

Implementation of Digitalised Management and Service Delivery in Enhancing Customer Loyalty: A Case Study of Polimandiri Motorcycle Workshop

Eko Hadi Saputra^{1✉}, Ranggau Faroza Putra², Joko Mariyanto³, Ahiruddin⁴, Kinanti Nurul Faithya⁵

¹ Universitas Muhammadiyah Lampung, Lampung, Bandar Lampung

^{1*} Email: Eko.tjita@gmail.com

² Universitas Muhammadiyah Lampung, Lampung, Bandar Lampung

² Email: ranggaufarozaputra@gmail.com

³ Universitas Sang Bumi Ruwa Jurai, Lampung, Bandar Lampung

³ Email: orlinmariyanto@gmail.com

⁴ Universitas Sang Bumi Ruwa Jurai, Lampung, Bandar Lampung

⁴ Email: akhiruddinrudin@gmail.com

⁵ Universitas Sang Bumi Ruwa Jurai, Lampung, Bandar Lampung

⁵ Email: kinantinurulf.31023@gmail.com

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ABSTRACT

The development of digital technology has compelled service-based businesses to adapt to more efficient management and service systems in order to maintain and enhance customer loyalty. However, many small-scale motorcycle workshops continue to face various challenges, including manual transaction recording, poorly integrated customer data management, and limited utilisation of digital technology in customer service delivery. This study aims to examine the implementation of digitalisation in management and service activities and its influence on improving customer loyalty at Polimandiri Motorcycle Workshop. This research employed a qualitative approach using a case study design. The research informants consisted of the workshop owner, three employees, and ten active customers selected through purposive sampling based on their involvement in workshop operations and utilisation of the available services. Data were collected through observation, interviews, and documentation. The data were subsequently analysed through the stages of data reduction, data display, and conclusion drawing to obtain a comprehensive understanding of the phenomenon under investigation. The findings indicate that the implementation of digital systems for transaction recording, customer database management, and the use of business communication applications has generated positive impacts, including improved administrative efficiency, faster service delivery, and enhanced communication between the workshop and its customers. These improvements have created a more satisfying service experience, encouraging

customers to return and continue using the workshop's services. Therefore, this study concludes that the digitalisation of management and service delivery represents an effective strategic approach to enhancing customer loyalty in small-scale motorcycle workshops and has the potential to serve as a reference model for similar service businesses in adapting to the era of digital transformation.

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Corresponding Author:

Eko Hadi Saputra¹

Universitas Muhammadiyah Lampung, Lampung, Bandar Lampung

Email: Eko.tjita@gmail.com

1. INTRODUCTION

Digital transformation has become one of the most significant developments influencing the business landscape in recent years. Advances in information technology, the internet, cloud computing, mobile devices, and various digital communication platforms have fundamentally changed the way organisations conduct their operations, interact with customers, and create added value for their businesses (Vial, 2019). Digitalisation is no longer merely a supporting option for companies; rather, it has evolved into a strategic necessity for maintaining competitiveness and ensuring business sustainability in an increasingly dynamic environment (Verhoef et al., 2021). Numerous studies have demonstrated that an organisation's ability to adopt digital technologies can enhance operational efficiency, flexibility, innovation, and the quality of services delivered to customers (Kraus et al., 2021).

One of the primary drivers accelerating digital transformation is the changing behaviour of consumers. Modern consumers are increasingly familiar with the use of digital technologies to search for information, conduct transactions, submit complaints, and communicate with service providers (Lemon & Verhoef, 2016). They expect services that are fast, easily accessible, transparent, and capable of responding to their needs in a more personalised manner. This situation has compelled business operators to adapt their business models and service systems to align with continuously evolving customer expectations. Consequently, digitalisation is not merely understood as the adoption of technology but also as an organisational effort to establish stronger relationships with customers and deliver a more optimal service experience (Becker & Jaakkola, 2020).

The urgency of digital transformation is particularly evident within the Micro, Small and Medium Enterprise (MSME) sector. As one of the principal pillars of the national economy, MSMEs play a crucial role in generating employment opportunities, stimulating economic growth, and promoting equitable social welfare. Nevertheless, many MSMEs continue to face a range of challenges, including limited technological capabilities, suboptimal human resource quality, and insufficient capital to support innovation and business development (Rahayu & Day, 2017). These constraints often hinder MSMEs from improving operational efficiency and retaining customers amid increasingly intense business

competition. Therefore, digital transformation is widely regarded as a strategic solution that can assist MSMEs in enhancing productivity, expanding market reach, improving business processes, and strengthening customer relationships (Priyono et al., 2020).

Several studies have highlighted the significant benefits of digital technology adoption for MSME development. According to Ainin et al. (2015), the utilisation of digital technology can improve marketing effectiveness while simultaneously expanding customer reach. Other studies have shown that digitalisation contributes to improved decision-making quality, faster information dissemination, and enhanced service quality provided to customers (Eller et al., 2020). Similar findings were reported by Chatterjee et al. (2023), who explained that successful digital transformation within MSMEs not only improves operational efficiency but also enriches customer experiences, thereby fostering stronger customer loyalty.

In practice, digitalisation within MSMEs extends beyond digital marketing activities and the use of social media platforms. Digital transformation also encompasses the digitalisation of management and service delivery. Management digitalisation refers to the application of digital technologies to managerial functions, including planning, organising, implementing, and monitoring business activities. Its implementation may take the form of digital transaction recording systems, customer data management, electronic archiving systems, and cloud-based business management applications (Verhoef et al., 2021). Meanwhile, service digitalisation refers to the utilisation of digital technologies to improve the quality of interactions between businesses and customers through faster, more accurate, and more responsive communication tailored to customer needs (Hoyer et al., 2020).

Management digitalisation and service digitalisation are two interrelated aspects that complement one another and cannot be separated. The implementation of digital-based management systems enables organisations to manage customer data and information more efficiently, thereby supporting the provision of higher-quality services. Conversely, excellent service delivery requires management systems capable of providing information quickly, accurately, and reliably. Therefore, the success of digital transformation is largely determined by an organisation's ability to integrate both management and service digitalisation into its day-to-day operations (Kraus et al., 2021).

In the service sector, service quality is one of the most critical determinants of business success. Unlike tangible products that can be evaluated before purchase, services are generally assessed based on customers' experiences throughout the service delivery process (Parasuraman et al., 1988). Customers evaluate not only the final outcome of the service received but also various other aspects, including service speed, employee attitude and professionalism, ease of access to information, and the company's ability to respond effectively to customer needs and expectations. Consequently, service quality often becomes a competitive advantage that differentiates one service provider from its competitors.

Numerous studies have confirmed the close relationship between service quality and customer loyalty. According to Oliver (2015), customer loyalty refers to a strong commitment to continue using or repurchasing the same products or services consistently in the future. Such loyalty is reflected not only in repeat purchasing behaviour but also in customers' willingness to recommend the business to others. Research conducted by Dam and Dam (2021) demonstrated that service quality significantly influences customer satisfaction and loyalty across various service industries. Similar findings were reported by Rather et al. (2019), who argued that positive customer experiences strengthen long-term relationships between customers and businesses.

Advancements in digital technology have also transformed the concept of service quality. Whereas service quality was previously measured largely through direct interactions between customers and service providers, contemporary service quality increasingly

incorporates digital dimensions, including system usability, technological reliability, information security, service personalisation, and responsiveness through digital channels (Blut et al., 2015). Modern customers expect services that are accessible at any time, provide rapid responses, and facilitate easy access to the information they require. Consequently, service digitalisation has become an essential element in creating superior customer experiences and enhancing overall service quality.

The relationship between digitalisation and customer loyalty has attracted growing attention in academic research. Lemon and Verhoef (2016) explained that customer experiences developed through multiple channels and digital touchpoints significantly influence customer satisfaction and loyalty. Research by McLean and Wilson (2019) demonstrated that the ease of using digital technologies and the quality of digital interactions can enhance customer trust in a company. Becker and Jaakkola (2020) further emphasised that positive customer experiences result from a combination of high-quality services, ease of access to information, and effective communication between businesses and customers.

Within the automotive service industry, customer loyalty plays a particularly important role because business sustainability depends heavily on customers who repeatedly return to use the services provided. Motorcycle workshop customers expect not only high-quality vehicle repairs but also cost transparency, honesty in service delivery, timely completion of work, and effective communication from workshop personnel (Ahmed et al., 2021). Therefore, the quality of the relationship established between a workshop and its customers is a key factor influencing long-term business success.

Several studies in the automotive sector have demonstrated that service quality exerts a strong influence on customer satisfaction and loyalty. Izogo and Ogba (2015) found that improvements in service quality can lead to higher levels of customer satisfaction and ultimately strengthen customer loyalty. Similarly, Nawi et al. (2023) revealed that effective communication and responsive service significantly enhance customer retention in automotive after-sales services. These findings suggest that the success of a motorcycle workshop depends not only on technical competence in vehicle maintenance and repair but also on its ability to establish and maintain strong relationships with customers.

Although extensive research has been conducted on digitalisation, service quality, and customer loyalty, several research gaps remain. First, most previous studies have focused on banking, e-commerce, modern retail, and large-scale service organisations (Verhoef et al., 2021; Chatterjee et al., 2023), while studies specifically examining digitalisation within automotive service MSMEs, particularly motorcycle workshops, remain limited. Second, the majority of existing studies have adopted quantitative approaches that primarily focus on testing relationships among variables (Dam & Dam, 2021; Rather et al., 2019). While such approaches effectively explain statistical relationships, they provide limited insight into how digitalisation is actually implemented within small-scale business operations. Third, previous studies have generally examined management digitalisation and service digitalisation separately, despite the fact that these two dimensions are closely interconnected and jointly contribute to shaping customer experiences and fostering customer loyalty.

These research gaps highlight the need for studies capable of providing a deeper understanding of how management and service digitalisation are implemented within automotive service MSMEs and how such implementation contributes to the development of customer loyalty. A case study approach is considered particularly appropriate because it enables researchers to gain a comprehensive understanding of digitalisation processes within real-world contexts, including the challenges encountered, strategies adopted, and outcomes achieved throughout the transformation process (Yin, 2018).

Polimandiri Motorcycle Workshop is one of the automotive service MSMEs currently undertaking digital transformation initiatives to improve business management effectiveness and service quality. Prior to the implementation of digitalisation, most administrative activities, transaction recording, customer data management, and customer communication were conducted using conventional manual methods. This situation had the potential to create various challenges, including slow service processes, data recording errors, and suboptimal customer relationships. Given increasing customer expectations for services that are fast, convenient, and responsive, the adoption of digital transformation has become essential for improving service quality while simultaneously strengthening customer loyalty.

The novelty of this study lies in its integration of management digitalisation and service digitalisation perspectives within a single analytical framework used to understand the process of customer loyalty formation in motorcycle workshop MSMEs. Unlike many previous studies that employed survey methods and focused primarily on testing relationships among variables, this research adopts a qualitative case study approach to explore in depth the implementation of digitalisation within actual operational settings. Consequently, this study is expected to contribute theoretically to the growing body of knowledge on digital transformation within service-sector MSMEs while also providing practical recommendations regarding digitalisation strategies that may serve as references for motorcycle workshops and other service-based MSMEs.

This study aims to analyse the implementation of management digitalisation at Polimandiri Motorcycle Workshop, examine the implementation of service digitalisation within its operational activities, and explain the contribution of these two forms of digitalisation to enhancing customer loyalty. To achieve these objectives, the study focuses on three main research questions: how management digitalisation is implemented at Polimandiri Motorcycle Workshop; how service digitalisation supports improvements in service quality; and how management and service digitalisation collectively contribute to strengthening customer loyalty.

2. METHOD

This study employed a qualitative approach using a case study method to obtain a deeper understanding of the implementation of management and service digitalisation in enhancing customer loyalty at Polimandiri Motorcycle Workshop. The selection of a case study design was based on the study's focus on a single research object, namely Polimandiri Motorcycle Workshop, thereby enabling an in-depth examination of the digitalisation processes undertaken, the challenges encountered during implementation, and their impact on service quality and customer loyalty within a real-world setting.

The research was conducted at Polimandiri Motorcycle Workshop, a small-scale automotive service enterprise that has adopted several forms of digitalisation within its operational activities. Research participants were selected through purposive sampling based on their level of involvement in digitalisation initiatives and customer service activities. The participants consisted of the workshop owner, who was responsible for managerial decision-making; three employees directly involved in operational and service activities; and ten active customers who regularly utilised the workshop's services.

Research data were collected through in-depth interviews, field observations, and document analysis. To ensure data validity and reliability, source triangulation and methodological triangulation were employed. In addition, member checking was conducted by inviting several participants to review the researchers' interpretations of the interview findings. This procedure was intended to ensure that the analysed data

accurately reflected the experiences and perspectives of the participants. Through these measures, the credibility, dependability, and transferability of the research findings were enhanced.

Data analysis was conducted interactively following the model developed by Miles, Huberman, and Saldaña, which consists of data condensation, data display, and conclusion drawing and verification. During the data condensation stage, the researchers selected, simplified, and categorised the collected data according to the research focus. The organised data were then presented in the form of descriptive narratives to facilitate the identification of patterns, relationships among phenomena, and major themes emerging from the findings. The final stage involved drawing conclusions accompanied by continuous verification throughout the research process. Through these procedures, the study is expected to provide a comprehensive understanding of the implementation of management and service digitalisation and its role in enhancing customer loyalty at Polimandiri Motorcycle Workshop.

3. RESULTS AND DISCUSSION

Motorcycle Workshop Polimandiri is a small-scale automotive service enterprise located on Pramuka Street (former Kemiling Bus Terminal), Bandar Lampung, Indonesia. The workshop provides various motorcycle maintenance and repair services and has been operating for more than a decade. Its operations are supported by three mechanics and an owner who also serves as the business manager. Prior to the implementation of digitalisation, almost all administrative and customer service activities were carried out conventionally using manual record-keeping systems. Customer information, service histories, daily transactions, and spare-part inventories were recorded in handwritten logbooks, which frequently created operational challenges.

The results of observations and interviews with the business owner revealed that the manual recording system generated several difficulties, particularly in retrieving customer data and vehicle service histories. In addition, some transaction records were incompletely documented due to damaged record books and human errors in data entry. These circumstances negatively affected service efficiency and limited effective communication between the workshop and its customers.

As part of its digital transformation initiative, Motorcycle Workshop Polimandiri began implementing a digital transaction-recording system using Google Sheets, which can be accessed through computers and smartphones. Customer data were subsequently stored and managed using Microsoft Excel, enabling information such as service histories, customer contact numbers, vehicle types, and future service schedules to be organised more systematically and retrieved more easily whenever required. Furthermore, the workshop started preparing monthly transaction reports digitally, facilitating income monitoring and business performance evaluation.

In terms of customer service, Motorcycle Workshop Polimandiri adopted WhatsApp Business as its primary communication platform. The catalogue feature is utilised to display available maintenance services and spare parts to customers. Through the application, customers also receive periodic service reminders and may conduct simple consultations regarding vehicle conditions before visiting the workshop. The

adoption of this technology has significantly improved response times and enhanced communication between the workshop and its customers.

The changes observed following the implementation of digitalisation demonstrated positive impacts on customer behaviour. Based on data collected during the six months after implementation, the number of active customers increased from 85 to 132. Moreover, the frequency of repeat visits rose from an average of 42 visits per month to 76 visits per month. Customer trust also increased as vehicle service histories were properly documented and information provided by the workshop became clearer and more transparent.

The improvement in customer loyalty was reflected in the growing number of customers who repeatedly utilised the workshop's services, the increase in new customers obtained through referrals from existing customers, and the rising number of customers who regularly undertook scheduled maintenance at Motorcycle Workshop Polimandiri. These findings indicate that the implementation of digitalisation in both management and customer service not only improved service quality but also strengthened long-term relationships between the workshop and its customers.

To provide a clearer illustration of the changes that occurred following the implementation of digitalisation, the results of observations and research documentation are summarised in Table 1.

Table 1. Comparison of Workshop Conditions Before and After Digitalisation

Indicator	Before Digitalisation	After Digitalisation
Transaction recording system	Manual logbooks	Google Sheets
Customer data storage	Customer record books	Microsoft Excel
Customer service history	Difficult to trace	Stored and easily searchable
Monthly report preparation	Irregular	Prepared monthly
Customer communication media	Telephone and direct visits	WhatsApp Business
Service information	Delivered verbally	WhatsApp Business catalogue
Service reminders	Not available	Periodic reminder messages
Active customers	85 customers	132 customers
Repeat visits per month	42 visits	76 visits
Administrative complaints	Relatively frequent	Significantly reduced

Source: Primary data processed by the researchers (2026).

The data presented in Table 1 indicate that the implementation of digitalisation brought significant changes to both administrative processes and customer service activities. The time required to retrieve customer information became considerably shorter, business reports could be prepared on a regular basis, and communication with customers became more effective. These findings support the view of Verhoef et al. (2021), who argued that digital transformation is not merely the adoption of technology but also a change in the way organisations manage information to create greater value

for customers. The findings are also consistent with the study conducted by Eller et al. (2020), which demonstrated that digitalisation assists small and medium-sized enterprises (SMEs) in improving operational efficiency and enhancing decision-making quality.

3.1 Digitalisation Implementation at Motorcycle Workshop Polimandiri

Motorcycle Workshop Polimandiri is a small-scale automotive service business located on Pramuka Street (former Kemiling Bus Terminal), Bandar Lampung, and has been operating for more than ten years. Throughout this period, administrative activities and customer service were conducted using traditional manual recording systems. Information relating to customers, vehicle maintenance histories, daily transactions, and spare-part inventories was documented in administrative logbooks, which frequently created operational difficulties. Based on observations and interviews, the use of manual systems resulted in lengthy customer data retrieval processes, incomplete transaction documentation, and difficulties for the business owner in monitoring and evaluating business performance on a regular basis.

The workshop owner explained that the growing number of customers over time had made the manual recording system increasingly ineffective. When customers returned for servicing, mechanics often encountered difficulties locating vehicle maintenance histories because the information was stored across several different record books. This situation not only slowed down the service process but also created the potential for inaccuracies in determining the maintenance requirements of customers.

“Previously, when customers returned after several months, we had to search for their service history across several record books. Sometimes the information could be found, but in many cases it was difficult to locate. If a record book was damaged or lost, the customer data would also be lost.”

To address these challenges, Motorcycle Workshop Polimandiri began implementing digitalisation in its administrative management by utilising Google Sheets for transaction recording and Microsoft Excel for customer data storage. Various customer details, including names, telephone numbers, vehicle types, registration numbers, service histories, and future service schedules, were subsequently stored digitally in a structured manner. Furthermore, all daily transactions were recorded electronically, making the preparation of monthly business reports more efficient and straightforward.

Digital transformation was also implemented in customer service activities through the use of WhatsApp Business as the primary communication platform. The application serves as a bridge between the workshop and its customers. The service catalogue feature is used to display the various maintenance services available, enabling customers to obtain information more quickly and conveniently. In addition, the workshop introduced a periodic service reminder system based on information stored within the customer database. Customers approaching their next scheduled service receive reminder messages via WhatsApp, ensuring that communication and

relationships between the workshop and customers remain active even when no transaction is currently taking place.

The findings indicate that the success of digital transformation does not necessarily depend upon the adoption of sophisticated and complex technologies. The utilisation of relatively simple technologies such as Google Sheets, Microsoft Excel, and WhatsApp Business proved capable of generating significant improvements in business management effectiveness and customer service quality. These findings are consistent with the argument of Priyono et al. (2020), who suggested that successful digitalisation among SMEs is determined more by the suitability of technology to business needs than by the sophistication of the technology itself. In other words, selecting practical and easily implementable technologies may provide greater benefits for business sustainability and development.

3.2 Changes in Customer Behaviour Following Digitalisation

The implementation of digitalisation not only transformed business management systems but also influenced customer behaviour and experiences. Based on interviews with customers, improved communication convenience was identified as one of the most noticeable changes following the adoption of digital systems. Prior to the use of WhatsApp Business, customers were required either to visit the workshop directly or contact the owner by telephone to obtain information regarding available services. Following digitalisation, customers were able to access information more easily, conduct simple consultations, and enquire about service requirements through WhatsApp messaging.

One customer stated :

“Everything is much more practical now. If I experience a problem with my motorcycle, I simply send a message and usually receive a response immediately. There is no need to visit the workshop merely to ask a question.”

This ease of communication positively influenced customer comfort in interacting with the workshop. Furthermore, the service catalogue available through WhatsApp Business enabled customers to review the services offered before visiting the workshop. The availability of more transparent and easily accessible information contributed to customers' perceptions of professionalism and effective business management.

Changes in customer behaviour were also reflected in increased levels of trust towards the workshop. Prior to the implementation of digital systems, customers often experienced difficulties in obtaining complete information regarding their vehicle maintenance histories. However, once all customer records were digitally documented, mechanics could easily access and display previous service records. This development increased customer confidence in the maintenance and repair recommendations provided by the workshop.

One customer explained:

“I feel more confident because my vehicle’s service history is stored properly. The mechanic can immediately identify which components have been replaced and which parts require further inspection.”

These findings suggest that digitalisation contributes significantly to improving service transparency and accountability. From a Relationship Marketing perspective, trust represents a fundamental element in establishing long-term relationships between businesses and customers. According to Morgan and Hunt (1994), relationships built upon high levels of trust encourage customer commitment to continue using the same services over time.

Digitalisation also enhanced customer experience through the provision of periodic service reminder services. This feature assists customers in maintaining their vehicles in optimal condition while simultaneously strengthening relationships between customers and the workshop. These findings are consistent with the Service-Dominant Logic perspective proposed by Vargo and Lusch (2016), which emphasises that service value is created through continuous interaction and long-term relationships between service providers and customers. Therefore, digitalisation not only improves operational efficiency but also creates a more valuable service experience for customers.

3.3 The Impact of Digitalisation on Customer Loyalty

The findings demonstrate that changes in management systems and service delivery had a direct impact on customer loyalty. Customer loyalty was reflected in the increasing number of repeat visits, the growth in customers acquired through referrals from existing customers, and the rising number of customers who regularly undertook scheduled maintenance at Motorcycle Workshop Polimandiri. Changes in customer loyalty indicators are presented in Table 2.

Table 2. Changes in Customer Loyalty Indicators

Indicator	Before Digitalisation	After Digitalisation
Active customers	85	132
Repeat visits per month	42	76
Customers acquired through referrals	18	47
Customers undertaking routine servicing	31	68

Source: Primary data processed by the researchers (2026).

The data presented in Table 2 indicate that the number of active customers increased by approximately 55%, while repeat visits increased by more than 80% compared with the period prior to digitalisation. A substantial increase was also observed in the number of customers who visited the workshop based on recommendations from existing customers. These findings suggest that customers not only returned to use the workshop’s services but were also willing to recommend the business to others.

According to customer loyalty theory, these conditions may be categorised as indicators of both behavioural loyalty and attitudinal loyalty (Oliver, 2015). Customer loyalty is not only characterised by a tendency to make repeat purchases or repeatedly use a service, but is also reflected in customers' commitment to continue choosing the same company and providing positive recommendations to others. The findings of this study are consistent with those reported by Rather et al. (2019) and Dam and Dam (2021), which demonstrate that service quality and customer experience exert a strong influence on the development and enhancement of customer loyalty.

From the perspective of the Resource-Based View (RBV), Motorcycle Workshop Polimandiri's ability to manage customer databases, optimise the use of simple digital technologies, and establish effective communication with customers may be regarded as strategic resources capable of generating a competitive advantage. Furthermore, from the perspective of Relationship Marketing, the improvement in customer loyalty can be interpreted as a consequence of the closer relationships established between the workshop and its customers through continuous communication and more personalised, customer-oriented services.

3.4 Implications of the Findings for Automotive Service SMEs

The findings of this study provide several important implications for the development of small and medium-sized enterprises operating in the automotive service sector. First, the implementation of digitalisation does not necessarily require substantial technological investment or the adoption of complex systems. The utilisation of simple applications such as Google Sheets, Microsoft Excel, and WhatsApp Business has proven effective in improving administrative efficiency, enhancing service quality, and fostering greater customer loyalty. Second, the success of digital transformation depends more on the ability of business owners to select and optimise technologies that align with their operational needs than on merely adopting sophisticated technologies. Third, digitalisation should not be viewed solely as a tool for supporting administrative activities, but also as a strategic approach for strengthening long-term customer relationships through more effective communication and personalised service delivery.

3.5 Research Limitations

This study has several limitations. First, the research was conducted within a single case-study setting; therefore, the findings cannot yet be generalised to all motorcycle workshops in Indonesia. Second, the observation period covered only six months following the implementation of digitalisation, meaning that the long-term effects on customer loyalty could not be fully assessed. Third, the study employed a qualitative approach, and consequently the findings emphasise contextual understanding rather than the measurement of causal relationships.

Therefore, future studies are encouraged to involve a larger number of research sites and adopt mixed-methods approaches in order to provide a more comprehensive understanding of the impact of digitalisation on business performance and customer loyalty within the automotive service sector.

4. CONCLUSION

This study demonstrates that the implementation of digitalisation at Motorcycle Workshop Polimandiri has brought substantial changes to both business management systems and the quality of customer service. Prior to the digitalisation process, administrative activities relied heavily on manual record-keeping systems using paper-based logbooks, which created various operational challenges, including difficulties in retrieving customer information, limitations in storing vehicle service histories, ineffective preparation of business reports, and suboptimal communication with customers. Through the utilisation of Google Sheets for transaction recording, Microsoft Excel for customer data management, and WhatsApp Business as a customer service communication platform, these challenges were addressed more effectively. The digital system enabled more structured customer data storage, facilitated access to vehicle maintenance histories, accelerated the preparation of financial and transaction reports, and enhanced the workshop's ability to manage information required for decision-making processes. These findings suggest that digital transformation within automotive service SMEs does not necessarily require sophisticated technologies or substantial financial investment; rather, it can be achieved through the adoption of simple technologies that are aligned with operational requirements and available organisational resources.

The findings also indicate that digitalisation has had a positive impact on customer behaviour. The use of WhatsApp Business has enabled customers to access service information more conveniently through features such as service catalogues, online consultations, and periodic service reminders. This improved accessibility has enhanced the customer experience, as customers perceive that they receive greater attention and faster service compared with previous practices. Furthermore, the availability of digitally stored service histories has increased transparency throughout the service process and strengthened customer trust in the workshop. Customers are no longer dependent upon mechanics' recollections or manual records; instead, they can obtain more accurate information regarding vehicle conditions and maintenance histories. This situation has fostered stronger relationships between the workshop and its customers, as reflected in increased communication, greater ease of consultation, and more positive customer perceptions of the professionalism of the services provided. Therefore, digitalisation serves not only as a tool for supporting business administration but also as a strategic instrument for establishing closer and more sustainable customer relationships.

This study further demonstrates that the implementation of digitalisation in both management and customer service activities has made a tangible contribution to enhancing customer loyalty at Motorcycle Workshop Polimandiri. This is evidenced by the increase in active customers, the higher frequency of repeat visits, the growing number of customers undertaking routine servicing, and the increase in new customers acquired through recommendations from existing customers. These findings indicate that customer loyalty is not determined solely by the technical quality of vehicle repairs but is also influenced by a business's ability to deliver services that are efficient,

transparent, responsive, and customer-oriented. The digitalisation initiatives implemented by the workshop successfully created a superior service experience, encouraging customers to continue using its services and recommending the business to others. Consequently, this study confirms that digitalisation can serve as an effective strategy for automotive service SMEs to enhance their competitiveness while simultaneously maintaining customer loyalty in an increasingly competitive business environment.

Based on these findings, automotive service SME owners are encouraged to begin adopting simple digital technologies that are relevant to their business needs. Future research is expected to involve a broader range of research settings and longer observation periods in order to provide a deeper understanding of the long-term effects of digitalisation on business performance and customer loyalty.

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