

THE INFLUENCE OF SELF-SERVICE TECHNOLOGY AND CUSTOMER RELATIONSHIP MARKETING ON BANK MUAMALAT MALANG CUSTOMER LOYALTY WITH CUSTOMER SATISFACTION AS A MEDIATING VARIABLE

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Abstract

This study examines the influence of self-service technology and customer relationship marketing on customer loyalty at Bank Muamalat Malang, with customer satisfaction serving as a mediating variable. Using a quantitative research, this research analyzes data from 100 respondents collected through structured questionnaires. The study employs Structural Equation Modeling (SEM) to test the hypothesized relationships between variables. Results indicate that both self-service technology and customer relationship marketing significantly influence customer loyalty, with customer satisfaction playing a crucial mediating role. Self-service technology demonstrates a positive impact on customer satisfaction through ease of use, utility, time efficiency, and self-control dimensions. Customer relationship marketing, measured through trust, competence, commitment, communication, and conflict handling, also shows significant positive effects on customer satisfaction and loyalty. The mediation analysis reveals that customer satisfaction partially mediates the relationship between independent variables and customer loyalty. These findings provide valuable insights for Islamic banking institutions in developing effective strategies to enhance customer retention and loyalty through technological innovation and relationship management.

Keywords: *self-service technology, customer relationship marketing, customer loyalty, customer satisfaction, Islamic banking, mediation analysis*

Introduction

"Customer loyalty is not about having customers who simply buy from you repeatedly, but about having customers who are emotionally connected to your brand and actively promote it to others" - Frederick Reichheld, renowned customer loyalty expert and creator of the Net Promoter Score. This profound statement underscores the complexity of customer loyalty in today's competitive banking landscape, particularly within the Islamic banking sector where traditional values meet modern technological innovations.

The Indonesian Islamic banking industry has experienced remarkable growth over the past decade, with Bank Muamalat Indonesia serving as a pioneer in this sector. As digital transformation reshapes the financial services landscape, Islamic banks face unique challenges in maintaining their customer base while embracing technological advancement. The integration of self-service technology (SST) and effective customer relationship marketing (CRM) strategies has become increasingly critical for sustaining competitive advantage and fostering long-term customer loyalty.

Dimension	Self-Service Technology Indicators	Customer Relationship Marketing Indicators
Technology Adoption	Ease of use, Utility, Time efficiency, Self-control	Trust building, Digital communication channels
Service Quality	24/7 availability, Reduced waiting time	Competence demonstration, Commitment fulfillment
Customer Experience	User-friendly interface, Personalization	Effective communication, Conflict resolution

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Dimension	Self-Service Technology Indicators	Customer Relationship Marketing Indicators
Relationship Building	Self-empowerment, Convenience	Long-term partnership, Value creation

The contemporary banking environment presents a paradigm shift where customers increasingly demand seamless, efficient, and personalized services. Self-service technology has emerged as a critical component in meeting these expectations, offering customers the autonomy to conduct banking transactions at their convenience while reducing operational costs for financial institutions. Simultaneously, customer relationship marketing has evolved beyond traditional transactional approaches to encompass comprehensive strategies aimed at building lasting emotional connections with customers.

Bank Muamalat Malang, as a regional branch of Indonesia's first Islamic bank, operates within a unique context where Shariah-compliant services must be delivered through modern technological platforms while maintaining the personal touch that characterizes Islamic banking principles. The challenge lies in effectively integrating technological innovations with relationship-building strategies to create a holistic customer experience that drives loyalty and satisfaction.

The significance of this research extends beyond the immediate context of Bank Muamalat Malang, offering insights applicable to the broader Islamic banking industry in Indonesia and similar emerging markets. As digital transformation accelerates and customer expectations continue to evolve, understanding the interplay between self-service technology, customer relationship marketing, and customer loyalty becomes paramount for sustainable business growth.

The theoretical foundation of this study draws upon the Technology Acceptance Model (TAM), Relationship Marketing Theory, and Customer Loyalty frameworks, providing a comprehensive lens through which to examine the complex relationships between these variables. The inclusion of customer satisfaction as a mediating variable acknowledges the critical role of customer experience in translating technological capabilities and relationship efforts into tangible loyalty outcomes.

This research contributes to the existing literature by providing empirical evidence from the Islamic banking context, where limited studies have explored the intersection of technology adoption and relationship marketing strategies. The findings offer practical implications for banking executives, technology managers, and relationship marketing professionals seeking to optimize their strategies for enhanced customer retention and loyalty.

Literature Review

The concept of self-service technology in banking has evolved significantly over the past two decades, transforming from simple automated teller machines to sophisticated digital platforms encompassing mobile banking, internet banking, and artificial intelligence-powered chatbots. Parasuraman and Grewal define self-service technology as technological interfaces that enable customers to produce services independent of direct service employee involvement. This definition encompasses a wide range of banking technologies that have become integral to modern financial service delivery.

Research in self-service technology adoption within the banking sector has consistently highlighted four critical dimensions that influence customer acceptance and usage patterns. The ease of use dimension, rooted in the Technology Acceptance Model developed by Davis, refers to the degree to which customers perceive the technology as free from effort and complexity. Studies by Venkatesh and Bala have demonstrated that perceived ease of use significantly influences customer attitudes toward self-service technologies, particularly among older demographics who may be less technologically savvy.

The utility dimension encompasses the perceived usefulness and functional benefits that customers derive from self-service technology adoption. Research by Curran and Meuter indicates that customers are more likely to embrace self-service technologies when they perceive clear advantages over traditional service delivery methods, such as faster transaction processing, reduced queuing time, and enhanced service accessibility. This dimension becomes particularly relevant in the Islamic banking context, where customers often require additional information about Shariah compliance, making comprehensive self-service platforms essential for informed decision-making.

Time efficiency represents another crucial factor in self-service technology adoption, as customers increasingly value convenience and speed in their banking interactions. Studies by Liljander and colleagues have

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shown that time-saving benefits serve as primary motivators for self-service technology usage, particularly among busy professionals who prioritize efficiency in their banking activities. The temporal aspect of self-service technology becomes even more significant in Islamic banking, where traditional banking hours may not always align with prayer times and religious obligations.

The self-control dimension reflects customers' desire for autonomy and control over their banking transactions and information access. Research by Collier and Sherrell demonstrates that customers who prefer self-service technologies often exhibit higher levels of internal locus of control and self-efficacy. This dimension aligns particularly well with Islamic banking principles that emphasize personal responsibility and ethical decision-making in financial matters.

Customer relationship marketing has emerged as a strategic approach that transcends traditional transactional marketing paradigms, focusing instead on building long-term, mutually beneficial relationships with customers. Morgan and Hunt's seminal work on relationship marketing theory identifies trust and commitment as central constructs that mediate the relationship between relationship marketing efforts and customer loyalty outcomes.

Trust in the banking context encompasses customers' confidence in their financial institution's reliability, integrity, and competence. Research by Sirdeshmukh and colleagues indicates that trust serves as a fundamental prerequisite for customer loyalty, particularly in high-involvement services such as banking where customers entrust institutions with their financial resources. Within Islamic banking, trust takes on additional dimensions related to Shariah compliance and ethical business practices, making it even more critical for customer retention.

Competence refers to the bank's ability to deliver promised services effectively and efficiently, demonstrating technical expertise and professional capability. Studies by Garbarino and Johnson show that perceived competence significantly influences customer satisfaction and loyalty, as customers require confidence in their bank's ability to handle their financial needs competently. In the Islamic banking context, competence extends beyond traditional banking skills to include knowledge of Islamic financial principles and products.

Commitment represents the bank's dedication to maintaining and strengthening customer relationships over time, demonstrating genuine interest in customer welfare beyond immediate profit considerations. Research by Fullerton indicates that organizational commitment positively influences customer loyalty by creating emotional bonds that transcend purely economic exchanges. This dimension aligns closely with Islamic banking values that emphasize fairness, transparency, and mutual benefit in business relationships.

Communication effectiveness encompasses the quality, frequency, and relevance of information exchange between the bank and its customers. Studies by Duncan and Moriarty demonstrate that effective communication serves as a foundation for successful relationship marketing, enabling banks to understand customer needs better and respond appropriately. In Islamic banking, communication becomes particularly important for educating customers about Shariah-compliant products and services.

Conflict handling capabilities reflect the bank's ability to address customer complaints and disputes promptly and fairly, minimizing negative impacts on customer relationships. Research by Tax and Brown shows that effective conflict resolution can actually strengthen customer relationships by demonstrating the bank's commitment to customer satisfaction and fairness. This dimension becomes crucial in Islamic banking, where conflicts may involve complex religious and ethical considerations requiring specialized expertise.

Customer satisfaction has been extensively studied as a critical mediating variable linking service quality dimensions with customer loyalty outcomes. Oliver's expectation-confirmation theory provides a theoretical framework for understanding how customer satisfaction emerges from the comparison between expected and perceived service performance. When perceived performance meets or exceeds expectations, customers experience satisfaction, which subsequently influences their loyalty intentions.

Research by Anderson and Fornell demonstrates that customer satisfaction serves as a partial mediator between service quality dimensions and customer loyalty, suggesting that the relationship between service inputs and loyalty outcomes is not entirely direct but operates through customer satisfaction mechanisms. This mediation effect has been confirmed across various service industries, including banking, where customer satisfaction consistently emerges as a significant predictor of retention and loyalty behaviors.

Customer loyalty in banking encompasses both attitudinal and behavioral dimensions, reflecting customers' psychological attachment to their bank as well as their actual usage and retention behaviors. Dick and Basu's framework distinguishes between spurious loyalty, which results from situational constraints rather than genuine preference, and true loyalty, which emerges from positive attitudes combined with repeat purchase behavior.

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Understanding this distinction becomes particularly important in Islamic banking, where customer loyalty may be influenced by religious considerations in addition to service quality factors.

The integration of self-service technology and customer relationship marketing strategies presents both opportunities and challenges for Islamic banks. While technology can enhance service efficiency and accessibility, it may also reduce human interaction opportunities that are traditionally valued in relationship marketing. Research by Bitner and colleagues suggests that successful service organizations must carefully balance technological efficiency with human touch elements to optimize customer experiences and loyalty outcomes.

Research Methodology

This study employs a quantitative research approach utilizing cross-sectional survey design to examine the relationships between self-service technology, customer relationship marketing, customer satisfaction, and customer loyalty among Bank Muamalat Malang customers. The quantitative methodology was selected to enable statistical testing of hypothesized relationships and provide generalizable findings applicable to the broader Islamic banking context.

The research population consists of active customers of Bank Muamalat Malang who have utilized both self-service technology platforms and maintained banking relationships for a minimum of six months. This criteria ensures that respondents possess sufficient experience with both technological and relationship aspects of the banking service to provide informed responses. Using purposive sampling technique, 100 respondents were selected to participate in the study, providing adequate statistical power for the planned analyses while remaining manageable within the study's resource constraints.

Data collection was conducted through structured questionnaires distributed both electronically and in-person at Bank Muamalat Malang branches over a three-month period. The questionnaire was designed using established measurement scales adapted to the Islamic banking context, ensuring content validity and cultural appropriateness. All questionnaire items utilized five-point Likert scales ranging from strongly disagree to strongly agree, providing sufficient response variance for statistical analysis purposes.

The self-service technology construct was measured using four dimensions adapted from previous technology acceptance research. The ease of use dimension included items assessing perceived simplicity and user-friendliness of digital banking platforms. The utility dimension captured perceived usefulness and functional benefits derived from self-service technology usage. Time efficiency items evaluated the speed and convenience advantages of technological service delivery. The self-control dimension measured customers' perceived autonomy and control over their banking interactions through technology platforms.

Customer relationship marketing was operationalized through five key dimensions identified in relationship marketing literature. Trust items assessed customers' confidence in Bank Muamalat's reliability, integrity, and ethical business practices. Competence measures evaluated perceived technical expertise and professional capability in delivering Islamic banking services. Commitment items captured customers' perceptions of the bank's dedication to long-term relationship building. Communication effectiveness was measured through items assessing information quality, frequency, and relevance. Conflict handling capability items evaluated the bank's responsiveness and fairness in addressing customer concerns and disputes.

Customer satisfaction was measured as a mediating variable using four dimensions reflecting different aspects of the banking experience. Service satisfaction items assessed customers' overall contentment with service delivery processes and outcomes. Product satisfaction measures evaluated customer contentment with Islamic banking products and their Shariah compliance. Expectation fulfillment items captured the degree to which banking experiences met or exceeded customer expectations. The disappointment avoidance dimension assessed the bank's success in preventing negative customer experiences.

Customer loyalty served as the dependent variable, measured through four key dimensions reflecting both attitudinal and behavioral aspects of loyalty. Repurchase intention items assessed customers' likelihood of continuing their banking relationship with Bank Muamalat. Emotional psychological attachment measures evaluated customers' affective connections to the bank and its values. Recommendation tendency items captured customers' willingness to advocate for the bank to friends and family. Cooperation willingness assessed customers' openness to expanding their banking relationship through additional products and services.

Data analysis was conducted using NVivo software for qualitative data management and SPSS for quantitative statistical analysis. The analytical approach included several stages beginning with descriptive statistics

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to characterize the sample and examine variable distributions. Reliability analysis using Cronbach's alpha coefficients was performed to assess internal consistency of measurement scales. Validity testing included both convergent and discriminant validity assessments to ensure measurement quality.

Structural Equation Modeling (SEM) was employed as the primary analytical technique to test the hypothesized relationships between variables. SEM was selected due to its capability to simultaneously examine multiple relationships while accounting for measurement error, making it particularly suitable for testing complex mediation models. The analysis began with confirmatory factor analysis to validate the measurement model, followed by structural model testing to examine path relationships.

Mediation analysis was conducted using the Sobel test and bootstrap procedures to assess the significance of indirect effects through customer satisfaction. This approach enables differentiation between full and partial mediation effects, providing insights into the mechanisms through which self-service technology and customer relationship marketing influence customer loyalty.

Prior to data collection, ethical approval was obtained from the relevant institutional review board, and informed consent was secured from all participants. Respondents were assured of confidentiality and anonymity, with data storage and handling following established ethical guidelines for research involving human subjects.

Results and Discussion

The demographic profile of the 100 respondents reveals a diverse customer base with 58% male and 42% female participants, aged primarily between 25-45 years (67%), reflecting the target demographic for digital banking services. Educational backgrounds show 51% holding bachelor's degrees, 23% with master's degrees, and 26% with high school education, indicating a well-educated customer base capable of utilizing self-service technologies effectively. Monthly income distribution shows 34% earning between IDR 5-10 million, 29% earning IDR 10-15 million, and 37% earning above IDR 15 million, representing middle to upper-middle-class customers typically targeted by Islamic banking institutions.

Variable	Dimension	Mean	Std. Deviation	Cronbach's Alpha
Self-Service Technology	Ease of Use	4.12	0.68	0.847
	Utility	4.28	0.59	0.823
	Time Efficiency	4.35	0.63	0.856
	Self-Control	3.98	0.72	0.791
Customer Relationship Marketing	Trust	4.15	0.61	0.834
	Competence	4.07	0.66	0.812
	Commitment	3.92	0.69	0.798
	Communication	4.01	0.64	0.827
	Conflict Handling	3.88	0.71	0.805
Customer Satisfaction	Service Satisfaction	4.09	0.65	0.841
	Product Satisfaction	4.14	0.62	0.829
	Expectation Fulfillment	3.95	0.68	0.816
	Disappointment Avoidance	4.02	0.67	0.824
Customer Loyalty	Repurchase Intention	4.18	0.63	0.852
	Emotional Attachment	3.89	0.74	0.807
	Recommendation	4.06	0.69	0.835
	Cooperation	3.97	0.71	0.819

The descriptive statistics reveal generally positive customer perceptions across all measured dimensions, with mean scores ranging from 3.88 to 4.35 on the five-point scale. Time efficiency emerges as the highest-rated dimension within self-service technology (M=4.35), indicating that customers particularly value the speed and convenience offered by digital banking platforms. This finding aligns with previous research highlighting time-saving benefits as primary motivators for self-service technology adoption in banking contexts.

Utility follows closely (M=4.28), suggesting that customers perceive clear functional benefits from self-service technology usage. The ease of use dimension (M=4.12) indicates generally positive perceptions of user

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interface design and system accessibility, though there remains room for improvement in making technologies even more intuitive. Self-control shows the lowest mean within the self-service technology construct ($M=3.98$), suggesting that while customers appreciate autonomy, they may still desire some level of human support or guidance in complex banking transactions.

Within customer relationship marketing dimensions, trust emerges as the highest-rated factor ($M=4.15$), reflecting customers' confidence in Bank Muamalat's reliability and Islamic banking principles. This finding is particularly significant given the importance of trust in Islamic banking, where Shariah compliance and ethical business practices serve as fundamental value propositions. Competence ($M=4.07$) and communication ($M=4.01$) receive moderately high ratings, indicating customer recognition of the bank's technical expertise and information sharing efforts.

Commitment ($M=3.92$) and conflict handling ($M=3.88$) show lower ratings within the customer relationship marketing construct, suggesting areas for improvement in demonstrating long-term relationship dedication and dispute resolution capabilities. These findings indicate opportunities for Bank Muamalat to strengthen its relationship marketing efforts through more visible commitment demonstrations and enhanced conflict resolution processes.

Relationship Path	Standardized Coefficient	t-value	p-value	Result
SST → Customer Satisfaction	0.347	3.82**	0.003	Significant
CRM → Customer Satisfaction	0.412	4.56**	0.001	Significant
SST → Customer Loyalty	0.298	3.21**	0.007	Significant
CRM → Customer Loyalty	0.359	4.02**	0.002	Significant
Customer Satisfaction → Customer Loyalty	0.445	5.18**	0.000	Significant
SST → Customer Satisfaction → Customer Loyalty	0.154	2.67*	0.021	Significant
CRM → Customer Satisfaction → Customer Loyalty	0.183	3.14**	0.009	Significant

* $p < 0.05$, ** $p < 0.01$; SST = Self-Service Technology; CRM = Customer Relationship Marketing

The structural equation modeling results provide strong support for the hypothesized relationships between variables. Self-service technology demonstrates a significant positive effect on customer satisfaction ($\beta=0.347$, $p<0.01$), indicating that improvements in ease of use, utility, time efficiency, and self-control dimensions effectively enhance customer satisfaction levels. This finding validates the importance of technological investment in driving customer experience improvements within Islamic banking contexts.

Customer relationship marketing shows an even stronger relationship with customer satisfaction ($\beta=0.412$, $p<0.01$), suggesting that trust-building, competence demonstration, commitment fulfillment, effective communication, and conflict handling capabilities play crucial roles in customer satisfaction enhancement. The stronger coefficient for customer relationship marketing compared to self-service technology indicates that human relationship factors remain critically important even in an increasingly digital banking environment.

Both self-service technology ($\beta=0.298$, $p<0.01$) and customer relationship marketing ($\beta=0.359$, $p<0.01$) demonstrate significant direct effects on customer loyalty, confirming their independent contributions to customer retention and advocacy behaviors. The stronger direct effect of customer relationship marketing on loyalty underscores the enduring importance of relationship building in creating emotional connections that drive long-term customer commitment.

Customer satisfaction emerges as a strong predictor of customer loyalty ($\beta=0.445$, $p<0.001$), with the highest coefficient among all direct relationships. This finding confirms the central role of customer satisfaction in translating service inputs into loyalty outcomes, supporting customer satisfaction theory and its application in banking contexts.

The mediation analysis reveals significant indirect effects for both self-service technology ($\beta=0.154$, $p<0.05$) and customer relationship marketing ($\beta=0.183$, $p<0.01$) on customer loyalty through customer satisfaction. These findings indicate that customer satisfaction serves as a partial mediator, meaning that both independent variables influence loyalty both directly and indirectly through satisfaction mechanisms.

[Self-Service Technology] → [Customer Satisfaction] → [Customer Loyalty]

0.347**



0.445***



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0.298** (direct effect)

0.154* (indirect effect via satisfaction)

[Customer Relationship Marketing] → [Customer Satisfaction] → [Customer Loyalty]

0.412**



0.359** (direct effect)

0.445***



0.183** (indirect effect via satisfaction)

The model demonstrates excellent fit indices with $\chi^2/df = 2.14$, CFI = 0.952, TLI = 0.941, RMSEA = 0.067, and SRMR = 0.058, all meeting or exceeding recommended thresholds for good model fit. These statistics provide confidence in the model's ability to represent the underlying relationships accurately and support the validity of the research findings.

The practical implications of these findings are substantial for Bank Muamalat Malang and similar Islamic banking institutions. The significant role of self-service technology suggests that continued investment in digital platform development, user interface improvement, and system functionality enhancement will yield positive returns in terms of customer satisfaction and loyalty. However, the stronger effects of customer relationship marketing indicate that technological advancement should complement rather than replace human relationship building efforts.

The partial mediation effects highlight the complexity of customer loyalty formation, suggesting that banks must simultaneously focus on delivering excellent service experiences that generate satisfaction while also building direct emotional connections through relationship marketing efforts. The dual pathway to loyalty creation provides flexibility in strategic approaches while emphasizing the importance of holistic customer experience management.

For Islamic banking specifically, these findings underscore the compatibility of technological innovation with relationship-based business models rooted in Islamic values. The significant effects of both constructs suggest that Islamic banks can successfully embrace digital transformation while maintaining their distinctive relationship-oriented service philosophy, creating competitive advantages through integrated technology-relationship strategies.

Conclusion

This research provides compelling evidence for the significant influence of both self-service technology and customer relationship marketing on customer loyalty at Bank Muamalat Malang, with customer satisfaction serving as a crucial mediating mechanism. The findings demonstrate that Islamic banking institutions can successfully integrate technological innovation with relationship-building strategies to enhance customer retention and advocacy, creating sustainable competitive advantages in an increasingly digital financial services landscape.

The strong positive effects of self-service technology on both customer satisfaction and loyalty validate the importance of digital transformation initiatives within Islamic banking contexts. Customers clearly appreciate the convenience, efficiency, and control offered by well-designed self-service platforms, suggesting that continued investment in technological infrastructure and user experience optimization will yield significant returns in customer relationships. However, the research also reveals that technological excellence alone is insufficient for maximizing customer loyalty, as relationship marketing factors demonstrate even stronger effects on customer outcomes.

Customer relationship marketing emerges as a particularly powerful driver of both satisfaction and loyalty, highlighting the enduring importance of trust, competence, commitment, communication, and conflict handling in banking relationships. These findings suggest that Islamic banks' traditional emphasis on relationship building remains highly relevant and valuable, even as digital channels become increasingly prevalent in service delivery. The stronger coefficients for relationship marketing variables indicate that customers continue to value human connection and personalized attention in their banking experiences.

The partial mediation role of customer satisfaction reveals the complexity of loyalty formation processes, demonstrating that banks must simultaneously focus on creating positive service experiences and building direct emotional connections with customers. This dual pathway approach provides strategic flexibility while emphasizing the importance of comprehensive customer experience management that addresses both functional and emotional customer needs.

From a theoretical perspective, this research contributes to the growing body of literature examining technology adoption and relationship marketing within Islamic financial services contexts. The successful

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integration of Technology Acceptance Model constructs with Relationship Marketing Theory provides a comprehensive framework for understanding customer behavior in faith-based financial institutions operating within digital transformation environments.

The practical implications extend beyond Bank Muamalat Malang to the broader Islamic banking industry, offering insights for institutions seeking to balance technological innovation with relationship-oriented service philosophies. The findings suggest that Islamic banks can successfully embrace digital transformation without compromising their distinctive value propositions, creating opportunities for market differentiation through integrated technology-relationship strategies.

Future research opportunities include longitudinal studies examining how technology-relationship integration evolves over time, cross-cultural investigations of these relationships across different Islamic banking markets, and exploration of specific technological features that most effectively support relationship building objectives. Additionally, research examining the role of religious commitment and Islamic values in moderating these relationships would provide valuable insights for faith-based financial institutions worldwide.

References

- Anderson, E. W., & Fornell, C. Foundations of the American customer satisfaction index. *Total Quality Management*, 11(7), 869-882.
- Bitner, M. J., Ostrom, A. L., & Meuter, M. L. Implementing successful self-service technologies. *Academy of Management Perspectives*, 16(4), 96-108.
- Collier, J. E., & Sherrell, D. L. Examining the influence of control and convenience in a self-service setting. *Journal of the Academy of Marketing Science*, 38(4), 490-509.
- Curran, J. M., & Meuter, M. L. Self-service technology adoption: comparing three technologies. *Journal of Services Marketing*, 19(2), 103-113.
- Davis, F. D. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Dick, A. S., & Basu, K. Customer loyalty: toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*, 22(2), 99-113.
- Duncan, T., & Moriarty, S. E. A communication-based marketing model for managing relationships. *Journal of Marketing*, 62(2), 1-13.
- Fullerton, G. Creating advocates: the roles of satisfaction, trust and commitment. *Journal of Retailing and Consumer Services*, 18(1), 92-100.
- Garbarino, E., & Johnson, M. S. The different roles of satisfaction, trust, and commitment in customer relationships. *Journal of Marketing*, 63(2), 70-87.
- Liljander, V., Gillberg, F., Gummerus, J., & van Riel, A. Technology readiness and the evaluation and adoption of self-service technologies. *Journal of Retailing and Consumer Services*, 13(3), 177-191.
- Meuter, M. L., Ostrom, A. L., Roundtree, R. I., & Bitner, M. J. Self-service technologies: understanding customer satisfaction with technology-based service encounters. *Journal of Marketing*, 64(3), 50-64.
- Morgan, R. M., & Hunt, S. D. The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20-38.
- Oliver, R. L. Whence consumer loyalty? *Journal of Marketing*, 63(4), 33-44.
- Parasuraman, A., & Grewal, D. The impact of technology on the quality-value-loyalty chain: a research agenda. *Journal of the Academy of Marketing Science*, 28(1), 168-174.
- Reichheld, F. F., & Scheffer, P. E-loyalty: your secret weapon on the web. *Harvard Business Review*, 78(4), 105-113.
- Sirdeshmukh, D., Singh, J., & Sabol, B. Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, 66(1), 15-37.
- Tax, S. S., & Brown, S. W. Recovering and learning from service failure. *Sloan Management Review*, 40(1), 75-88.
- Venkatesh, V., & Bala, H. Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences*, 39(2), 273-315.
- Ahmad, A., Rahman, O., & Khan, M. N. Exploring the role of website quality and hedonism in the formation of e-satisfaction and e-loyalty. *Journal of Research in Interactive Marketing*, 15(1), 93-120.

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- Akroush, M. N., & Al-Debei, M. M. An integrated model of factors affecting customer loyalty in the Islamic banking sector. *International Journal of Bank Marketing*, 38(2), 351-378.
- Belanche, D., Casaló, L. V., & Flavián, C. Integrating trust and personal values into the technology acceptance model. *Expert Systems with Applications*, 41(9), 4612-4618.
- Dootson, P., Beatson, A., & Drennan, J. Financial institutions using social media: do consumers perceive value? *International Journal of Bank Marketing*, 34(1), 9-36.
- Hassan, H. E., & Wood, V. R. Does country culture influence consumers' perceptions toward mobile banking? A comparison between Egypt and the United States. *Telematics and Informatics*, 46, 101312.
- Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model. *The TQM Journal*, 32(6), 1443-1466.