

Financial Stability of Car Service Stations in Conditions of Economic Instability

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Abstract- *The economic uncertainty creates financial difficulties for small and medium enterprises including car service stations. These businesses operate with limited profit margins while their success depends heavily on customer spending patterns and supply chain disruptions and inflation rates and credit market fluctuations. The research identifies the primary financial challenges faced by car service stations during economic decline and develops strategies to help them achieve long-term recovery. The research analyzes industry data through regional case studies and financial statistics to understand how tourism companies adapt to market changes. The report provides all stakeholders with recommendations to enhance service station economic stability during economic turbulence. The article examines financial practices through easy-to-understand examples and reviews operational strategies for efficient and responsible management under pressure. The research demonstrates that stations can preserve their stability through market diversification and cost management and by integrating technology into their operations.*

Indexed Terms- *Financial Stability, Economic Instability, Car Service Stations, Small and Medium Enterprises (SMEs), Operational Resilience*

I. INTRODUCTION

Automobile services serve dual purposes by enabling people to move freely while simultaneously driving economic expansion. Car service stations provide safety support to road users through their operations of both small independent shops and large commercial establishments. The organizations face uncertain market conditions primarily during economic instability. The normal demand of customers together with operational expenses and

limited financial resources pose threats to the existence of businesses in this sector. Service-based businesses face severe impact from current worldwide and regional economic challenges which include recessions along with price inflation and supply chain disruptions and ongoing pandemic consequences. The economy faces a major downturn which causes customers to allocate their budgets toward essential items while reducing their spending on discretionary goods at car service stations. Unplanned maintenance avoidance coupled with basic service selections creates revenue uncertainty for businesses. The increase in spare parts and labor costs together with rising rent prices cuts into profit margins and complicates financial management. This research investigates the financial stability mechanisms which car service stations employ when facing economic downturns. The research investigates business advantages and disadvantages through an examination of market patterns and relevant documentation and successful and unsuccessful enterprise examples. The research aims to develop useful financial strategies that enhance both the adaptability and stability of car service stations across multiple economic environments. The research provides essential value to automotive service professionals along with analysts and policy makers and groups assisting small businesses during periods of uncertainty. The paper combines quantitative and qualitative research to create an extensive analysis of economic challenges within this sector. The paper consists of six chapters which begin with theoretical explanations followed by market analysis before evaluating financial strategies and ending with practice and policy recommendations.

II. LITERATURE REVIEW

2.1 Definition of Financial Stability in SMEs

The assessment measures enterprise financial management capacity during stressful times and capability to generate sufficient cash flow for ongoing operations and payment fulfillment. The financial stability of SMEs requires the development of an operational structure which supports problem resolution and change adaptation and future planning. Smaller businesses face more financial exposure to economic changes than larger corporations do. Financial stability for these companies depends on cost-cutting strategies and operational adaptability.

The success of car service stations relies on three critical factors: customer retention together with dependable delivery and handling of shifting market demand. Small businesses maintain financial stability by maintaining tight financial management practices because they do not possess significant financial reserves. Service stations with sound financial health possess enough resources to handle inventory management and payrolls and equipment investments while waiting for challenging market conditions to resolve.

2.2 Overview of Car Service Stations as Business Units

Car service stations function as Small and Medium-Sized Enterprises dedicated to vehicle maintenance and repair services including vehicle checks and oil changes and tire management and engine repairs and inspection services. These businesses either operate independently or through franchising networks while catering to both personal and business clients. The financial operations of these companies depend on service and parts revenue to fund both fixed and variable expenses as well as equipment leasing and loans for cash management. The core operations of car service stations depend on their physical facilities together with trained personnel and their accumulated customer base. Most of their expenses consist of fixed costs including rent and personnel wages yet their main revenue comes from delivering services based on customer demand. A business requires expert financial planning and excellent operational management to preserve profit during economic hardships specifically because of this reason.

Table 1: Key Economic Challenges Faced by Car Service Stations During Periods of Instability

Economic Challenge	Description	Impact on Service Stations	Example
Inflation and Price Volatility	Rising cost of spare parts, lubricants, and energy due to macroeconomic shocks	Increased operational costs; reduced profit margins	Oil price spike causing 30% increase in inputs
Reduced Consumer Spending	Customers defer non-essential maintenance or repairs	Decline in service volume; increased competition	Drop in major engine repair orders
Credit Access Restrictions	Banks tighten lending to small businesses	Difficulty in financing upgrades or restocking inventory	Rejection of equipment loan applications
Supply Chain Disruptions	Delays or unavailability of parts and tools	Service delays, customer dissatisfaction, idle labor time	Import delays of electronic diagnostic tools

2.3 Economic Instability: Causes and Impact on Small Businesses

Economic instability emerges when GDP along with inflation and unemployment and exchange rates and interest rates experience volatility. The causes of this phenomenon include worldwide financial crises and political conflicts and pandemics as well as rising prices and economic management deficiencies. Small businesses and medium enterprises face multiple supply chain problems alongside customer base shifts and labor shortages and credit difficulties whenever economic fluctuations begin—and these issues tend to produce immediate severe consequences. During economic downturns numerous people delay their vehicle maintenance thus making car service stations highly susceptible to risks. Many people reduce their spending because of limited financial resources and therefore delay important repairs while seeking budget-friendly alternatives. Rising inflation creates imported product price increases which reduce business profit opportunities. Banks establish new rules regarding financing due to economic instability which makes it harder to obtain funding. The pressure on liquidity can result in payment delays and employee departures and may force the business to close down unless immediate action is taken.

2.4 Financial Health Indicators for Service-Based Enterprises

Business financial stability depends on the evaluation of computed health indicators. Service-based SMEs need to focus on liquidity ratios (current and quick ratios) and profit margins (net profit margin and operating margin) and solvency measures (debt-to-equity ratio) and efficiency (inventory turnover and asset utilization rate). These indicators demonstrate the ability of an organization to meet its short-term and long-term responsibilities as well as generate profits through operations while maintaining resource control.

Financial indicators are crucial but other indicator categories play an equally important role. The quality of operations becomes visible through metrics that include customer satisfaction scores and employee retention rates as well as order fulfillment speed and customer retention rates because these factors

directly impact financial results. These metrics become crucial during economic instability because they indicate potential financial difficulties before they emerge. The combination of financial and operational data enables business owners to make sound decisions and protect their business from potential threats.

III. ANALYSIS OF THE CAR SERVICE MARKET UNDER ECONOMIC STRESS

3.1 Current State of the Car Service Industry

Car service operations represent the core value-producing activities in the automotive industry's entire value creation process. The industry operates across multiple levels from single-bay independent garages to franchise outlets of full-service dealerships that connect with vehicle manufacturers. This sector has maintained steady growth worldwide because roads get more congested and cars become more technologically advanced.

SMEs represent the status of car service stations in both developed and developing economies because they operate with workforce sizes between 3 and 50 employees. The automotive sector supports neighborhood development and urban growth and produces money for the informal economy. The majority of cities maintain their car service stations in industrial zones while rural areas have these facilities as their only vehicle maintenance solution.

The business operations of this sector do not have a dominant position from either a single large company or multiple large companies. The organization method makes this sector more vulnerable to outside impacts. The profit margin of service stations decreases because of rising costs and competition and changing customer expectations even though car ownership rates have increased. Most SMEs face difficulties financing new investments because customers now expect immediate service and digital tools and transparent pricing.

3.2 Impact of Economic Instability

Economic instability produces multiple direct and indirect effects which reach car service stations. The

first immediate result of economic instability leads to reduced customer spending on goods and services. People delay routine vehicle maintenance and minor repairs during times of economic recession and high inflation. People tend to select service stations that operate without official regulation instead of going to facilities owned by major companies. Reduced customer usage of the business creates financial instability that becomes more pronounced from month to month.

Economies which heavily depend on imported spare parts parts faced significant difficulties because of inflation rates. The total cost of operating a service center will rise steeply when replacement parts and consumables become more expensive. Small and medium-sized enterprises in this industry lack supplier bargaining power so they must accept repeated price hikes from their suppliers.

The supply chain disruptions which occurred during both COVID-19 crisis and conflict situations made existing financial instability worse. Operations become more complicated because of part delivery delays which leads to dissatisfied customers and reduced sales numbers. High interest rates and bank crises create difficulties for companies to meet their short-term expenses and implement facility improvements.

3.3 Operational Challenges Faced by Car Service Stations

Car service stations face multiple operational challenges when operating in countries with established economies. The economic instability worsens these problems while creating additional challenges. The fixed costs of rent and electricity and insurance continue to rise which makes it difficult to achieve cash flow equilibrium. These businesses must avoid both overstocking and errors because they lack the advantages of large-scale operations.

The management of inventory becomes challenging because demand patterns are highly unpredictable. Excessive parts inventory reduces profits yet insufficient parts availability leads to customer dissatisfaction and missed sales opportunities. The implementation of traditional stock control methods exposes businesses to increased operational inefficiencies.

The maintenance of customer loyalty presents an additional challenge to business operations. Most people seek the best financial deals when economic times become difficult instead of staying loyal to their current service providers. Clients tend to select cheaper competitors as their primary choice over time. Service stations face difficulties in retaining customers because they lack both loyal customer programs and digital strategies. The increasing cost of customer acquisition creates substantial budgetary challenges when you lose even a small portion of your repeat business.

Table 2: Comparative Resilience of Car Service Stations Based on Business Model

Business Model Type	Service Range	Technology Integration	Financial Performance During Instability	Strengths	Weaknesses
Independent Traditional Shop	Basic repairs, maintenance	Low	High vulnerability	Loyal local customer base	Poor cash flow, outdated tools
Franchise Station	Wide, standardized services	High	Moderate to high resilience	Brand trust, support systems	Franchise fees, less flexibility
Mobile Mechanic Units	On-site basic repairs	Medium	Moderate resilience	Low overhead, flexible service delivery	Limited equipment, weather-dependent

Multi-Service Urban Garage	Repairs, diagnostics, detailing	High	High resilience	High diversification, premium service potential	High fixed costs, skilled labor dependency
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3.4 Comparative Regional Case Studies

The actual economic impacts on car service stations are demonstrated through three separate case studies from different locations which use business and location and financial features for comparison. The first case study examines the Capital City Branch of the Metropolitan Independent Service Station.

This mid-sized station operates in a densely populated area by providing various services and digital booking options to its passengers. The station experienced a 15% decrease in average monthly revenue during the economic downturn of last year but managed to grow customer numbers while lowering prices to stay operational. The company achieved an 18% decrease in product storage costs through lean inventory practices and its mobile appointment app led to a 22% increase in customer return visits.

The third case study examines a Rural Family Business Garage operating in a Remote Location. The business experienced reduced income from the previous year because qualified staff members departed and local spending decreased. The service windows remained open for extended periods because the business served only a small number of happy customers who lacked access to replacement parts. The owners chose to cut their operating hours and lay off one technician because they had no credit access. The business maintained a small group of dedicated customers because customers trusted the company and found its prices affordable despite numerous operational challenges.

The third case study examines a Mid-size Town station which belongs to a chain.

The fuel stop gained brand recognition and supply delivery from a central location because it operated as part of a large national chain. The revenue decrease reached 10% because of corporate

marketing and financing support. The franchise trained staff members to handle emergencies while teaching them optimal customer communication methods throughout the crisis. The franchise fees created operational challenges but the television station maintained better financial stability than independent stations operating alone.

IV. FINANCIAL STRATEGIES FOR STABILITY

4.1 Diversification of Services

A car service station should choose service diversification as its top economic strategy when facing challenging financial conditions. The ability to perform services beyond mechanical maintenance creates multiple revenue streams which helps businesses withstand sector changes. The basic service diversification methods for car service stations consist of tire alignment, car washing, windshield repair and diagnostic testing together with unrelated services like roadside assistance. A successful business strategy can be achieved by establishing fleet servicing contracts. The partnership between car service stations and taxi companies and delivery teams and major corporations makes their revenue streams more stable even if individual customers decrease their orders during economic downturns. Many businesses now provide subscription packages that include scheduled vehicle checks and oil change services with reduced maintenance fees. Companies that use this model generate steady income streams while maintaining their customer base.

Diversification should be developed according to market needs and station capabilities. Fast implementation of unfamiliar services before proper staff training and additional measures leads to negative consequences for the business. Strategic business diversification involves evaluating costs

while organizing resources to market new and enhanced customer value.

4.2 Cost Optimization Techniques

A business needs to implement proper cost control to survive uncertain economic periods. Car service stations can protect their earnings through waste reduction while maintaining budgets and optimizing operations. Lean inventory management helps businesses reduce stock levels which in turn helps them avoid excessive capital consumption. Supply prices often become unpredictable during periods of high inflation so businesses need to be extra vigilant about these changes. Energy efficiency initiatives help organizations decrease their operational expenses. The installation of LED bulbs together with smart heating devices and time-controllable workshop equipment allows homeowners to reduce their utility bills. Many businesses that make regular purchases succeed in saving money by negotiating their orders in bulk. The current trend shows companies purchasing parts online because they can find better prices and bulk discounts on those platforms. Work practices become more efficient when organizations utilize better workforce management systems. The implementation of scheduling software ensures that mechanics stay productive and prevents unnecessary time waste. The company can reduce costs through the basic responsibilities of bookkeeping and web presence and customer machine responses. Businesses must preserve employee satisfaction and mood because these elements sustain operations and customer happiness.

4.3 Revenue Management and Dynamic Pricing

The process of maintaining financial stability demands more than cost reduction because it needs strategic pricing strategies combined with service package designs. Service industries now use dynamic pricing to adjust their prices according to demand levels and time periods and customer segments which results in higher earnings per transaction. Businesses can maintain their profits during peak hours by providing discounted rates to price-sensitive customers during periods of low demand.

A business can increase its revenue through the implementation of loyalty programs and referral incentives. Service stations can maintain customer loyalty through benefit programs that prevent their regular clients from switching to competitors. The combination of oil changes with multi-point inspections and tire rotations increases total costs but provides customers with greater value.

Subscription models enable companies to forecast their annual revenue according to my previous statement. These plans attract customers who prioritize budget management and want fast solutions. Companies use CRM systems and customer analytics along with digital solutions to create personalized offers and service recommendations and appointment reminders which drive both visit conversion and increased revenue per customer visit.

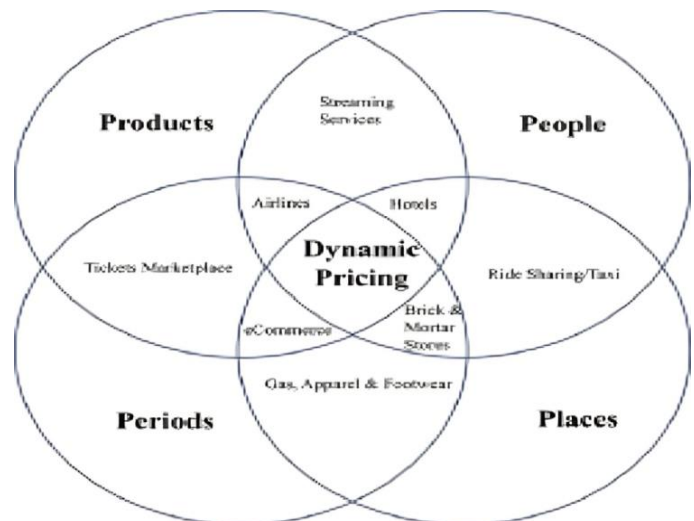


Figure1: Revenue Management and Dynamic Pricing
/ source: ScienceDirect

4.4 Access to Financing and Government Support

The process of obtaining financing proves challenging for car service stations because banks become more cautious during economic slowdowns. Businesses that maintain proper financial records and show consistent cash flow and strong business goals become more qualified to receive loans or credit or leasing options. Building positive relationships with nearby banks or credit unions enables you to handle

financial pressure during difficult times. The popularity of non-traditional lending options including microloans and peer-to-peer lending and manufacturer or third-party vendor equipment financing has increased recently. The solutions provide fast approval processes and adaptable deal conditions but their interest rates tend to be higher. Business owners must evaluate these factors carefully to prevent their company from becoming over-leveraged. The financial system becomes stronger through government interventions. During economic crises governments at all levels create programs to provide support for small and medium-sized enterprises. The support programs include grants together with tax delays and subsidized training and low-interest loans. Many business owners remain unaware of available programs because they find the application process too complicated. Business development agencies in your area will provide you with financial savings together with essential business knowledge. Insurance coverage designed for SME needs provides additional support during business interruptions and equipment failures and pandemic disruptions. The ongoing premium payments become valuable during crises because they provide business security and operational continuity.

V. RECOMMENDATIONS

5.1 Policy Recommendations for Stakeholders

The survival of car service stations and other SMEs during economic instability depends on government groups and banks and regulatory bodies. Policymakers need to create financial support programs that focus on the specific needs of these enterprises. The establishment of loan programs combined with simplified paperwork and tax incentives for businesses that adopt sound financing practices and technology adoption should be implemented. The industry receives financial support from regulatory bodies through their endorsement of business practices that maintain fairness. The quality standard and charging rates should be fixed to prevent small repair operations from competing with standard repair stations that follow all laws and pay taxes. The agencies need to collaborate with industry groups to provide continuous training and certification programs for businesses to enhance their capabilities and meet worldwide service regulations. The government and vocational institutions should collaborate to teach young professionals automotive diagnostics and mechatronics and workshop management skills. The measures reduce workforce instability while improving service sector employment opportunities. The implementation of systematic support systems for car service stations will enable stakeholders to build their financial stability.

Table 3: Summary of Financial Strategies and Their Effectiveness

Financial Strategy	Description	Estimated Effectiveness	Implementation Complexity	Benefits	Risks / Considerations
Service Diversification	Expand offerings to include diagnostics, detailing, fleet servicing	★★★★★	Medium	Increases revenue streams; captures new customer segments	Requires training, equipment investments
Cost Optimization	Lean inventory, energy efficiency, negotiated supplier rates	★★★★☆	Low to Medium	Lowers fixed and variable costs	May reduce flexibility or service capacity

Subscription-Based Pricing	Monthly/yearly plans for routine services	★★★★☆	Medium	Stabilizes income, improves retention	Customers may underuse plans or demand high-value work
Digital Management Tools	CRM, booking apps, inventory software	★★★★★	Medium to High	Improves efficiency, customer engagement	Setup and learning curve; software costs

5.2 Technological Innovation and Digitalization

The financial stability of car service stations depends heavily on their ability to adopt digital operations. Service stations need encouragement to adopt modern technological solutions which enhance operational speed and reduce costs while delivering better customer experiences. The tools consist of booking platforms alongside stock management systems and customer relationship management tools and mobile payment solutions. The government together with local businesses should create programs to offer financial backing and interest rate benefits for people who want to enhance their technological capabilities. Organizations need to provide training programs for their employees and business owners to adapt to new digital business practices. The implementation of digital tools enables automatic appointment reminders and service records and feedback collection which leads to better customer retention and expanded service offerings.

Workshops can improve their predictive maintenance capabilities through new diagnostic tools and data to prevent customer car failures which builds trust with customers. The new solutions increase profitability at each visit while establishing the business as an independent entity from informal competitors. The extent to which car service stations adopt technology will determine their ability to maintain competitiveness in upcoming years.

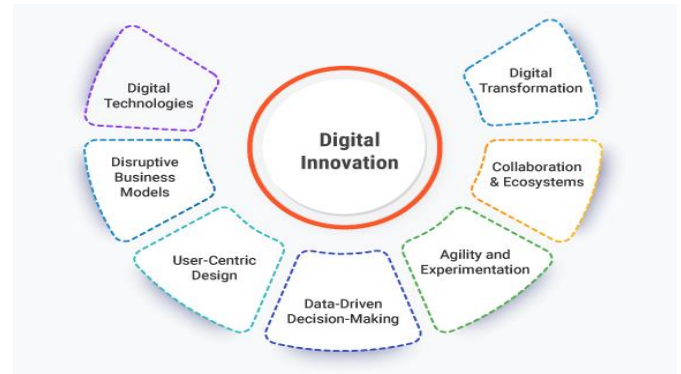


Figure2: what is Digital innovation / source: IdeaScale

5.3 Capacity Building and Financial Literacy

Research and field data show that capacity building stands essential for improving financial capabilities of managers operating in small and medium sized car service centers. Small business owners demonstrate extensive knowledge of their core business skills but lack expertise in budgeting, forecasting, cost control and profit optimization. Such lack of knowledge prevents them from making sound financial decisions when faced with overwhelming situations. As part of their programming Asset Building Coalitions should implement financial literacy programs together with trade associations and microfinance institutions and NGOs and local chambers of commerce. The programs must include training on managing cash flow and reading financial statements and break-even analysis and investment planning. The acquisition of these business capabilities creates additional financial protection against market fluctuations. Business owners who have experience should lead newcomers through program organization but peers should also learn from each other. Service stations need to

perform financial health checks using standard tools on a regular basis. Financial literacy growth enables operators to take proactive control of growth while actively pursuing outside funding opportunities and investing their resources for sustained business success.

5.4 Strategic Alliances and Networking

A business needs effective partnership development during economic downturns to determine its survival. The success of car service stations depends on their ability to establish partnerships between industry companies and organizations from different sectors. The partnership between car companies and suppliers and providers and sales companies enables them to create and market deals which appeal to a broader customer base. Members of network organizations such as franchising and service cooperatives and industry communities benefit from reduced advertising costs while gaining access to bulk material pricing and training and shared operational standards. Members of alliances experience reduced isolation because they can collaborate and study businesses together and discover optimal operational approaches. Local business networking events combined with digital online forums create an environment that supports success. The planned use of these tools enables you to detect recent fintech developments and locate potential investments and track regulatory changes. Such long-term partnerships between stations help both their financial stability and adaptability capabilities in unstable economic conditions.

CONCLUSION

Today's economies require car maintenance and repair services to maintain their operational foundation. The operations of car service stations ensure safe transportation and support job creation and entrepreneurial ventures and small business expansion. This comprehensive research shows that these businesses face significant economic fluctuations because of COVID-19 and rising inflation and unstable political climates and unpredictable energy costs.

This research shows that financial stability in the industry stems from multiple broad and narrow economic conditions. The combination of economic downturns leads to reduced consumer spending alongside supply chain problems and reduced workforce demand and higher funding costs which diminishes the financial performance of car service stations. The degree to which a business suffers from these effects depends on the existing resilience measures within the organization.

The case studies together with data presented in Section 3 indicate that certain service station owners suffered major losses but others managed better outcomes through their proactive planning. Business success was greater for companies which used technology together with multiple services and low stock levels and digital customer engagement. A company's financial resilience stems from its business choices as well as its models and abilities in addition to economic conditions.

The approach in Section 4 shows how to create financial resilience. Companies can protect their operations through diverse service offerings and multiple customer segments when market demand shifts. Efficient practices in energy spending and supplier relations and stock management help businesses protect their profit margins during challenging times. Financial stability and customer loyalty during difficult times become easier for fuel stations when they adopt innovative pricing methods and packaging strategies.

Business planning through technology adoption has become an essential requirement for all organizations. Businesses can improve their productivity while gaining real-time data access through their customer management systems and digital stock tracking and diagnostic tools. Many worldwide regions have residents who cannot implement these tools because they lack the financial means to afford them or lack the necessary understanding of their operation. The situation shows that outside assistance must be brought to the table.

The following section presents essential financial industry actions which extend beyond organizational limits. Policymakers and industry players must

collaborate to create appropriate settings because this partnership drives significant support for financial stability.

Governments need to provide SMEs with financial assistance while improving regulations and expanding educational support and training programs. Financial institutions should provide seasonal and adaptable loans to the car service industry while trade associations should distribute best practice guides and promote supply chain coordination and equipment sharing.

The industry requires managers and owners to receive financial literacy training together with digital capability development as part of their capacity development programs. The main cause of industry business failures stems from poor budgeting alongside insufficient risk anticipation and reactive operational approaches. The unpredictable nature of the global economy requires us to take immediate action for system adaptation. The automotive service industry will face additional changes because of climate change alongside growing electric vehicles and shifting consumer behaviors. Car service stations that embrace innovation through strategic partnerships and maintain strong financial stability will achieve better prospects for future success than mere survival. Building financial strength for a car service station demands support from both internal development and external factors. Service stations can build economic resilience through diverse revenue streams and cost reduction initiatives and digital system enhancements and relationship development with key stakeholders. The ability to be resilient protects individual businesses and enables the continuation of transportation services and employment opportunities and economic stability. Planning for the future combined with knowledge growth and policy alignment will become critical elements for this essential sector.

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