The Digital Transformation Path and Challenges of McDonald's China

Baochuan Ma

Durham University Business School, Durham University, Durham, DH1 3LE, United Kingdom
baochuan.ma@durham.ac.uk

Abstract. In today's digital wave, many traditional chain enterprises are starting digital transformation due to technological advances and new consumer habits. This has led to new pressures of brand competition. As the most valuable fast food brand in the world today, McDonald's naturally got involved in this transformation early on. Therefore, this paper aims to analyse McDonald's transformation achievements and flaws in one country and provide follow-up plans. McDonald's competitors can also refer to these plans. More specifically, this paper uses SWOT to analyse McDonald's China's current internal and external transformation. Internally, McDonald's has a strong brand foundation, ample funding and years of collected data. These are considered the foundation of its digital transformation. But its internal problems are inadequate services and a high proportion of temporary workers. In terms of external opportunities, China's digital economy accounts for 39.8% of GDP. The country also has a highly educated population and a huge food delivery market. However, the threat lies in the digitisation of competitors and the improvement of China's data-related laws. Ultimately, McDonald's can maintain its advantage through the three-stage plan outlined in this article while reducing the issues mentioned above. This article believes that this will help improve its competitiveness and customer satisfaction.

Keywords: Digital Transformation, McDonald's, China's fast food market.

1 Introduction

Today, the world is undergoing a wave of digitalisation and technological advancement. As some scholars have pointed out, many countries are paying attention to the productivity gains that digital transformation brings [1]. Unfortunately, the benefits of digitisation clearly vary from country to country [2]. The same applies to companies in different industries. This is because digital transformation has given small businesses the opportunity to rise. And it is almost becoming a prerequisite for internationalisation [3].

Catering is an industry with low barriers to entry but is highly valued by people. When the catering industry and digitalisation combine, service automation and customer interaction both benefit catering economic activities [4]. A typical example of the combination of these two is the emergence of the food delivery industry. So joining

A. J. Moshayedi (ed.), *Proceedings of the 2025 International Conference on Hybrid Commerce, Human Capital, and Economic Dynamics (ICHCH 2025)*, Advances in Economics, Business and Management Research 374,
https://doi.org/10.2991/978-2-38476-585-0_13

this industry is a way for small roadside restaurants to quickly go digital. The significance of this article lies in analysing McDonald's current digital progress, pointing out its shortcomings and future risks. Then, provide digital recommendations based on the actual situation of McDonald's China. In fact, McDonald's has been a pioneer in digital transformation. So this article may also be helpful to other companies in the same industry. In terms of research methods, this paper will employ literature review and case study methods.

2 Background Information on McDonald's

As early as 1954, Mr. Ray Kroc opened a small McDonald's restaurant in the United States [5]. In 1990, McDonald's opened its first restaurant in China, and business was booming. At that time, it was the largest McDonald's restaurant globally, with approximately 700 seats [6]. Today, McDonald's has over 36,000 restaurants worldwide [5]. This reflects its leading position among fast food brands. More specifically, McDonald's main menu items include various burgers, fried chicken, and beverages. These dishes are served quickly, so customers eat quickly too. This reflects McDonald's realistic approach, as it strives to meet the needs of people living fast-paced lives.

3 McDonald's Current Progress in Digital Transformation

McDonald's first began promoting digital transformation in 2016 [7]. The company first set its sights on establishing its own official website and mobile app. And it quickly succeeded. This has made it possible to order McDonald's online. Following this, they bought the digital technology company Dynamic Yield. Because online food ordering programmes need algorithms for matching, such as menu recommendations [8]. In addition, McDonald's China's transformation is more in line with the local market. For instance, some of its restaurants no longer have staff at the order counters, only a QR code or ordering machine. And the staff are only responsible for cooking the food. This new dine-in ordering model is more efficient and makes it easier for customers to order and pay. However, face-to-face ordering is still common in McDonald's restaurants in some small Chinese cities. Therefore, McDonald's digitalisation is far from complete.

4 SWOT Analysis of McDonald's Digital Transformation

According to relevant research, SWOT framework is a very practical strategic decision-making tool for companies [9]. So, this section will help find the opportunities and challenges facing McDonald's in its transformation.

4.1 Strengths

In such a large-scale transformation, McDonald's itself has some advantages. As mentioned earlier, McDonald's restaurants are located all over the world. This is largely due

to its standardised service processes and clear market objectives [10]. So its brand advantage is obvious. This means that McDonald's has sufficient funds to sustain its transformation. At the same time, customers may also be more supportive. In addition, over the years, McDonald's have accumulated comprehensive data on its operations and consumer preferences. And these data are clearly the foundation of digitisation.

4.2 Weaknesses

Human services and self-service are two models of modern services [11]. This means that one is a real person service, while the other is a device system. The new ordering model mentioned earlier for McDonald's China is clearly self-service. In fact, this kind of digitisation does not take into account each group. For example, the elderly may question this. Because they may not be familiar with digital platforms for ordering food. In addition, McDonald's China's digital transformation will also be influenced by the composition of its workforce. Because McDonald's restaurants in China generally employ a large number of temporary workers. For example, student workers and retired workers. These two groups may account for 70% of a restaurant's workforce [12]. So this inevitably leads to high employee turnover, which affects employee training in the context of digital transformation.

4.3 Opportunities

From an external policy perspective, the Chinese government has been strongly promoting the development of the national digital economy. Since 2012, China's digital economy has reached 39.8% of GDP [13]. At the same time, its digital infrastructure development plan was already established as early as 2013 [14]. So this is already a highly digitalised country. And this environment is favourable for any company seeking to transform digitally. More specifically, over 70% of Chinese consumers prefer to use mobile payment apps to pay rather than cash or bank cards [15]. This is very helpful for businesses that have their own online platforms. In addition, China's online food delivery market is also lucrative. In fact, China is not only the world's largest online food delivery market, but also the market where restaurant businesses and food delivery platforms collaborate most extensively [16].

4.4 Threats

Even in the digital age, competition among fast food brands in China has not diminished. This has a lot to do with the COVID-19 pandemic. During the pandemic in 2021, Pizza Hut and KFC pushed for digitalisation in China in order to survive. This resulted in a 60% increase in online delivery sales for both brands that year [17]. Their passive strategy actually ended up stealing some of McDonald's online market share. In fact, there are also many local brands in China's fast food industry participating in digital competition. For example, the Chinese fast food brand 'Laoxiangji' has also started using AI to monitor the quantity of dishes.

In addition to competition issues, data storage and security are also major challenges in the digital age. Sometimes, people may think that China does not place much importance on data security protection and personal data privacy. This is actually beneficial for the digital transformation of enterprises, as it makes it easier for them to directly utilise the collected data. However, the actual situation is much more complicated. In the summer of 2021, China implemented new data security and personal information protection laws. This includes mentioning the importance of data security to national security [18]. So this has certainly pushed up the cost of digitalisation for foreign companies. For example, they need to spend more money to store data locally.

5 The Path to Digital Transformation

5.1 Strategic Direction

From the analysis above, it is clear that McDonald's digital transformation is already underway. Therefore, it is necessary to clarify the strategic intent. McDonald's can divide its future transformation into early, mid-term and long-term phases. Table 1 below makes this very clear.

Table 1. Strategic directions for McDonald's China's digital transformation in the future

Short-term	**Establish a transformation department to complete the digitisation of all offline restaurants.**
Medium-term	Optimise existing digital platforms and promote new technologies.
Long-term	Focus on employees and customers.

As mentioned earlier, McDonald's has not been able to implement its online ordering service in all cities in China. This may be linked to regional development imbalances. Related study shows that there are a large number of McDonald's outlets in the southeastern part of China and very few in the western part [19]. So in order to balance the resources required for the transition as much as possible, McDonald's China needs to establish a new department. It can simply be called the 'Digital Transformation Department'. This will make the transition more efficient. At the same time, the department can also coordinate with the government to avoid legal disputes over data.

5.2 Digital Technology

From a technical standpoint, McDonald's China currently has in-store machines, an app, and data. This has already formed a digital closed loop. Therefore, McDonald's can easily train its own AI to be linked to its restaurants. Through the construction of this smart restaurant, customers will also be able to order food faster. For example, they can use voice commands to tell McDonald's AI what they want to eat. In fact, the role of such chat AI goes far beyond helping early adopters redefine costs and profits. It can also help restaurants find new customers through data analysis, thereby increasing the likelihood of online orders [20]. However, Chinese consumers often use third-party

platforms as their primary gateway for ordering takeout. This has resulted in the McDonald's China mobile app having very few users in the market. So this app needs to be changed. Currently, consumers can only scan QR codes to order food offline using WeChat, not the McDonald's app. The best solution is to give the app the ability to scan QR codes. This will ensure that mobile phones, third-party platforms, and self-service ordering machines are all connected to McDonald's kitchen. Finally, the mobile app needs to add a large font switching feature to assist older consumers.

5.3 Restaurant Operations and Customer Experience

Currently, McDonald's China needs to make changes to its workforce. Because it was mentioned earlier, many temporary workers may not be able to quickly familiarise themselves with digitalised restaurants. The first solution that seems effective is to slowly recruit more long-term employees to replace them. However, this is not realistic in the short term and is not conducive to transformation. And these new employees will increase the additional cost burden on the restaurant. So, McDonald's China can establish clear sales commission rates under a digitalised system. This is because it is cost-effective and promotes employee learning and digitalisation, which in turn boosts sales.

In addition to employees, customers are also witnesses to McDonald's China's digital transformation. And McDonald's needs to take better care of customers who are unfamiliar with or unwilling to order online. Among them, the elderly require special care. Because they have a lower smartphone ownership rate than other groups [21]. Moreover, some elderly people do not believe that they need to carry their phone with them every time they go out. At this point, a McDonald's employee needs to stand next to the self-service ordering machine and ask them. As a result, this semi-self-service ordering is still indispensable even in the digital age.

6 Conclusion

This paper uses the SWOT framework to provide recommendations for McDonald's China's ongoing digital transformation. Overall, McDonald's transformation is at a stage where it is easy for competitors to catch up. This is because fast food brands have limited options for digital transformation in the early stages. For example, they do not need a high level of digitalisation to have an online ordering platform to compete with McDonald's. So the recommendations in this article are strategically offensive. The core idea is to utilise data advantages to train AI, and then integrate it into mobile apps and the equipment of every McDonald's restaurant in China. This kind of true digital restaurant is something other brands cannot achieve. They lack both the equipment and the data. So this is one of the limitations of this article, that small fast food brands simply cannot implement these suggestions.

If the recommendations are followed completely, this article predicts that McDonald's China's brand effect will be stronger. The increased customer satisfaction brought about by AI restaurants and artificial service will help McDonald's capture more market share in China. Its total revenue will also increase. Finally, the limitations of this paper

lie in the fact that the study does not apply to McDonald's in all countries. So, it is recommended that scholars conduct further analysis of McDonald's digitalisation from a global perspective.

References

1. Ebert, C., Duarte, C.H.C.: Digital transformation. IEEE Softw. **35**(4), 16–21 (2018)
2. Małkowska, A., Urbaniec, M., Kosała, M.: The impact of digital transformation on European countries: insights from a comparative analysis. Equilibrium. Quarterly Journal of Economics and Economic Policy **16**(2), 325–355 (2021)
3. Pereira, C.S., Durão, N., Moreira, F., Veloso, B.: The importance of digital transformation in international business. Sustainability **14**(2), 834 (2022)
4. Pyanikova, E.A., Kovaleva, A.E., Galchenko, S.I., Kobchenko, S.N., Ovchinnikova, E.V., Pikalova, M.B.: Digitalization of restaurant business as a factor of competitiveness increase. In: Russian Conference on Digital Economy and Knowledge Management (RuDEcK 2020), pp. 546–550. Atlantis Press (2020)
5. McDonald's: About us: McDonald's story, facts & information, https://www.mcdonalds.com/us/en-us/about-us.html, last accessed 2025/07/21
6. Xu, Y.: Research on McDonald's business strategy in China. Advances in Economics, Management and Political Sciences **32**, 106–111 (2023)
7. Tian, H.: Explore the marketing strategy of McDonald's after digital transformation. In: 2022 2nd International Conference on Economic Development and Business Culture (ICEDBC 2022), pp. 447–451. Atlantis Press (2022)
8. Omol, E.J.: Organizational digital transformation: from evolution to future trends. Digital Transformation and Society **3**(3), 240–256 (2024)
9. Sammut-Bonnici, T., Galea, D.: SWOT analysis. Wiley Encyclopedia of Management **12**(1) (2015)
10. Ceil, C.: Service quality and branding strategies at McDonald's. Available at SSRN 2984100 (2017)
11. Lee, H.J., Yang, K.: Interpersonal service quality, self-service technology (SST) service quality, and retail patronage. Journal of Retailing and Consumer Services **20**(1), 51–57 (2013)
12. Wei, W.: Never cross the red line? analysing employment relations practices and the behaviour of front-line managers in Chinese McDonald's stores. Industrial Relations Journal **55**(2), 100–118 (2024)
13. Liang, L., Li, Y.: How does government support promote digital economy development in China? the mediating role of regional innovation ecosystem resilience. Technological Forecasting and Social Change **188**, 122328 (2023)
14. Ma, R., Lin, B.: Digital infrastructure construction drives green economic transformation: evidence from Chinese cities. Humanities and Social Sciences Communications **10**(1), 1–10 (2023)
15. Chen, Y.J.: Digital platforms for ride-hailing and food-delivery services in China. IT for Change Policy Overview (2019), https://projects.itforchange.net/platformpolitics/wp-content/uploads/2019/06/Digital-Platforms-for-Ride-Hailing-and-Food-Delivery-Services-in-China.pdf
16. Li, J., Bonn, M.A., Wang, J., Cho, M.: Food delivery application user segmentation in the mobile marketing world in China. Journal of the Asia Pacific Economy **28**(2), 484–501 (2023)

17. Geng, X., Chin, A., Chen, A.: How the fast food industry can protect its lunch (and eat it too), https://ink.library.smu.edu.sg/ami/192, last accessed 2025/07/21
18. Creemers, R.: China's emerging data protection framework. Journal of Cybersecurity **8**(1), tyac011 (2022)
19. Tang, S., Wang, L., Shi, Y., Li, A., Lin, K., Xiang, C., Tang, H.: McDonald's China adopts operations research for network design. INFORMS Journal on Applied Analytics **55**(1), 36–47 (2025)
20. Gupta, M., Dheekonda, V., Masum, M.: Genie: enhancing information management in the restaurant industry through AI-powered chatbot. International Journal of Information Management Data Insights **4**(2), 100255 (2024)
21. Morrison, B.A., Nicholson, J., Wood, B., Briggs, P.: Life after lockdown: the experiences of older adults in a contactless digital world. Frontiers in Psychology **13**, 1100521 (2023)