“Delighting customers: Evaluating service quality and customer satisfaction of self-checkout users in sports retail”

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DELIGHTING CUSTOMERS: EVALUATING SERVICE QUALITY AND CUSTOMER SATISFACTION OF SELF-CHECKOUT USERS IN SPORTS RETAIL

Abstract

Digitalization has transformed dynamics across all fields, and technology has completely changed the customer experience. One prominently utilized technology in offline retail is self-checkout services. The present study intends to investigate the attributes that influence people to use self-checkout services and assess their impact on service quality and customer satisfaction. Drawn from Dabholkar's attribute-based model, the study employs a positivist approach to test the conceptual framework. After the preliminary survey of 330 respondents, it identified ninety-nine consumers who had used the self-service check-out facility. The data collected were analyzed using a multi-variate technique – Partial Least Squares Structural Equation Modeling (PLS-SEM) – owing to the small sample size requirement. All independent variables taken for the study positively affect the service quality. Customer perception of control, ease of use, reliability, enjoyment, speed, adventure, and openness positively affect service quality. It was noted that ease of use, with a variance value of 2.451, and openness to experience, with a variance value of 2.437, show the importance of determining independent variables with service quality. The study findings reported that service quality is primarily influenced by ease of use, enjoyment, and openness to experience. It underlines that some retail customers will likely feel frustrated rather than enjoy the self-service technology, perceiving it as less reliable. The study suggests incorporating openness to experience and adventure shopping in retail outlets that can enhance consumer satisfaction and loyalty. Adopting an immersive and interactive shopping experience will ultimately improve the perception of service quality and customer happiness.

Keywords self-checkout, self-service technology, sports retail, Dabholkar's attribute model, service quality, customer satisfaction

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INTRODUCTION

In modern era, technology is integral to all aspects of human life, including purchase behavior. Retail stores leverage emerging technologies to provide customers with an enhanced shopping experience via efficient digital interactive platforms (Bulmer et al., 2018). Waiting at checkout counters results in fatigue and boredom for the consumers, affecting their satisfaction. One of the recent practices adopted by retailers to enhance customer satisfaction is the introduction of self-checkout facilities, which curtails the average customer wait time. Dabholkar (1996) coined the term "self-service technology" (SST), which refers to technologically-based activities or benefits performed by consumers themselves.

Self-service checkout is a gateway to providing service using technology intervention (Thomas-Francois & Somogyi, 2022). Here, transactions happen more independently and without the involvement

of a service employee. Self-checkout counters enhance the possibility of customers' perception of reduced waiting time by giving them the impression of perceived control over check-out-related activities. Amongst the various types of self-service checkouts, retail checkouts have a high adoption rate due to enhanced efficiency, convenience, and productivity (Jeonet al., 2020). In-store technologies innovated by sports retail stores are gaining customer favor, offering them additional, more accessible, and convenient ways to make purchases (Alexander & Kent, 2021). In sports retail, customers' emotional involvement, sense of community, and unpredictable nature are distinctive. Customer personality traits lean towards embracing challenges and exhibit a pronounced inclination towards inherent novelty seeking (Duarte et al., 2022).

Digitalization is transforming dynamics across all fields. Consequently, retailers must continuously upgrade themselves and incorporate the latest technology (Bulmer et al., 2018). With the advancement of Information and Communication Technologies (ICT), retailers focus on cost-effective alternatives and enhancing the overall customer experience (Grewal et al., 2023). The recent surge in customer interest in sports and physical well-being has significantly impacted sports-related product purchases, leading to the rise of specialty sports stores. Like other retail establishments, sports retail has embraced technology-assisted services (Basu et al., 2022). Several sports retail stores in India have successfully implemented self-checkout technology. The value of global self-checkout industry size is slated to grow at 13.3% CAGR (Compound Annual Growth Rate) from 2021 to 2030 (Grand View Research, 2022). With the increasing use of SST by organizations, encouraging consumers to handle check-out tasks themselves, it is critical to comprehend the probable impact of the quality of this emergent technology on the intention to purchase and satisfaction (Isharyani et al., 2024).

1. LITERATURE REVIEW AND HYPOTHESES

Self-checkout is a significant innovative practice that retailers have adopted to enhance the customer experience. Self-checkouts (SCOs), commonly known as assisted checkouts (ACOs), offer customers a mechanism to complete transactions without the need for traditional staffed checkout assistance (Penttinen & Rinta-Kahila, 2021). While using self-checkouts, the customers must scan the barcodes of the goods they intend to purchase, eliminating the need for one-to-one staff assistance. Usually, at least one staff member oversees the entire activity and may extend assistance while transaction processing if required. The industry is expected to witnessthe installation of 1.2 million SCO systems by 2025 (Duartee et al., 2022).

Previous researchers have emphasized the significance of demographics and personality in sports retailing (Makgosa & Sangodoyin, 2018). Extant studies have indicated a higher interest among men in retail technology than women (Dean, 2008; Lee et al., 2010). Additionally, Millennials have demonstrated a greater interest in various retail technologies (Collier & Kimes, 2013). Research has also noted that higher-income individuals are more inclined toward exploring new technologies (Wong & Sohal, 2022). Moreover, shoppers confident in their abilities are more likely to embrace SST (Lee et al., 2017; Chen, 2018).

In-store ambiance, waiting time, and many customers significantly influence the utilization of self-checkout services (Dabholkar & Bagozzi, 2002). The presence of a substantial number of customers, particularly on weekdays when many are in a hurry, also plays a role in influencing customers to opt for self-checkout services (Elms et al., 2016). Customers' interests in sports retail have evolved significantly, driven by heightened awareness and consciousness about health. The role of personality, individual interests, and commitment to health motivate customers to seek novel experiences and embrace challenges (Leng & Wee, 2017).

The theoretical framework inspired by Dabholkar's attribute-based model offers a framework for comprehending the prospective service quality in the retail sector. While most studies on retail service quality traditionally employ the unified theory of acceptance and use of technology (UTAUT), tech-

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nology acceptance model (TAM), and diffusion of innovation models, previous research has predominantly centered around the SERVQUAL model. The present study is inspired by Dabholkar's attribute-based model (Dabholkar, 1996), which offers a framework for comprehending the prospective service quality in the retail sector. This model revolves around the retail experience and customers' perceptions of service quality parameters.

Previous work has investigated the SST experience in offline stores, but to the authors' knowledge, none have focused explicitly on SSTs in sports retail contexts. SST's operationalization of service quality is established through frequently cited attributes: control, enjoyment, ease of use, reliability, and speed. Furthermore, an extension of this model includes two additional crucial psychological attributes: adventure shopping and openness to experience. Given this context, it is imperative to investigate service quality perception-related dimensions in organized retail and their implications for customer satisfaction.

As defined by Bateson (1987), the attribute of control refers to the level of authority a consumer experiences over the checkout process. It is anticipated that the level of control a consumer has over the checkout process is directly proportional to SST service quality. Individual personality dimensions shape the consumers' behavior regarding self-checkouts in retail. Customers with high authoritative traits tend to prefer and engage in self-checkout services. Especially in sports retail, the customer's personality is of that kind that they want to have a free and liberal experience within the store and increase in authority because technology is giving a boost and overall gives better control and thus helps in enhancing the service quality of sports retail (Yosida et al., 2017).

The following attributes are enjoyment, fun, and joy derived from self-service technology. Customers are inclined to use technology because it provides an enjoyable experience (Dabholkar, 1996). Individuals who find the enjoyment aspect of the experience thrilling and motivating are more inclined to adopt technology for that specific reason. Customers coming to sports retail love to play with technology and its gaming mindset, which gives them a feeling of fun with the use of technology, and that creates a service quality enhancer while using the self-checkouts at the sports retail counter. The fun of novelty-seeking experiences in using new technology gives them adventure and fun with the touch of novelty. Again, it helps in service quality development in sports retail outlets.

If a technology absorbs too much time and effort from a consumer, it fails to fulfill its primary purpose: simplify consumers' lives (Cui et al., 2022). Ease of use is linked to convenience and significantly influences customers' cognitive aspects. "Perceived ease of use" is defined as "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320) and would reduce social vulnerability, as not using technology sometimes causes stress for customers (Dabholkar, 1996). Those who do not perceive value in terms of performance or effort reduction by using a particular product may lack motivation for using it. The utilitarian function of technology with self-checkouts creates ease of process, less time, less waiting time at the counter, and more flexibility during the overall purchase process, increasing the service quality of sports retail outlets.

Given the compulsory nature of online payments and product scanning in self-service technology, malfunctions may lead to issues such as payment failures, product exclusion from the bill, double scanning, and inconvenience and disutility for consumers. Higher reliability is associated with a lower risk of malfunctioning. "Reliability" implies the level of accuracy and dependability of self-service technology (Hong & Ahn, 2023). The reliability of technology is considered an essential tool for creating trust. Reliability enhances the quality of the service. In retail service, consistency, and trust play critical roles. Consistency is giving uniformity in multiple experiences, consistently delivering the service with the same quality. Similarly, trust in service delivery motivates the adoption of SST.

The context highlights consumer irritation with long queues during bill payment, especially during peak times like weekends and evenings. Anticipating increased consumer satisfaction, self-service technology is expected to save time and enhance time efficiency. In sports retail counters,

customers are looking for more swiftness in service, and speed also drives the quality of service in sports retail. Here, speed is another critical factor, defined as the fastness of technology and its ability to reduce delivery and service time (Fernandes & Pedroso, 2016). As human interaction is unavailable, there are self-service checkouts that save time, and billing happens fast with less hassle. In turn, speed in billing and less waiting time enhance the service experience within sports retail.

In sports retail, just like the interest in sports and adventure, customers are more inclined toward adventure shopping (Liang et al., 2022). Adventure shopping, defined as the act of simulating the mind and experiencing another world during shopping (Arnoldet al., 2003), is particularly significant in sports retail, where consumers are inherently more adventurous. Consumers' inclination and interest in exploring the adventure of self-checkouts are emphasized (Triantafillidou et al., 2017). The thrill, fun, and adventure associated with self-checkout contribute to positive shopping motivation. Recognizing that service quality is co-created by customers, a lack of customer involvement cannot create a suitable dimension of service quality in any service.

Previous research on mobile checkouts has confirmed the importance of openness to experience trying out new features in technology. In sports retail outlets, the novelty of experiencing new technology gives customers a unique experience. "Openness to experience" is a personality trait that reflects the propensity of individuals to be flexible in thought, curious, and pursue activities (Roy & Ramakrishnan, 2024). It deals with something new that you have not tried and also to explore new (Moslehpour et al., 2018; Abbasi et al., 2023). Openness to new experiences directly affects technology usage through utilitarian cognitive motivation.

Against the backdrop of highly competitive markets, service quality significantly influences customer experience and satisfaction (Sivadaset al., 2020). "Service quality" is one of the critical determinants affecting customer satisfaction in technology usage and general services and has been extensively discussed in previous research (Yesitadewi et al., 2024). Although the SERVQUAL model has not been seamlessly adapted for organized retail (Dabholkar et al., 1996), its significance in influencing customer satisfaction cannot be denied, despite mixed evidence about the generalizability it is dimensioned to various service verticals.

Service quality and customer satisfaction are distinct despite being treated as similar concepts. Rendering superior-quality services is recognized to enhance customer satisfaction (Sari et al., 2024). Extant literature strongly supports improved service quality's positive role in enhancing customer satisfaction (Mamakou et al., 2024).

Previous research on self-checkout services has primarily concentrated on grocery, fashion, or hospitality retail contexts (Tsoukatos et al., 2010). These studies have investigated consumer attitudes and motivations regarding adopting self-checkout services in offline retail (Fernandes & Pedroso, 2022; Lin et al., 2011). Additional research has explored challenges associated with adopting self-service checkouts. Personal and demographic factors and their impact on service quality and customer satisfaction have also been examined in prior studies (Halvorsrud et al., 2016). Though adoption and intention-related studies in the context of self-service technology are frequent, scant research has been done in the area of impact assessment toward satisfaction and retention of customers (Leng et al., 2017). With an increasing trend of self-checkout system usage in sports retail outlets (Duarte et al., 2022) and a lack of studies explicitly addressing self-checkout implementation in the Indian context, it becomes crucial to identify the factors that drive consumers to use self-checkout services and their impact on service quality and customer satisfaction.

Hence, the following hypotheses were formulated.

H1: Customer perception of control significantly and positively influences service quality among sports retail.

H2: Customer perception of enjoyment positively and significantly influences service quality in sports retail.

H3: Customer perception of ease of use exerts a positive and significant influence on service quality of SST.

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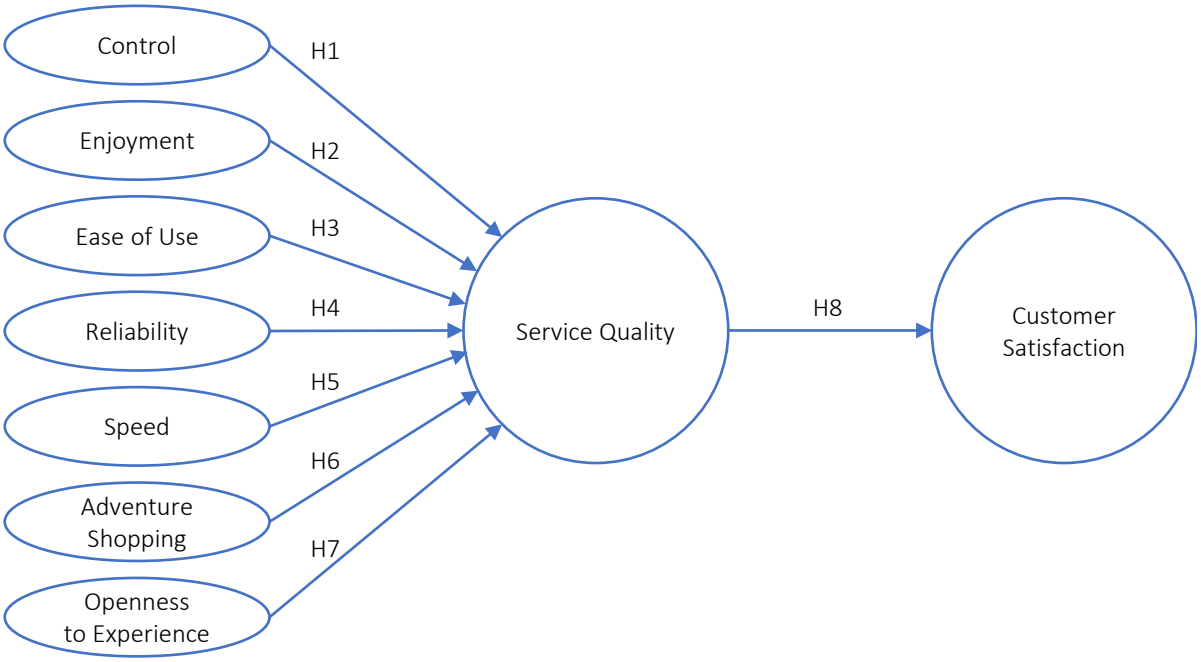

Figure 1. Conceptual model

H4: Customer perception of reliability significantly and positively impacts service quality in sports retail.

H5: Customer perception of speed positively impacts service quality in sports retail.

H6: Customer perception of adventure shopping positively affects service quality in sports retail.

H7: Customer perception of openness to experience positively impacts service quality in sports retail.

H8: Service quality has a significant, positive effect on customer satisfaction.

2. METHODOLOGY

The study analyzed customer satisfaction associated with SST in sports retail stores in Pune. A convenient sampling method targeted individuals who have shopped from retail stores. Three hundred thirty people were surveyed through a well-structured questionnaire, and incomplete responses were eliminated. After the data screening process, 99 data points (see Table 1) were used for the final analysis. Sports shoppers use two types of self-service technology (SST): one involving customers scanning their items themselves and checking out, and the other using RFID boxes. Out of the 99 respondents, 42 shoppers used 'scan with mobile and pay,' 19 shoppers used scanning counters, and 38 people used both types of SST.

Table 1. Respondents' profile

Variable	Item	Frequency	Percentage
Gender	Male	62	62.63
	Female	37	37.37
Age	18-28	94	94.95
	29-38	5	5.05
Self-checkout usage	Scan with mobile and pay	42	42.42
	Scan using counter	19	19.19
	Both	38	38.38

Assessing customer satisfaction with SST in sports retail stores involved exploring various formative and reflective constructs to measure latent variables. The interlinkages between these variables were effectively assessed using the multivariate technique PLS-SEM, which is distribution-assumption-free and capable of handling complex models.

3. RESULTS

The multivariate data analysis was performed in two stages. It involved assessing the measurement model, evaluating the structural model and employing the measurement and structural equation models.

3.1. Measurement model

Measurement model results are summarized in Table 2, which details the parameter estimations for outer loadings.

The outer loadings in Table 2 indicate how well the indicator represents the underlying construct. The threshold levels were set, and items with loadings below the specified threshold were removed from the model. Items EOU2, OTE2, and SP3 were excluded from the model due to their low factor loadings, ensuring that only items with substantial relationships with their respective constructs were retained for further analysis.

Indicatoreliability and internal consistency are measured using conservative measures of Cronbach's alpha and composite reliability. The construct reliability is established as all the values meet the acceptance criteria 0.7 (see Table 2). Convergent validity is assessed using average variance extracted (AVE), which implies how much the variance is extracted by latent construct based on its indicators. Since all AVE values align with the acceptance criteria 0.5, convergent validity stands established.

Discriminant validity measures the distinctiveness of the constructs measured using the HTMT ratio (Henseler et al., 2017). It is below the prescribed limit of 0.90 in almost all cases except the correlation between AS and E, OTE, and SQ (Hair et al., 2013). However, Henseler et al. (2017) recommended a threshold limit 1. Hence, the discriminant validity condition in the measurement model is fulfilled (see Table 3).

Table 2. Assessment of measurement model

Construct	Item	Outer loading	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average Variance Extracted (AVE)
Adventure shopping	AS1	0.901	0.772	0.772	0.898	0.814
	AS2	0.904				
Control	C1	0.8	0.858	0.869	0.903	0.701
	C2	0.812				
	C3	0.854				
	C4	0.88				
Customer satisfaction	CS1	0.856	0.903	0.905	0.932	0.775
	CS2	0.86				
	CS3	0.911				
	CS4	0.893				
Enjoyment	E1	0.853	0.865	0.888	0.907	0.711
	E2	0.924				
	E3	0.762				
	E4	0.824				
Ease of use	EOU1	0.838	0.877	0.878	0.925	0.804
	EOU2	0.926				
	EOU3	0.922				
Openness to experience	OTE1	0.844	0.811	0.813	0.888	0.725
	OTE2	0.848				
	OTE3	0.862				
Reliability	R1	0.781	0.795	0.806	0.866	0.618
	R2	0.849				
	R3	0.715				
	R4	0.795				
Speed	SP1	0.913	0.814	0.863	0.888	0.728
	SP2	0.742				
	SP3	0.894				
Service quality	SQ1	0.906	0.881	0.882	0.918	0.737
	SQ2	0.859				
	SQ3	0.824				
	SQ4	0.843				

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Table 3. Heterotrait-Monotrait (HTMT)

Construct	AS	C	CS	E	EOU	OTE	R	SP	SQ
AS	–	–	–	–	–	–	–	–	–
C	0.769	–	–	–	–	–	–	–	–
CS	0.846	0.875	–	–	–	–	–	–	–
E	0.900	0.771	0.897	–	–	–	–	–	–
EOU	0.759	0.881	0.874	0.750	–	–	–	–	–
OTE	0.839	0.875	0.870	0.860	0.879	–	–	–	–
R	0.776	0.738	0.818	0.787	0.783	0.821	–	–	–
SP	0.675	0.745	0.782	0.727	0.713	0.738	0.577	–	–
SQ	0.755	0.806	0.887	0.75	0.835	0.921	0.719	0.792	-

These findings collectively validate the measurement model, providing a solid foundation for subsequent structural equation modeling and lending credibility to the constructs utilized in the study.

3.2. Structural model

The measurement model assessment was followed by examining a structural model that connects the relationships between the latent variables.

Table 4. Collinearity statistics

Dimension correlations	VIF
AS → E	1.000
C → OTE	1.000
E → CS	2.195
EOU → SQ	2.451
OTE → SQ	2.437
R → CS	1.962
SP → SQ	1.771
SQ → CS	1.970

While evaluating the structural model, collinearity diagnostics were conducted to understand the problem of collinearity using "Variance Inflation Factor (VIF)" values. This model's VIF values are between 1.000 and 2.451. Since all the VIF values were below the threshold value of 3, the structural model is free from collinearity issues. The analysis reinforces the model's structural integrity, allowing for reliable path coefficient estimation and ensuring the conceptual framework's validity in explaining the relationships between behavioral constructs.

Table 5. R^2 and Q^2 values

Construct	R-squared	Q-squared
CS	0.775	0.567
SQ	0.707	0.498

Furthermore, the model's explanatory power was evaluated based on R^2, whileQ2 values indicated the model's predictive power (see Table 5). Values of R^2 greater than 0.75 imply substantial; more than 0.50 represents moderate, while between 0.25 and 0.50 is interpreted as weak explanatory power of the model. The R^2 values of CS, E, and SQ are above 0.75, signifying substantial explanatory power. OTE has an R^2 value of 0.543, signifying moderate explanatory power. Q^2 helps identify the predictive relevance of endogenous variables. All R^2 and Q^2 values from Table 5 indicate that predictive capability and relevance are successfully established.

The model fit is assessed using SRMR, NFI, and RMS_theta values. SRMR was introduced by Henseler et al. (2017). SRMR value below the limit of 0.08 implies goodness of fit of the model. Further, NFI, a goodness-of-fit indicator, lies between 0 and 1 (see Table 6).

Table 6. Model fit

Criteria	Saturated model
SRMR	0.074
NFI	0.696

As per Table 6, the SRMR value (0.074) is less than the prescribed limit of 0.08, implying that the model is bad only to 7.4 %.

Hypotheses *H1-H7* investigate the relationships between dimensions, such as SP influencing SQ or AS influencing E. The dimension correlations indicate the strength and direction of association between the variables, and the findings of the analysis provide useful information. For example, *H1* suggests a positive relationship between SP and SQ. Dimension correlation is 0.279, indicating a

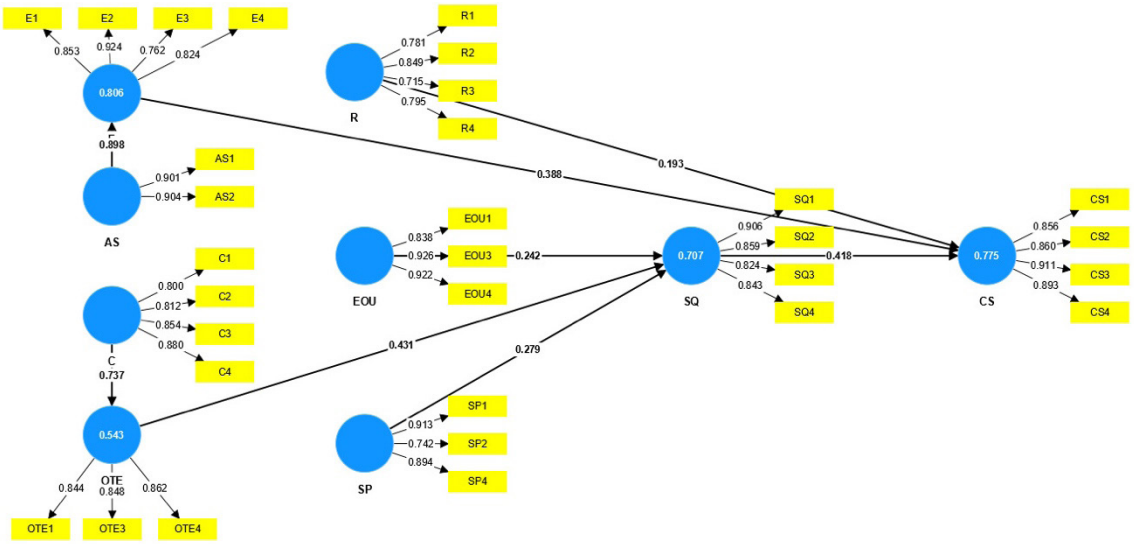

Figure 2. Structural model Assessment-Output derived from Smart PLS-4 software

Table 7. Path analysis

Sr. No.	Hypothesis	Original sample (O)	Standard deviation	t-statistics	p-values	Result
H1	SP → SQ	0.279	0.096	2.917	0.004	Accepted
H2	EOU → SQ	0.242	0.082	2.961	0.003	Accepted
H3	R → CS	0.193	0.078	2.479	0.013	Accepted
H4	SQ → CS	0.418	0.076	5.503	0.000	Accepted
H5	AS → E	0.898	0.018	49.344	0.000	Accepted
H6	E → CS	0.388	0.088	4.389	0.000	Accepted
H7	C → OTE	0.737	0.072	10.238	0.000	Accepted
H8	OTE → SQ	0.431	0.089	4.861	0.000	Accepted

moderately positive relationship. The significance of this relationship is confirmed by the t-statistics of 2.917 and the p-values of 0.004, leading to the acceptance of *H1*. Similarly, with a dimension correlation of 0.898, *H5* proposes a significant correlation between AS and E. This hypothesis is strongly supported by the high t-statistics of 49.344 and the p-values of 0.000, emphasizing the strong relationship between autonomy support and efficiency.

All hypotheses are accepted if the evaluation criteria (t-statistics > 1.96 or p <0.05) are met (see Table 7). As shown in Figure 2, these findings collectively contribute to the credibility of the empirical model. The inner model calculates p-values and t-values meticulously, confirming the dependability of the proposed relationships. The empirical evidence supports the structural model's validity by emphasizing the importance of the identified behavioral constructs and their interconnected pathways.

All the path relations shown in Figure 2 are significant, implying that all predictors have a positive and significant effect on both outcome variables.

4. DISCUSSION

In the study, the highly cited dimensions of SST were rigorously evaluated – speed, ease of use, control, reliability, and enjoyment – through measurement and structural models. The research conducted among users of self-service technology at sports retail indicates that enjoyability and reliability do not significantly influence consumer satisfaction. However, psychological attributes like adventure shopping and openness to experience strongly predicted service quality and customer satisfaction. Consistent with Dabholkar's attribute model, control, speed, and ease of use were significant and crucial predictors in the model. These attributes also significantly impacted consumer satisfaction (Dabholkar, 1996).

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The previous research by Nusrat and Huang (2024) confirmed the role and impact of ease of use on service quality and loyalty of customers in sports retail. Customer motivation has been studied earlier on their motion factors like hedonic, playfulness, utilitarian, and functional value, enhancing the user's sports retail experience (Bonfanti et al.,2023). Customers' experience with self-service technologies has been studied multiple times in retail with their experience (Durate et al., 2022). Previous studies have worked on effectiveness efficacy of the retail outlet due to self-service technologies (Rinta-Kahila et al., 2021)

Retail stores enhance customer experiences by focusing on variables like enjoyability and reliability (Lee et al., 2017). Insights from these findings can guide software and operations teams involved in designing self-service technology devices. To improve the self-checkout experience, stores can work on making it more enjoyable. Reliability can be gained through repeated use and positive customer experiences, necessitating ongoing monitoring of customer experiences over time. Notably, the positive impact of adventure shopping and openness to experience on consumers' attitudes toward SST in retail is evident in the test results. The approach is expected to enhance customer satisfaction and increase the company's percentage of repeat customers. Companies can further develop and upgrade their self-service technology devices to boost customer satisfaction, benefiting retail store owners. By stimulating a feeling of exploration and discovery, retailers may enhance consumer involvement and satisfaction levels, potentially leading to more significant sales and customer loyalty.

The study expands the scope by considering additional factors such as usage frequency and customer characteristics – identifying age-related differences, where younger customers believe they have better control over technology. Besides, frequent users find it easy to use and enjoyable. These contribute valuable insights for service industry players and highlight the effectiveness of tailoring self-service options to different customer segments' diverse preferences and behaviors.

The study's context, an unexplored territory in the Indian market, can be enriched by uncovering unknown factors influencing consumer behavior in self-checkouts. A qualitative inquiry in this regard is likely to unveil context-specific variables. Further discussion is needed to explore the antecedents for variables such as reliability and enjoyability and understand the contributing factors. Studies may provide insights into emergent technologies to automate aspects of the self-checkout process, potentially reducing costs. Further studies could investigate integrating mobile technologies with self-checkout systems, such as mobile payment options or dedicated apps. Assessing the impact on transaction speed, user satisfaction, and overall efficiency could provide valuable insights for retailers.

The study's findings reinforce established dimensions of self-checkout quality and offer specific insights into the sports retail context, demonstrating the applicability of these dimensions in a distinct sports retail setting. The dimensions identified in our study carry practical implications for service providers in sports retail. Enhancing aspects of SST can lead to enhanced user experience and customer satisfaction. The study makes a significant contribution by addressing literature gaps related to self-checkout technology, particularly in the context of real-life sports retail stores. Analyzing actual usage and outcomes in this specific setting provides nuanced insights into how consumers interact with self-checkout technology in an environment characterized by emotional involvement and a sense of community.

CONCLUSION

The study aimed to investigate the attributes that influence people to use self-checkout services and, ultimately, assess its impact on service quality and customer satisfaction. The empirical relations were tested and validated using PLS-SEM, leading to a good predictive model. The study finding emphasizes that service quality is primarily influenced by ease of use, speed, and control rather than enjoyment and reliability along with the adventure shopping attribute.

The study's uniqueness lies in extending Dabholkar's model to the sports retail segment, resulting in theory generalization. It advanced the understanding of factors motivating consumers' use of SST in sports retail. It offers a perspective on attributes that sports shoppers seek, thereby contributing to the existing literature on offline retail experience with the use of technology, focusing on self-checkouts and their impact on service quality and satisfaction. Additionally, this study expands the scope of Dabholkar's model by introducing additional attributes relevant to SST in retail sports outlets.

The current study is relevant for offline and sports retailers, offering insights into the crucial attributes in maintaining service quality and ultimately impacting customer satisfaction. In the present context, where offline retailers recognize the significance of touchpoints that can provide a competitive edge over online stores, it becomes crucial for them to prioritize attributes influencing service quality. Sports customers, characterized as task-oriented, ego-oriented, and socially approved-oriented, focus on attributes that enhance service quality. For sports shoppers, shopping does not mean to be a recreational activity but an integral part of their sports, and self-checkouts contribute significantly to customer satisfaction in sports retail.

AUTHOR CONTRIBUTIONS

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APPENDIX A

Table A1. Operationalization of the constructs

Variable	Factor	Construct	Statement	Scale
Predictor variable	Control	C1	I control the entire billing process using the technology of assisted checkout rather than a personal encounter.	7-Likert
		C2	Having control over the entire checkout process makes me confident.	
		C3	By controlling the entire checkout process through self-billing, I can bill at my own pace and convenience.	
		C4	Having control over the entire checkout process makes me independent and free.	
Predictor variable	Enjoyment	E1	The Self-billing process is enjoyable.	7-Likert
		E2	It is exciting and fun to go through the self-billing process.	
		E3	I am amused that I can check out my items without human interaction.	
		E4	I feel thrilled to have control over the entire self-billing process.	
Predictor variable	Ease of use	EOU1	Self-billing at Decathlon is easy to use.	7-Likert
		EOU2	My user experience with self-billing at Decathlon was easy to understand.	
		EOU3	I could easily navigate the entire self-billing process at Decathlon.	
Predictor variable	Reliability	R1	The self-billing process at Decathlon is reliable.	7-Likert
		R2	I feel secure when making online payments during the self-billing process.	
		R3	The Decathlon app should not misuse my data during self-billing.	
		R4	It is reliable to shop at Decathlon without a hard copy of the bill (due to self-billing).	
Predictor variable	Speed	SP1	The billing process is speedy because of self-billing (due to skipping long queues).	7-Likert
		SP2	Time taken for unproductive waiting can be utilized for extra shopping.	
		SP3	Time is saved as long queues are skipped.	
Predictor variable	Service quality	SQ1	I find the entire self-billing process at Decathlon Pune Smooth and hassle-free.	7-Likert
		SQ2	I can carry out the entire self-billing process without any interruptions.	
		SQ3	The self-billing technology at Decathlon Pune is very time-saving.	
		SQ4	The self-billing technology used at Decathlon Pune is very Efficient.	
Dependent variable	Consumer satisfaction	CS1	I am satisfied with the entire self-billing process at Decathlon Pune.	7-Likert
		CS2	The self-billing experience is better than the traditional style (Waiting in a queue to have the items checked out by a store operator).	
		CS3	As I am satisfied with the self-billing process, I am willing to do it again.	
		CS4	I would choose self-billing over the traditional checkout whenever I visit Decathlon Pune.	
Predictor variable	Adventure shopping	AS1	To me, shopping is an adventure.	7-Likert
		AS2	I find shopping stimulating.	
Predictor variable	Openness to experience	OTE1	I always prefer novelty and variety while shopping.	7-Likert