

Influence of McDonald's Digitalized Services on Consumer Satisfaction in the Mumbai Suburban

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Abstract: Digital transformation incorporates digital technology into various aspects of a business to provide new value to customers and spur the company's growth. It changes the way firms operate. Through digital transformation, businesses enhance their efficiency, coordination, flexibility, and response time. McDonald's is the world's largest fast-food restaurant chain. It has embraced digital transformation to enhance sales through customer satisfaction. The study gauged the influence of digitalized services offered by McDonald's on consumers' satisfaction with Mumbai Suburban. The study was descriptive and inferential. Snowball sampling was adopted. Data were gathered through secondary and primary sources. Primary data were collected through a structured questionnaire. The study found that digital convenience, digital experience, digital reliability and services positively influenced consumer satisfaction. However, the level of influence varied. Digital convenience had a strong influence, digital experience had a moderate influence, and digital reliability and services had a weak positive influence on consumer satisfaction.

Keywords: Digitalized services, consumer satisfaction, McDonald

INTRODUCTION

Digital transformation is the process through which companies integrate technologies throughout their businesses to initiate fundamental change [Accenture, 2025]. The digital transformation of fast-food restaurants has helped them create customer value by gathering and analyzing online reviews of customers. Digital capabilities such as sensing, seizing, transforming, and refining are crucial for creating customer value. Fast-food restaurants have adopted digital transformation capabilities like artificial intelligence, value innovation, building several digital platforms, and gathering and analyzing customers' online reviews [Daradkeh, 2023].

McDonald's Corp (McDonald's) is a food service retail chain operator operating in North America, South America, Europe, Asia, and Oceanic and Africa. McDonald is adapting to technological advancements to meet evolving customer needs. McDonald uses artificial intelligence (AI), machine learning and analytics to modernize its operations, enhance product offerings, and improve customer service through digital solutions. It strives to enhance the in-restaurant experience, personalise the customer experience, mobile order and pay solutions and centralised social media strategy.

Objective of the study

The current study examines how McDonald's digital services influence consumer satisfaction in Mumbai's suburban areas by developing a theoretical customer satisfaction model.

LITERATURE REVIEW

Overviews of existing literature on the impact of digitalized services provided by the fast food industry on consumer satisfaction are as follows:

Customer Satisfaction

Customer Satisfaction is a personal experience derived from differences between personal expectations and actual receive [Baker, 2000]. Customer Satisfaction is a customer's summary assessment of their consuming experiences that is linked to results at the firm and customer levels. Customer satisfaction influences the success of the business, as it directly impacts customer loyalty, retention, and overall profitability. Higher levels of customer satisfaction lead to increased customer loyalty and retention rates, thereby enhancing the firm's financial performance [Mittal, 2023].

Kiosks and Satisfaction

Self-service kiosks enhance customer experience. Customer satisfaction was directly influenced by ordering speed, convenience, order accuracy and menu design towards self-service kiosks for quick-service restaurants [Shahril, 2021].

User-friendly Interface of Mobile App and Satisfaction

E-service quality (ease, use of the website, effectiveness, and speed of access) enhanced customer satisfaction and loyalty [Jabbour, 2025]. Application design and user-friendly interface of food delivery apps influenced customer satisfaction and customer loyalty. They not only

attracted more users but also led to an increase in the frequency of app usage [Titus, 2024]. App usability and ease of navigation of online food delivery apps satisfy customers [Saranya, 2024].

Personalization of Menu and Satisfaction

AI-driven personalized recommendations enhance customer experiences leading to increased efficiency and satisfaction. These systems leverage data analysis to reduce errors, speed up processes, and cater to individual consumer preferences, ultimately transforming the fast-food industry [Gonzalez, 2024].

Safety of personal information and Satisfaction

Safety of personal information with the app increased consumer satisfaction [Ghosh, 2020]

Multiple Payment Options and Satisfaction

Digital payments, including UPI, wallets, and cards, make transactions cashless and seamless. COVID-19 impacted the positive adoption of digital payment systems [Chennappa, 2023]. Customers want simple and easy-to-use payment solutions. Short transaction time and secure payment systems satisfy customers [Ghosh, 2020]. Hassle-free payment with options like Gpay, Phonepay, e-wallets, debit and credit cards, and cash on delivery influences consumers' perceptions [Pakkala, 2022]. The multiple payment options fulfill the varied preferences and lifestyles of their customers. UPI was used to order online food owing to convenience, cash backs, a payment gateway that is secured, referrals, and a system of multiple payment options such as QR code, collection request, VPA, and discounts offered by payment service providers [Sowndarya, 2024]. The perceived utility of mobile payment systems influences customers' adoption of mobile payment (digital payment) methods in fast-food establishments [Nurul, 2022]. Restaurants that accepted payment through mobile technology were preferred by the consumers. Mobile payment technology enhanced customer satisfaction and loyalty in restaurants [Furtado, 2020]. AI-driven payment systems boosted customer experiences by enabling streamlining transactions that led to increased efficacy and satisfaction [Gonzalez, 2024].

Digital coupons, Loyalty Programs and satisfaction

Customers are satisfied with the discounts received through online purchases [Ghosh, 2020]. Rewarding mobile app users through loyalty points increases customer engagement [Son, 2023]. Customer satisfaction, perceived value and commitment determined customer loyalty for discount and promotion applications.

Digital Menu Boards, Wi-Fi Hotspots and Satisfaction

Tablet menus did not strongly influence consumer

satisfaction or decision-making [Moody, 2016]. Wi-Fi service is valued by customers. Wi-Fi services positively impacted customer satisfaction and loyalty [Mohamed, 2019].

Quick delivery and satisfaction

The customer wishes for intuitive ordering flows [Saranya, 2024; Pakkala, 2022].

Online Order Accuracy and satisfaction

Consumer satisfaction is influenced by the fulfillment of delivery as per online orders [Ghosh, 2020; Saranya, 2024].

Order Tracking and satisfaction

Real time order tracking enhances consumers' satisfaction [Ghosh, 2020; Saranya, 2024] and loyalty [Udayakumar]

Digital customer service and satisfaction

Responsive and helpful digitalized customer service helps in resolving customers' problems and enhances customer satisfaction [Saranya, 2024]. Swiftiness in handling grievances, refunds, and convenience of using a grievance redressal system influenced customer satisfaction also the availability of online service 24 x 7 positively influences customer satisfaction [Ghosh, 2020].

RESEARCH GAP

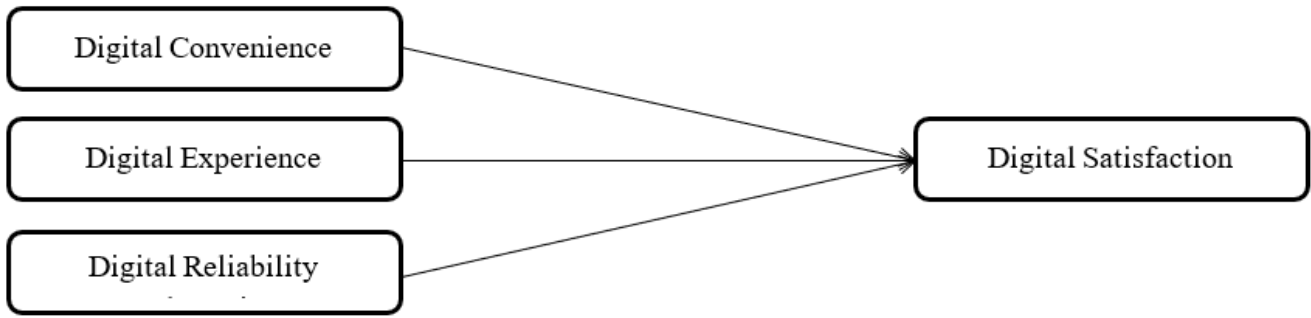
The review of the literature illustrates that there exists an extensive body of research that exists on the determinants of customer satisfaction in the fast food industry. However, the influences of digitalized services of McDonald are not studied extensively in Mumbai Suburban.

Theoretical Background and Hypotheses Development

McDonald has a user-friendly interface of self-service kiosks and mobile apps to streamline the ordering process and reduce the wait times of customers. Mobile apps of McDonald and third-party are AI-powered and have recommendation systems that suggest menu items to customers based on order history or preferences. The digital apps of McDonald provide multiple payment options, digital coupons under loyalty programs, a real-time tracking facility, and prompt customer service. The store provides free Wi-Fi and has a digital board to showcase menu items and promotions. It provides assurances of the safety of personal details.

Based on the literature review and theoretical background, the study proposes a theoretical framework where three independent factors (digital Convenience, digital experience, digital reliability and service) influence the independent factor (consumer satisfaction) (Figure 1).

Figure 1: Theoretical Framework



The following hypotheses have been proposed for the study:

1. H1: Digital convenience has a positive influence on customer satisfaction.
2. H2: Digital experience has a positive influence on customer satisfaction.
3. H3: Digital reliability and service has a positive influence on customer satisfaction.

Based on the literature review and theoretical background, the study develops the following construct.

Table 1: Measurement of variables

Variables		Measurement items
Digital Convenience	1	Self-service kiosks and mobile apps reduce wait times and simplify the ordering process.
	2	The mobile app offers personalised menu recommendations based on order history making ordering easier.
	3	Multiple payment options reduce payment hassle.
Digital Experience	1	The mobile app and self-service kiosk have an intuitive and user-friendly interface.
	2	Digital coupons and loyalty program benefits enhance my experience.
	3	In-store digital board showcasing menu items and promotions and free Wi-Fi enhances the digital experience.
Digital Reliability and Services	1	Personal details are safe when using the app.
	2	Online orders are delivered swiftly and accurately, with a real-time tracking facility.
	3	Digital customer service is prompt, responsive and supportive.
Digital Satisfaction	T1	The quality of McDonald's digital services is excellent.
	T2	The digital services meet my expectations.
	T3	I am overall satisfied with McDonald's digital services.

METHODOLOGY

The target populations of the study were the customers of McDonald who had utilised the digitalized services of McDonald in Mumbai Suburban, Maharashtra, India. The study used a descriptive and inferential research approach. Under the survey technique, the snowball sampling technique was applied. Primary and secondary data were gathered. Primary data was collected through a structured questionnaire from 270 customers. A sample size table was used to determine the sample size. Questions on independent and dependent variables were designed on a five-point Likert scale ranging from “strongly disagree”, “disagree”, “neutral”, “agree” and “strongly agree”. Data analyses were carried out using Structural equation modelling under Jamovi software.

RESULTS AND DISCUSSIONS

Results of Confirmatory Factor Analysis (Measurement Model)

A confirmatory factor analysis was carried out to test the measurement model.

Goodness of fit of the model

Table 2: Confirmatory Factor Analysis (Measurement Model)

Fit Indices	Model Values	Recommended Threshold
χ^2	80.3	--
Df	48	--
χ^2 ratio (χ^2 ratio = χ^2 / DF)	1.673	< 2
P value	0.002	Significant p values is expected
TLI	0.966	>0.9
CFI	0.975	>0.9
RMSEA	0.050	<0.08

Table 2 indicates the goodness of fit of the measurement model. The results indicated a reasonable model fit with a chi-square value of 80.3 and a degree of freedom 48. The proposed model is accepted as various fit indices fulfill their threshold value.

Validity and reliability of model

The validity and reliability of model constructs were evaluated.

Table 3: Results of the Measurement Model

Construct	Variables	Measurement Items	Standardized Estimates	p-value	R ²	Cronbach's Alpha
Construct 1	Digital Convenience	1	0.757	<.001	0.519133	0.763825
		2	0.693	<.001		
		3	0.710	<.001		
Construct 2	Digital Experience	1	0.674	<.001	0.501069	0.750521
		2	0.741	<.001		
		3	0.707	<.001		
Construct 3	Digital Reliability and Services	1	0.792	<.001	0.627025	0.834351
		2	0.756	<.001		
		3	0.826	<.001		
Construct 4	Digital Satisfaction	T1	0.800	<.001	0.665715	0.856544
		T2	0.803	<.001		
		T3	0.844	<.001		

Internal consistency among constructs was examined through composite reliability (CR). Internal consistency was observed among constructs as composite reliability values for all constructs were greater than the critical value of 0.7.

The convergent validity was assessed through average variance (AVE). Convergent validity was observed as the AVE value for all constructs was more than the suggested 0.5.

Table 4: Result of Discriminant Validity (Fornell-Larcker Criterion)

Construct	√AVE	Digital Convenience	Digital Experience	Digital Reliability	Digital Satisfaction
Digital Convenience	0.721	0.721	0.318	0.381	0.630
Digital Experience	0.708	0.318	0.708	0.324	0.228
Digital Reliability	0.793	0.381	0.324	0.793	0.143
Digital Satisfaction	0.815	0.630	0.228	0.143	0.815

Note: The diagonal elements (bold) represent the square root of AVE. The values below them are the correlations between constructs.

Table 4 shows the discriminant validity of the construct. The discriminant validity of the construct was tested by comparing the square root of AVE with correlation values with other constructs. According to the Fornell-Larcker Criterion, each diagonal element should be greater than any value in its row/column for the validity of the construct. The square root of AVE for each construct is more than correlations with the remaining constructs, which confirmed discriminant validity.

Results of Structural Equation Model and Hypotheses Testing

Table 5: SEM (Measurement Model)

Fit Indices	Model Values	Recommended Threshold
χ ²	80.3	--
Df	48	--
χ ² ratio (χ ² ratio = χ ² / DF)	1.673	
P value	0.002	Significant p values is expected
AGFI	0.995	>0.8
TLI	0.966	>0.9
CFI	0.975	>0.9
RMSEA	0.050	<0.08

Table 5 indicates the goodness of fit of the structural model. The results showed a satisfactory model fit. The proposed model is accepted as various fit indices fulfill their threshold value.

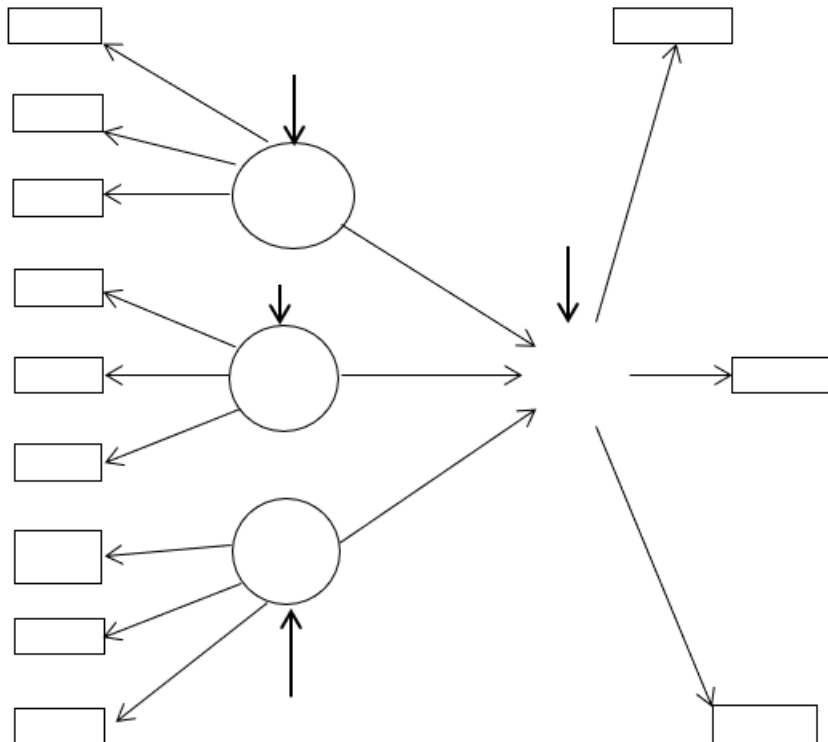
Table 6: Results of Structural Model (Hypotheses Testing)

Hypotheses and Path	Standardized Path Coefficient (β)	t-Statistic	p-value	Results	Inference
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H1: Digital convenience satisfaction	0.619	0.0793	0.630	7.81	< .001	Accepted	Strong
H2: Digital experience satisfaction	0.296	0.0868	0.228	3.41	< .001	Accepted	Moderate
H3: Digital reliability and services satisfaction	0.140	0.0620	0.143	2.25	0.024	Accepted	Weak
S.E. = Standard Error; β = Standardized Estimate							

Table 6 shows detailed results of hypotheses testing. Digital convenience, digital experience, digital reliability and services positively influenced consumer satisfaction. However, the level of influence varied. Digital convenience had a strong influence, digital experience had a moderate influence, and digital reliability and services had a weak positive influence on consumer satisfaction.

Figure 2: Structural Equation Model (SEM)



Δ--- 5.64 – 0.32	DR3					DSAT3 0.29--- 5.79----Δ
Δ--- 5.82 – 0.43	DR2					
Δ--- 5.80 – 0.37	DR1					
Δ--- 6.57 – 0.50	DE3	0.79	Δ		0.84	
Δ--- 6.89 – 0.45	DE2	0.32	Δ	0.14	0.00	DSAT2 0.36--5.60---Δ
Δ--- 6.74 – 0.55	DE1			0.63		0.80
Δ--- 5.20 – 0.52	DC3	0.38	0.32			0.80
Δ--- 5.56 – 0.52	DC2					0.36—5.84----Δ
Δ--- 5.38 – 0.43	DC1	0.76				

MANAGERIAL IMPLICATION

The study suggests that McDonald's should make greater investments in self-service kiosks, app usability, and seamless payment alternatives because digital convenience has the strongest influence on customer satisfaction. McDonald should attempt to improve mobile app efficiency to reduce crashes, loading times, and lag. They should regularly improve the user interface of self-service kiosks and mobile apps to enhance consumers' experience. They should expand loyalty programs and digital coupons to encourage app usage. They should use immersive in-store digital displays such as AR menus and interactive promotions.

LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

The study is limited to McDonald's retail stores in Mumbai Suburban only. A similar study can be carried out in different geographical areas covering other quick-service restaurants.

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