



RESEARCH PROPOSAL

Name: ZAINUL ABID PALAKKAL MUHAMMED ALI

Student Id: 2308777

University: University of Wales Trinity Saint David -Birmingham

Programme: MBA International business

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1. Proposed Title:

Examining the Role of Inventory Systems in Improving Retail Service Quality, Customer Retention and Satisfaction at Toyota automobile company

2. Introduction

In current paradigm of competition, delivering an efficient service quality is the key to unlocking customer loyalty in the retail environment (Gencer and Akkucuk, 2017). Specifically, this research proposal seeks to establish the relationship between inventory systems about improving the retail service quality and customer satisfaction and retention at Toyota, an automobile manufacturing firm. Based on factoring the inventory management and the customers' satisfaction, this study proposed aims to explore ways of improving the general retail operations (Famiyeh, Kwarteng and Asante-Darko, 2018).

2.1 Background of the study

In the highly competitive automotive retail environment, service quality and retention of the customers play a major role in the sustainable business future (Mishra, Mahanty and Thakkar, 2021) . With the customers proving to be wiser and having several choices when it comes to purchasing a car, automotive retailers have no option but to ensure that they deliver a neat and satisfactory service to their clients. Another factor that plays a very important role in determining the level of services as well as customers' satisfaction is the performance of inventory management systems (Amudha *et al.*, 2018).

Stock control is fundamental in ensuring that the appropriate products in adequate quantities are located in the correct areas at the right time. It can cause stockouts and overstocking hence cannot meet customer demands, which makes them dissatisfied and the business loses them (Linh, Quoc Nghi and Anh Tuan, 2021).

Toyota is one of the leading automobile companies across the globe that enjoys a reputation for quality, dependability, and customer care. Due to the strategy of the constant upgrading and adoption of improved systems in its business, operations, the company has been successful. Nonetheless, in the context of the ongoing and dynamic development of the retail industry it is

crucial to review and redesign the processes of inventory management in order to stay sustainable and respond to the customer needs (Xinyao *et al.*, 2023).

2.2 Research Problem

Lack of efficiency in the handling of inventories poses challenges to automotive retail in achieving high service quality while retaining customers. Poor inventory management can result to stockouts, delays, customer complaints hence eradicating the customer loyalty and the business returns and performance (Yadav and Joseph, 2017).

Toyota, a leading company in the industry, must examine its inventory management systems to improve customer satisfaction and its own operations. Thus, the purpose of this research will be to analyze the influence of inventory systems on retail service quality and customer loyalty with reference to Toyota and to determine the directions of optimization of inventory management in order to achieve the ultimate objectives of increasing customer loyalty and ensuring business growth.

3. Research aim and Objectives

Aim of the study

To examine the impact of inventory systems on retail service quality, customer retention and satisfaction at Toyota automobile company.

Objectives of the study

1. To assess the relationship between inventory accuracy and customer satisfaction in Toyota's retail outlets.
2. To investigate the effect of inventory visibility on the timeliness of order fulfilment in Toyota's retail operations.
3. To evaluate the impact of inventory management technology adoption on customer retention rates at Toyota automobile company.

3.1 Research Question

1. How does the level of inventory accuracy influence customer satisfaction in Toyota's retail outlets?
2. To what extent does inventory visibility impact the timeliness of order fulfillment in Toyota's retail operations?
3. How does the adoption of inventory management technology affect customer retention rates at Toyota automobile company?

4. LITERATURE REVIEW

4.1 Inventory Management in Retail

Inventory control is a vital tactical field that affects service delivery and consumer satisfaction especially in the context of retail businesses (Li, 2020). Inventory management or control entails ensuring that stock is always at an optimal level and ensuring it is available to meet demand while at the same time avoiding either stockouts or overstock situations (Copeland, Dunn and Hall, 2011).

Literature shows how the effectiveness of inventory management has been investigated in the retail industry. (Liu, Miao and Lin, 2019) noted that inventory can be managed to enhance services while at the same time lowering the costs. The author stressed the fact that retailers have to balance between inventory investment and level of customer service. Inventory control was explained by X. Liu & Sun, (2011) as supply chain management in which accurate demand forecast and inventory planning is critical.

Numerous studies reports that better stock control could result in increased product availability and customer satisfaction, coupled with enhanced profitability (Li and Kuo, 2008; Ramamoorthy and Ramamurthi, 2018; Thakre, 2021) . In a similar study, Yilmaz & Sürmeli oğlu, (2024) considered the effect of inventory errors on retail outcomes and urged the inventory management systems to maintain accurate measures to avoid any significant lapses that may hinder efficiency.

4.2 Service Quality and Customer Satisfaction

Literature review of customer satisfaction and service quality indicates that these two concepts are very crucial in retail industry since they determine customers' loyalty and business outcome. A lot of researchers have paid attention to the impact of service quality and customer satisfaction in different retail environments. SERVQUAL model was established by Parasuraman et al. (1988) and it is a standard tool commonly used to measure the service quality and its antecedents on perceived communication.

They identified five key dimensions of service quality: Dimension of the service quality are reliability, responsiveness, assurance, empathy and tangible. Later, Cronin and Taylor (1992) expanded the work done by Oliver, and developed the SERVPERF scale, based on the customer perceptions of service quality. They pointed out that service performance is superior to expectation-perception gap in one way to measure customer satisfaction. Touch, Devaraj et al (2001) studied the determinants of customer satisfaction in car dealerships to identify that service quality and sales staff behaviour held a significant impact on customer experience.

4.3 Service Quality and Customer Retention

Service quality and client retention are crucial factors for achieving company success, especially in highly competitive sectors like the automobile industry. Several writers have examined these ideas from different viewpoints, offering a diverse range of views that emphasise the intricacies and subtleties involved (Mei Yasfi and Pardede, 2023).

The SERVQUAL model is often used to describe service quality, and it consists of five essential dimensions: tangibles, dependability, responsiveness, assurance, and empathy. According to Venetis and Ghauri, (2004) , who were the first to develop this model, these variables together define how customers perceive service quality and impact their happiness and loyalty. Their research highlights the need of maintaining uniformity in providing services, indicating that firms need to succeed in all five aspects to guarantee a high level of service quality.

In contrast, Akaeze and Shaibu Akaeze, (2017) presents a two-dimensional framework for service quality, which differentiates between technical quality (the actual content of the service) and functional quality (the manner in which the service is supplied). He argues that while technical quality is important, functional quality typically has a greater influence on consumer impressions. This viewpoint changes the emphasis from just satisfying customer expectations to how the

service experience is handled and provided, highlighting the importance of human relationships and customer involvement.

The correlation between service quality and client retention is well established, with several research confirming that improved service quality results in enhanced customer retention. According to Al-Gasawneh and Dalain, (2023) , keeping existing customers is more financially efficient than obtaining new ones, and providing excellent service is a crucial factor in maintaining them. They emphasise that content consumers are more inclined to stay loyal and endorse the service to others, establishing a positive cycle of retention and promotion.

4.4 Technology Adoption in Inventory Management

The use of technology in order management has recently attracted the attention of many scholars. RFID, barcodes, and inventory management software that facilitates fast inventory tracking are some of the recent technologies that have been adopted in the retail industry (Xu, Blankson and Prybutok, 2017) . In their study, Jain & Verma, (2019); Yapa & Fernando, (2023) sought to understand the role of RFID technology in inventory of the retail business. Some of the benefits identified were that RFID adoption has the potential of making inventory accuracy better, stockouts would be fewer, and operations would be more efficient.

A number of advantages of using real-time inventory visibility and automation in the management of inventory were stressed by the study. Similarly, Nandini Ravichandran, (2014) examined the application of inventory management software in retailing operations. The importance of linking inventory data with sales and work on demand forecasts in order with better decision making in relation to inventory turnover. The authors also explored the risks that come with introducing inventory management technology that include highly expensive to acquire and implement, hence requiring employees to be trained on how to use the technology.

4.5 Research Gap

Even though prior studies have paid significant attention to the value of inventory management and the effects it brings to the retailing field, the existing research lacks sufficient attention with regard to the position of the inventory systems within the context of the automotive retail and the potential links between the inventory systems and both service quality and customer retention.

This proposed research effort seeks to fill this gap and to analyze the effects of inventory systems on retail service quality and customer loyalty issues, focusing on the Toyota automobile firm.

5. Proposed Research Methodology

5.1 Research Design

This research will employ a systematic literature review research methodology by employing qualitative research methodology (Smith, 2023). The systematic review will consist of a detailed and comprehensive search of all the research done on inventory management, service quality, customer retention and customer satisfaction in the automotive retail industry. The review process will be conducted according to the following steps: identification of the research questions, setting the inclusion/exclusion criteria, and the database search using Scopus, Web of Science, and Google Scholar (Onwuegbuzie and Leech, 2005). The articles for inclusion in the current study will be identified based on their relevance, quality, and the extent to which they address the research questions and objectives. The use of the qualitative approach makes it possible to capture the detailed interaction between inventory systems, service quality, customer retention and satisfaction by identifying essential themes, practices, and research directions (Markus, 2007).

5.2 Data Collection and Analysis

The collection of data will incorporate a thorough search and identification of specific literature based on critical word lists and search terms. Specifically, the consideration of this collection of databases is to maximize coverage of research in the proposed field. The eligibility criteria will thus comprise the relationship between the studies and the research goals, the publication year (after 2018) and the, quality of the research design. The specific articles will then be thoroughly screened, and the data will be gathered using a set data coding table.

The data collected will be analysed using thematic analysis, which entails coding since it avoids reliance on the original themes stated by the researchers. Based on the research questions formulated, the analysis of the study results will be conducted (Patel and Patel, 2019).

5.3 Research Ethics

The ethical issues that may arise from this study are very limited given the fact that it is conducted based on secondary data collected from a systematic literature review. However, the research will still include ethical consideration to increase the validity and reliability of the results. Citations and references for all the reviewed articles will be appropriately made to credit the original authors (Sanders, Pilkington and Pretorius, 2022).

6. Risks

This study’s risk is that bias may occur in the selection of literature and its interpretation. Bias may arise from the side of the researcher as they tend to include or exclude some articles in their review based on their personal beliefs without necessarily giving a true representation of the current research. Furthermore, the type and quantity of the chosen literature might be quite different, which impacts the credibility and reliability of the results obtained. We should also consider the possibility of not finding some works or not indicating the latest trends in the topic (Bertrand and Fransoo, 2002).

7. Timeline of the study

TITLE	START	FINISH	DURATION	2024			
				5	6	7	8
1.Identification of research area	2024-05-20	2024-05-30	11 days				
2.Initial literature review	2024-05-30	2024-06-03	5 days				
3.Setting research aim and objectives	2024-06-03	2024-06-06	4 days				
4.Writing research proposal	2024-06-01	2024-06-08	8 days				
5.Literature Review	2024-06-15	2024-07-03	19 days				
6.Data Collection	2024-07-08	2024-07-25	18 days				
7.Data Analysis	2024-07-23	2024-08-12	21 days				
8.First draft	2024-08-07	2024-08-15	9 days				
9.Second draft	2024-08-13	2024-08-16	4 days				
10.Final draft	2024-08-20	2024-08-30	11 days				

REFERENCES

- Al-Gasawneh, J.A. and Dalain, A.F. (2023) 'Impact of Service Quality on Customer Retention', *Quality - Access to Success*, 24(195). Available at: <https://doi.org/10.47750/QAS/24.195.33>.
- Amudha, R. et al. (2018) 'Assessing service quality in automobile sector', *International journal of pure and applied Mathematics*, 119(7).
- Bertrand, J.W.M. and Fransoo, J.C. (2002) 'Operations management research methodologies using quantitative modeling', *International Journal of Operations and Production Management*, 22(2). Available at: <https://doi.org/10.1108/01443570210414338>.
- Copeland, A., Dunn, W. and Hall, G. (2011) 'Inventories and the automobile market', *RAND Journal of Economics*, 42(1). Available at: <https://doi.org/10.1111/j.1756-2171.2010.00128.x>.
- Famiyeh, S., Kwarteng, A. and Asante-Darko, D. (2018) 'Service quality, customer satisfaction and loyalty in automobile maintenance services: Evidence from a developing country', *Journal of Quality in Maintenance Engineering*, 24(3). Available at: <https://doi.org/10.1108/JQME-10-2016-0056>.
- Gencer, Y.G. and Akkucuk, U. (2017) 'Measuring quality in automobile aftersales: Autoservqual scale', *Amfiteatru Economic*, 19(44).
- Jain, A. and Verma, D.S. (2019) 'Improvement on service quality of automobile service center', *International Journal of Scientific and Technology Research*, 8(8).
- Li, J. (2020) 'Distributed multi-level inventory algorithms for automotive maintenance spare parts based on centralized control model', *Jordan Journal of Mechanical and Industrial Engineering*, 14(1).
- Li, S.G. and Kuo, X. (2008) 'The inventory management system for automobile spare parts in a central warehouse', *Expert Systems with Applications*, 34(2). Available at: <https://doi.org/10.1016/j.eswa.2006.12.003>.
- Linh, L.M., Quoc Nghi, N. and Anh Tuan, D.H. (2021) 'Factors Affecting Customer Satisfaction with the Bus Service Quality of Phan Thiet Automobile Transport Cooperative', *International Journal of Research and Review*, 8(10). Available at: <https://doi.org/10.52403/ijrr.20211027>.
- Liu, Q., Miao, K. and Lin, K. (2019) 'Inventory management of automobile after-sales parts based on data mining', in *ACM International Conference Proceeding Series*. Available at: <https://doi.org/10.1145/3341069.3342975>.

Liu, X. and Sun, Y. (2011) 'Information Flow Management of Vendor-managed Inventory System in Automobile Parts Inbound Logistics Based on Internet of Things', *Journal of Software*, 6(7). Available at: <https://doi.org/10.4304/jsw.6.7.1374-1380>.

Markus, K.A. (2007) 'Philosophical Foundations of Quantitative Research Methodology.', *Structural Equation Modeling: A Multidisciplinary Journal*, 14(3). Available at: <https://doi.org/10.1080/10705510701303848>.

Mei Yasfi, S. and Pardede, R. (2023) 'Influence E-Service Quality Towards Customer Retention and Word of Mouth (WOM) Mediated By Customer Satisfaction', *Jurnal Indonesia Sosial Sains*, 4(11). Available at: <https://doi.org/10.59141/jiss.v4i11.927>.

Mishra, B., Mahanty, B. and Thakkar, J.J. (2021) 'A quantifiable quality enabled servitisation model: benchmarking Indian automobile manufacturers', *International Journal of Production Research*, 59(9). Available at: <https://doi.org/10.1080/00207543.2020.1736721>.

Nandini Ravichandran (2014) 'A Study on Inventory Management with reference to leading Automobile Industry', *International Journal of Management, Information Technology and Engineering*, 2(5).

O. Akazeze, Dr.C. and Shaibu Akazeze, Dr.N.A. (2017) 'Exploring Factors That Influence Consumer Loyalty to Automobile Dealerships in New York', *Journal of Business Theory and Practice*, 5(2). Available at: <https://doi.org/10.22158/jbtp.v5n2p98>.

Onwuegbuzie, A. and Leech, N. (2005) 'On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies', *International Journal of Social Research Methodology: Theory and Practice*. Available at: <https://doi.org/10.1080/13645570500402447>.

Patel, M. and Patel, N. (2019) 'Exploring Research Methodology: Review Article', *International Journal of Research and Review*, 6(3).

Ramamoorthy, R. and Ramamurthi, M. (2018) 'INVENTORY MANAGEMENT IN AUTOMOBILE INDUSTRY', *International Journal of Pure and Applied Mathematics*, 118(18).

Sanders, I., Pilkington, C. and Pretorius, L. (2022) 'Making research methodologies in theoretical computing explicit', *South African Computer Journal*, 34(1). Available at: <https://doi.org/10.18489/sacj.v34i1.881>.

Smith, A. (2023) *Research Methodologies: Quantitative Research Methodologies*, Fulton Library.

Thakre, S. (2021) 'Study of the Impact of Jit (Just--in Time) in Inventory Management in the Automobile Sector India in', *Ijm*, 12(2).

Venetis, K.A. and Ghauri, P.N. (2004) 'Service quality and customer retention: building long-term relationships', *European Journal of Marketing*, 38(11–12). Available at: <https://doi.org/10.1108/03090560410560254>.

Xinyao, D. et al. (2023) 'Financial and Non-Financial Analysis of Toyota and Ford: A Comparative Study', *Journal of Islamic, Social, Economics and Development*, 8(52).

Xu, L., Blankson, C. and Prybutok, V. (2017) 'Relative contributions of product quality and service quality in the automobile industry', *Quality Management Journal*, 24(1). Available at: <https://doi.org/10.1080/10686967.2017.11918498>.

Yadav, S.K. and Joseph, D. (2017) 'After-sales service quality satisfaction in Indian automobile industry', *International Journal of Business Information Systems*, 26(3). Available at: <https://doi.org/10.1504/IJBIS.2017.087107>.

Yapa, S. and Fernando, R. (2023) 'AN ASSESSMENT OF SERVICE QUALITY IN THE AUTOMOBILE SERVICE INDUSTRY: A STUDY OF A DEVELOPING COUNTRY', *Proceedings on Engineering Sciences*, 5(1). Available at: <https://doi.org/10.24874/PES05.01.008>.

Yilmaz, V. and Sürmeli oğlu, Y. (2024) 'Measuring automobile service quality with the European customer satisfaction index model (ECSI): the moderating effect of trust', *TQM Journal [Preprint]*. Available at: <https://doi.org/10.1108/TQM-10-2023-0315>.