytics in its headquarters. In addition, increasing investment in IT along with collected customer data by using machine learning and AI-driven information might allow Domino's to track consumption trends as well as predict future customer needs (Pereira et al. 2022). Domino's senior leaders have worked on new digital transformation efforts and developed an IT suite that can connect with the sales and marketing departments to provide data-driven forecasting of customer trends.

3. PROPOSED SOLUTIONS

3.1. Evaluation of Domino's digital transformation actions

Domino's is a pioneering fast-food chain that used digital technologies to transform the experience of process service for customers. Kamdjoug (2023) demonstrated that with the support of information technology solutions, employees can better meet their organizational requirements contributing to the overall performance of the entire organization. Domino's digital transformation strategy is highly appreciated for its emphasis on technology development and convenience with its digital platform and checkout ordering progress that has improved the consumer experience as well as standardised the ordering process (Matzler 2018).

However, focusing only on technology and convenience without updating the business model to adapt to digital transformation can pose risks for businesses especially for traditional businesses (Kraus et al. 2022). In this period, change management is one of the important factors, because leaders may need to change their thinking and perception to develop and incorporate technology into existing businesses (Bullantuono et al. 2021). Vial (2019) reviewed that changes in the structure and culture of a traditional organization lead to employees taking on traditional roles and having to change or risk being fired. Indeed, about half of its staff work in software and analytics in its headquarters. Therefore, there is a quite large disturbance in the structure of the long-standing business model. In order to have a successful digital transformation process, Domino's focused on rethinking change management. Bellantuono et al. (2021) stated that each transformation endeavour might involve a specific set of actions, which change management models can explain and investigate. As technology continues to advance rapidly, competitors may catch up or even surpass Domino's in digital services, it is essential to manage change and restructure business models to meet the transformation of digital technology.

3.2. Alternative solutions

From the above evaluations, decision-makers can find alternatives to address the digital transformation challenges faced by traditional businesses as well as Domino's. Alternative solutions or pathways will help the company balance the development of technology with factors that ensure a sustainable business model. According to Loonam et al. (2018), to gain digital transformation, companies need to implement four main actions including customer-

centric, technology-centric, organisation-centric and strategic-centric aspects. Decision-makers may focus on leveraging technology to increase customer experience and business performance while keeping up to date with organizational changes and business model changes for the company in the digital era (Pereira et al. 2022). In the study about Domino's, senior leaders should consider the socioeconomic implications of developing digital transformation. The change management model should focus on developing the structure and policy within the business model (Bellantouno et al. 2021). Close links between employees and technology to replace traditional ways of working by applying artificial intelligence and big data analytics. In addition, harnessing the power of data and automation may make it easier for senior leaders to control the company's operations and help the company reduce operating costs and improve overall efficiency. Therefore, the company will have an effective operational process based on data-driven decisions.

4. CONCLUSION

In conclusion, the study of Domino's digital transformation answers how traditional companies can transform to gain a competitive advantage in today's digital age. By applying automation and technology to the launch of the "Pizza Tracker" online ordering and tracking system, Domino's successfully solved the problem of declining sales and negative customer feedback about ordering and delivery. Domino's has been very adept in early digital transformation and has focused its development on customer-centric and technology-centric aspects. For digital transformation in traditional companies, change management is one of the critical factors determining whether the process is successful or not. Decision-makers should prioritize research into the change management paradigm while undertaking digital transformation. Although in terms of technology, Domino's has done quite well when it comes to gaining a competitive advantage in the early stages of the digital era. But due to the constant development of technology, the needs of customers are changing daily, so the company needs to invest more in technology and have convenient alternatives to the social and economic fluctuation. Alternatives for decision-makers include balancing the use of technology and people. In particular, decision-makers who need to change apply a change management model appropriate to each period. Looking to the future, digital transformation in traditional organizations is predicted to grow and become essential. Adaptability, customer-centric innovation, and technology are essential for all companies in the digital age. The task of senior leaders is to regularly evaluate updates and not be afraid to change the way the business is managed as well as take advantage of the development of technology such as big data analysis to have an objective view of business as well as market trends. For traditional businesses, the importance of digital transformation should come first, and adopting a change management model can help a company build an optimal strategy.

REFERENCES

- Bellantuono, N., Nuzzi, A., Pontrandolfo, P., Scozzi, B. (2021). Digital Transformation Models for the I4.0 Transition: Lessons from the Change Management Literature. *Sustainability*, 13. https://doi.org/10.3390/su132312941
- Blumberg, Y. (2017, December 21). How this familiar stock outperformed Apple, Amazon, Google and Netflix over the past 7 years. *CNBC*. https://www.cnbc.com/2017/12/21/this-pizza-stock-has-outperformed-apple-amazon-google-and-netflix.html
- Kamdjoug, J. R. K. (2023). Change management and digital transformation project success in SMEs located in the Democratic Republic of the Congo. *Journal of Enterprise Information Management*. https://doi.org/10.1108/JEIM-09-2022-0340
- Kolagar, M., Reim, W., Parida, V., Sjodin, D. (2021). Digital servitization strategies for SME internationalization: The interplay between digital service maturity and ecosystem involvement. *Journal of Service Management*, 33(1), 143-162.

https://doi.org/10.1108/JOSM-11-2020-0428

- Kraus, S., Jones, P., Kailer, N., Weinmann, A., Banegas, N. C., Tierno, N. R. (2021). Digital transformation: An overview of the current state of the art of research. *SAGE Open*. https://doi.org/10.1177/21582440211047576
- Loonam, J., Eaves, S., Kumar, V., Parry, G. (2018). Towards digital transformation: Lessons learned from traditional organizations. *Strategic Change*, 27(2), 101-109.

https://doi.org/10.1002/jsc.2185

- Matzler, K., Eichen, S. F. v. d., Anschober, M., Kohler, T. (2018). The crusade of digital disruption. *Journal of Business Strategy*, 39(6), 13-20. https://doi.org/10.1108/JBS-12-2017-0187
- Pereira, C. S., Durao, N., Moreira, F., Veloso, B. (2022). The importance of digital transformation in international business. *Sustainability*, 14(2).

https://doi.org/10.3390/su14020834

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *Journal of Strategic Information Systems*, 28(2), 118-144.

 $\underline{https:/\!/doi.org/10.1016/j.jsis.2019.01.003}$