Assessing the Determinants of Firm Performance Among Manufacturing Companies: A Qualitative Analysis

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Abstract

This study evaluates the influencing factors of firm performance among manufacturing companies in Ghana. Data used for the research is from the set of questionnaires issued to managers and employees. This research uses the organizing, structuring, and attributing significance to the extensive data that has been collected. The results show that flexibility, reduced lead time, forecasting, resource planning and cost saving, and reduced inventory level influence organizational performance. On the same line, Forecasting and Reduced Inventory Levels influence the firm performance to a significant. Reduced lead time and resource planning focus on internal markets may be attributed to the less proactive nature of firm key operations.

Keywords: Firm Performance, manufacturing companies, qualitative method, SPSS

Introduction

Ghana has been integrating into the growth of the world economy (Mohammed & Bunyaminu, 2021). With the advent of FDI businesses in Ghana, the market is becoming more competitive, and businesses must run efficiently to survive and grow (Appiah, Li, et al., 2019; Appiah, Li, & Korankye, 2019). The greater the firm performance, the more opportunities there are for businesses to increase and develop their production, add workers, raise worker living standards, and meet their financial obligations to the state budget (Dodoo et al., 2020). Manufacturing companies have gradually supplied the nation's economy with a wide range of vital items, met local demand, begun to replace imports, and started taking part in export activities with a diversity of designs and types (Prempeh, 2015). Intense competition exists for various products in both local and international markets. Furthermore, a significant portion of the industry's overall production and the country's gross domestic product (GDP) can be attributed to manufacturing firms. However, the performance of manufacturing companies has not been consistent, and challenges persist (Opoku et al., 2020).

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Manufacturing businesses in Ghana, in general, and Manufacturing businesses listed on the Ghana Stock Exchange (GSE), in particular, nevertheless confront several challenges despite development potential (Nsiah et al.). Manufacturing companies have been directly impacted by the negative effects of economic crises, ongoing changes in interest rates and inflation, as well as state management policies (Naliaka & Namusonge, 2015). Due to the unique characteristics of the manufacturing sector, where companies frequently need to obtain additional funding from outside sources, manufacturing companies in Ghana are placing an increasing emphasis on corporate governance, particularly on financial aspects that should be tailored to their needs (Mbah et al., 2019). Every company needs to make decisions about relevant financial metrics because they impact their ability to thrive in a competitive market and because this can optimize the advantages derived from interconnected individuals, entities, and business procedures (Soto-Acosta et al., 2016).

Will manufacturing companies do better if they borrow a lot of money during a time of high inflation? Contrarily, in the current time, which exhibits low inflation, manufacturing enterprises continue to post annual losses despite the substantial decline in bank loan interest rates and easy access to bank loans. What are the primary causes behind the improvement or decline in firm performance? Does the performance of the business depend on its internal variables? Studying how internal factors affect a firm's performance is so important and extremely useful for manufacturing firms. This study uses a mixed research methodology to identify internal characteristics that affect the performance of Manufacturing companies listed on the GSE. The paper then makes suggestions for enhancing the performance of these companies.

2 Literature Review & Hypothesis Development

2.1 Flexibility and Firm Performance

Flexibility now plays a key role in how operations can be strategically designed to contribute significantly to gaining a competitive edge (Camison & Lopez, 2010). The ability to deploy or redeploy production resources effectively in response to changes in the environment is referred to as manufacturing flexibility (Javahernia et al., 2017). Many authors have viewed manufacturing flexibility as a crucial tool for manufacturing businesses competing in situations with rising levels of uncertainty and volatile markets (Khalaf & El Mokadem, 2018). The actual effects it has on organizational performance, however, are not well supported by empirical evidence. El-Khalil and Darwish (2019) reviewed the empirical research that has already been done on manufacturing flexibility and identified two opposing perspectives. On the one hand, several research supports the idea that manufacturing flexibility and organizational effectiveness are directly related (Chahal et al., 2019; Yousuf et al., 2019). The relationship between the two constructs, however, is moderated or contingent according to other studies (Srinivasan & Swink, 2018; Балабанюк, 2020). Recently, some authors have even discovered a negligible connection (Wagner et al., 2018). Using case studies to investigate the issue, other studies have also sought to clarify this ambiguity (Yousuf et al., 2021).

There is an obvious need for a greater study addressing the indirect and direct linkages connecting manufacturing flexibility and performance, according to (Abdelilah et al., 2018). The dynamic capabilities research line, in particular, contends that superior performance is explained by a firm's capacity to continuously upgrade its resource and capability of competitors' imitations and outperform

them in the fight for continuous progress (Camps et al., 2016; Dubey et al., 2018). Therefore, utilizing manufacturing flexibility in conjunction with the growth of inventive capabilities will only result in exceptional outcomes. The study based on the above can hypothesize that:

H1: Flexibility is positively correlated with organizational performance

2.2 Inventory management and Firm Performance

Any company aiming to enhance its performance and attain high levels of customer satisfaction should give utmost importance to inventory management. Nzuza (2015) asserts that the majority of an organization's assets consist of the material it now owns. Most businesses spend a lot of money on materials, so they must have a good material management system to effectively manage their inventories. An organization's profitability may be significantly impacted by a proper inventory management system (Chan et al., 2017). Effective management significantly enhances the organization's performance, particularly in evaluating the material management system's effectiveness and the organization's overall efficiency.

In many cases of successful inventory management decisions, inventory planning models have been developed and implemented, with a particular focus on addressing both inventory quantity and timing issues (Mutuvi et al., 2019). Businesses can often assess their profitability using inventory management models designed to find the right balance between procurement and holding costs of goods. The primary reason for inventory fluctuations is the failure to implement inventory control systems based on fundamental principles. Additionally, inadequate information flow between leaf collection facilities and companies contributes to this issue Naliaka and Namusonge (2015), considerably contributes to high operational expenses. Since tea leaf inventory is one of the factory's major assets and is necessary for effective operational performance, it must be well controlled. Companies must properly develop and run materials management and product distribution activities if they want to succeed in a competitive environment.

Using inventory control systems, a business may establish and maintain the ideal level of inventory investment needed to deliver the necessary operational performance. According to Atnafu and Balda (2018), inventory management and control are used to satisfy client demand. Furthermore, according to Kansime (2015), businesses must take steps to prevent stock-outs to meet client demand without paying exorbitant inventory expenses. Variability in stocking levels is brought on by things like poor forecasts and information exchange. He discovered that businesses not using inventory control systems mostly cause fluctuation in inventories. He listed a number of the negative implications of inventory unpredictability, including faulty forecasting that causes periods of insufficient capacity, which results in subpar customer service and high inventory costs.

H2: Firms with high levels of Inventory Management Practices will have high levels of organizational Performance

2.3 Resource Planning and Cost Saving and Firm Performance

The Resource Planning system is a method of controlling company practices via an integrated system, typically in the form of software. The literature has stressed the significance of the RP system, especially its function as software that unifies and controls all organizational management levels through a single system (Hwang & Min, 2015). The Resource Planning system can also connect top, medium, and lower level management Aremu et al. (2018), allowing for the coordination of all management levels and their departments through an integrated system. Previous research on the Resource Planning system has shown that it reduces operational costs, increases product and service quality, and shortens operational time (Sheik & Sulphey, 2020). But studies have shown that elements like user ignorance, poor user training, technological advancement, user interest, communication process issues, financial capacity, top management support, and organizational culture are influencing the adoption of RP systems in business organizations (Aremu et al., 2018). Aspects including users' enthusiasm in using the RP system, perceived ease or simplicity of use, the value of the system, and experience in teaching users how to use it have also not yet been established in previous studies (Antero, 2015; Aremu et al., 2018). Additionally, according to (Asamoah et al., 2015; Bazhair & Sandhu, 2015), they haven't shown how the Resource Planning system links to other organizational components like financial performance, organizational structure, organizational culture, information access, and top management support. Therefore, it is recommended that middle size firms implement RP systems since they use an integrated database system, which increases their competitive edge in the global market (Hwang & Min, 2015).

Inventory service level was suggested as one of the typical delivery service characteristics by (Rutner et al., 2003). The proficiency of a firm's inventory management directly reflects the level of inventory serves as a type of service flexibility. An organization can maintain a reasonable level of raw material, work-in-process, and finished goods inventory while simultaneously reducing inventory waste by utilizing the service-cost trade off relationship. Intra-company inventory management flexibility allows a company to effectively oversee its stock and ensure it meets customer demands promptly. Conversely, inter-company inventory management flexibility enables a company to coordinate its stock with other players in the supply chain. These adaptations aim to establish a satisfactory level of inventory service throughout the chain through strong coordination, engagement, and close communication. Collaboration among supply chain participants helps prevent both shortages and excess inventory. According to (Zhang & Liang, 2006), causal relationship exists between performance and the flexibility of inventory management. They suggested that companies can benefit from their managerial skills, as well as their abilities in intra- and inter-inventory management, and their high levels of inventory service flexibility when they possess effective inventory management flexibility. This is because a flexible competence, which is an internal management emphasis, provides the systems and infrastructure needed for a company to attain the right levels of capability.

H3: Performance of organizations and Resource Planning system are positively correlated.

2.4 Forecasting and Firm Performance

The majority of forecasting research was conducted in the context of large firms (Hill et al., 2018). Due to their smaller operational volumes, lower levels of rivalry, and lack of resources and experience,

smaller businesses thought forecasting was less important and exerted less effort. Internal factors such pricing changes, product quality, distribution systems, and advertising strategies are the main causes of forecast inaccuracies (Miyakawa et al., 2017). For evaluating precision, researchers utilize mean error (ME), mean square error (MSE), mean absolute error (MAE), and mean absolute deviation (MAD) (Daisuke et al., 2017).

The detrimental effect of forecast mistake on business performance was established by (Ilmudeen et al., 2020). Annastiina et al. (2009) examined the effects of inaccurate forecasting on planning, capacity, and inventory. The study showed the need for more information and the difficulties in connecting forecast mistakes with business performance. Makridakis et al. (1982) revealed that accuracy, cost, and perceived utility are chosen as forecasting performance metrics. Organizations must enhance their forecasting judgment, which calls for an understanding of the sources of inaccuracies. (Wacker & Sheu, 2006; Wacker & Noskov, 2018) all investigated the impact of prediction error on inventory cost. All research results emphasize the importance of minimizing forecast error's negative impact on managerial choices and business performance.

The backdrop of most forecasting studies is that of major firms (Hsu et al., 2021). Due to their lower operational volumes, lower levels of competitiveness, and lack of resources and experience, smaller businesses view forecasting as less vital and exert fewer efforts. Eight factors were used by Smith et al. in 1996 to measure the usage of forecasting, and the results show no appreciable difference between SMEs and large businesses in terms of timeliness, accuracy, or overall satisfaction. Smith asserts that more individuals are involved in forecasting approaches with less of a preference for subjective methods. In comparison to large organizations, the time between forecasts and results is shorter for small firms. Using the same eight indicators, Oduro et al. (2021) found that there are more parallels than differences between industrial product enterprises and consumer product firms.

H4: Performance of organizations and Forecasting are positively correlated.

2.5 Reduced Lead Time and Firm Performance

To gain a respectable market share and boost consumer satisfaction, businesses must offer superior service and quality to effectively compete. Smarter consumers no longer solely base their purchasing decisions on price; they prefer fair prices, but high-quality goods and services, as well as appropriate lead times, are crucial elements in determining customer satisfaction (Stowers et al., 2020). It's important to keep in mind that agile supply chains demand low total lead times, which are measured as the interval between a customer's request for a good or service and when it is delivered (Aitken et al., 2002). The mechanism for time-based competition in the supply-production-distribution chain is lead time reduction. The ability to manage lead times can give businesses a competitive edge and improve client satisfaction. The opposite of controlling quality, cost, innovation, and productivity might be managing time. Adopting the just-in-time manufacturing mindset and focusing on topics like flexible manufacturing cells (FMC) or flexible manufacturing systems (FMS), automation tools, and effective information technology tools are vital for lowering lead times (Christopher & Towill, 2001).

Lead time is a crucial component of efficient materials management that aims to ensure prompt delivery of supplies, components, and work-in-progress. Lead time's primary goal is to genuinely help the business get competitive advantages while providing the right product at the right time and location, thereby delighting the client (Thürer et al., 2022). According to (McCarthy & Golicic, 2002), the key advantages of materials management are improved quality control, lower material costs, and improved supply continuity with shorter lead times. These improvements will also improve cooperation and communications with less effort duplication.

H5: there is a positive link between Performance of organizations and reduced lead time.

3. Data and methodology

3.1 Research Design

In every study, the researcher has the choice of a survey, experiment, history, archival record analysis, and case study (Yin, 2003). According to (Mark Saunders et al., 2007; M Saunders et al., 2007), the study design used a survey strategy. Surveys are typically associated with the deductive research approach, which is typically used in business sections and management research. As was the case in this study, surveys typically use questionnaires to collect data (Green, 2014). The investigation was carried out in a few chosen manufacturing facilities in Ghana. There are three different types of research methods, including the quantitative, qualitative, and hybrid approaches, according to (Creswell, 2009) and (Mark Saunders et al., 2007). In a quantitative study, variables are numerically measured, and the data obtained is then statistically analyzed (Mark Saunders et al., 2007; M Saunders et al., 2007). "Qualitative research is a technique of studying and comprehending the meaning individuals or groups attach to a social or human problem," claims (Creswell, 2014; Creswell & Creswell, 2017). The emphasis on numerical (numbers) or non-numeric (words) data is one technique to differentiate between the two. Largely quantitative studies are those that use structured questionnaires, whereas studies mostly qualitative studies that use observation or interviews (Creswell, 2014; Creswell & Creswell, 2017). In a single study, the mixed technique combines qualitative and quantitative approaches. The blended approach has a stronger overall impact than either qualitative or quantitative research (Creswell, 2009). This study adopted a quantitative method in accomplishing the objectives set.

3.2 Population and Sampling Techniques/Sample size of the study

A population is unmistakably a distinguishable group of instances where a sample was researched and conclusions extrapolated by the researcher (Newman & Hugo, 2006). This can apply to any individuals or things that have study-related traits. The population is the entire set of units representing the problem or phenomenon under study (Kumekpor, 2002). The management and employees of the chosen manufacturing enterprises made up the study's population. As a result, the offices' total population is roughly 105. Members of the management team were chosen via purposeful sampling. Purposive sampling involves choosing respondents who are subject matter experts in the study area or have the technical expertise to provide the pertinent data required for the study (Mark Saunders et al., 2007; M Saunders et al., 2007). Staff members who are accessible and capable of responding to the questionnaire are chosen at this point. A total sample size of 105 individuals was used.

3.3 Data and Data Analysis Techniques

According to (Kothari, 2004) primary data are data that are obtained anew and for the first time and hence happen to be original ". Primary data are those items that are unique to the topic at hand, according to (Steelman et al., 2014). Questionnaires were the primary instruments used to obtain primary data. The questionnaires were made to focus on a particular purpose, query for research, or test a hypothesis (Mugenda & Mugenda, 2003). In order to gather accurate and reliable data, questionnaires were used since, in accordance with (Kothari, 2004), information obtained from them is free from biases and researcher influence. With the assistance of study assistants, the surveys were self-administered. Self-administered questionnaires provide advantages over in-person interviews in that they are less expensive and give the researcher access to individuals who might not otherwise be reachable, according to (Cooper & Schindler, 2003).

Data analysis involves the task of organizing, structuring, and attributing significance to the extensive data that has been collected. The material obtained during data collecting was carefully submitted for comprehensive investigation and analysis, which aided in the study's conduct and allowed for the formulation of pertinent recommendations for the organization and the larger society (Mugenda & Mugenda, 2003). For analysis purposes, the responses were entered into the Statistical Package for Social Sciences (SPSS) program. Frequency distributions and tables were utilized to illustrate the results. The Cronbach alpha multivariate analysis was used to examine the data's dependability. Descriptive analysis such as mean, percentages, and standard deviation tools all provided meanings and interpretations.

3.4 Validity and Reliability of data

The extent to which a data collection method or procedure accurately measures what they were intended to measure is known as validity (Mark Saunders et al., 2007; M Saunders et al., 2007). A variety of actions were performed to guarantee the study's validity. First of all, the research tools were created using empirical literature. In addition, the research tools were pilot tested, allowing the researcher to make the necessary modifications for the final inquiries. Data from the workforce and management of the manufacturing enterprises in Ghana's were gathered using the enhanced questionnaire. Last but not least, the data were gathered in 3 weeks, and during this brief time, no significant event with a linked issue has changed. Reliability, according to (Mark Saunders et al., 2007; M Saunders et al., 2007), refers to the degree of consistency in the outcomes, observations, or interpretations that different researchers would obtain using the same data collection method. It also relates to the clarity in transforming raw data into meaningful insights. In this study, Cronbach's alpha was employed to assess internal consistency, which measures how closely a set of items within a dataset are interconnected. In social science research, a reliability coefficient of 0.70 or higher is considered "acceptable".

4. Results and Discussions

The study looked at the elements influencing the manufacturing company's organizational performance. Flexibility, shorter production lead times, forecasting, resource allocation, and cost savings are among the variables used to evaluate the aspects influencing organizational success. The variables in Table 2 below are used to assess organizational performance in manufacturing firms using the mean,

standard deviation, and percentages to interpret the data. The study took into account a variety of demographic factors, including respondents' gender, marital status, degree of education, and length of employment with the municipality.

Variables	Frequency	Percentage	
Gender			
Male	64	66.0%	
Female	33	34.0%	
Age of Respondents			
21-30 years	36	37.1%	
31-40 years	35	36.1%	
41-50 years	26	26.8%	
50 years and above	0	0.0%	
Marital status			
Single	34	35.1%	
Married	58	59.8%	
Divorced/Separated	5	5.2%	
Educational qualification			
Master's Degree	41	42.3%	
First Degree	40	41.2%	
Higher National Diploma	16	16.5%	
Years of working with the company			
Under 1 year	3	3.1%	
1-2 years	37	38.1%	
3-4 years	26	26.8%	
5 years and above	31	32.0%	

Table 1: Demographic information of respondents

The study aimed to determine the gender distribution of the participants. The results indicated that males constituted the majority, accounting for 66.0% of the respondents, while females comprised 34.0% of the workforce. Regarding age distribution, 37.1% of respondents were between 21 and 30 years old, 36.1% were between 31 and 40, and 26.7% were 50 years or older. In terms of marital status, 35.1% were single, 59.8% were married, and 5.2% were divorced. Concerning educational attainment, the majority, at 42.3%, held a Master's degree, 41.2% had a Bachelor's degree, and 16.5% possessed a Higher National Diploma. Regarding tenure, 3.1% had been employed for less than a year, 38.1% for 1-2 years, 26.8% for 3-4 years, and 32.0% for 5 years or more.

Variable	Cronbach Alpha	Number of Items
Flexibility	.662	7
Reduced Lead Time	.795	6
Forecasting	.728	3
Resource Planning and Cost	.769	6
Saving		
Reduced Inventory Level	.899	9
Organizational Performance	.765	9

Table 2: Reliability Data using Cronbach's Alpha

The study utilized the Cronbach Alpha coefficient to assess the internal consistency and reliability of the variables employed. The table in the fifth section displays the variables along with their respective coefficients. Calculating the Cronbach's Alpha coefficient involved using the collected data to assess the reliability of the scales used in the questionnaire. This assessment aimed to determine if the questionnaire items were consistent and reliable in measuring the same construct. Ideally, a scale's Cronbach alpha coefficient should exceed 0.7 (DeVellis et al., 2003). Values exceeding 0.7 are considered satisfactory, with values surpassing 0.8 being more desirable. Some scholars have also indicated that an alpha of 0.4 can be deemed acceptable. In all reliability tests, the Cronbach alpha exceeded 0.4, affirming the robust internal consistency of these variables.

	OP	FL	RLT	FO	RPS	RIL
OP	1.000					
FL	0.546	1.000				
RLT	0.732	.599	1.000			
FO	0.784	.566	0.6604	1.000		
RPS	-0.8356	0.6089	0.6777	0.435	1.000	
RIL	0.623	0.5620	0.6197	-0.7930	0.6107	1.000

Table 3. Correlation Results

Table 3 shows the factors' unconditional correlations. With the exception of Resource Planning and Cost Saving (RPS), the organizational performance (OP) was positively connected with all variables. The Reduced Lead Time (RLT) and Forecasting (FO) were shown to have greater association with organizational performance. As a result, there is no substantial multicollinearity among the variables chosen. The study suggests that these variables are favorably connected with organizational performance based on these connections.

Variables	Mean	Std. Deviation	Percentages %	Ν
Flexibility	3.9979	.41382	78.0%	97
Reduced Lead Time	3.9974	.45428	78.0%	97
Forecasting	4.0124	.55137	80.0%	97
Resource Planning and Cost Saving	3.8900	.61750	76.0%	97
Reduced Inventory Level	4.0653	.65199	80.0%	97

Table 4: Results on the factors affecting organizational performance.

Flexibility is seen as a key differentiator in the present market, and it gives businesses a competitive edge by permitting the production of a greater range of goods in the facility. Analysis of organizational performance-affecting elements for manufacturing companies takes flexibility into account. The variable received a mean score of 3.9 and a response rate total of 78.0 percent. The organization has the capacity to quickly adjust to changes in its business environment in order to satisfy client demands and expectations, according to the findings. Additionally, the business often lowers supply chain risks by implementing alternative sourcing for procurement and a wide variety of vendors. Once more, the business uses subcontractors and holds stock by delivering from inventory and hiring resources from subcontractors. Flexibility in supply networks refers to the capacity to adapt to sudden changes in demand or supply conditions or other external disruptions, as well as the ability to adjust to structural and strategic changes in the environment of the supply chain. Thus, agility and adaptability are combined into flexibility (Lee, 2004). The study's findings indicate that organizational structure flexibility is crucial for businesses to become more adaptable and that it has a beneficial effect on organizational agility skills. The findings of this study have been in agreement with those of some recent investigations. According to Koçyiğit and Akkaya (2020), there is a strong correlation between organizational agility and flexibility. According to Chester and Allenby (2019), good infrastructure in the twenty-first century will need to be adaptable and agile, and they have also recognized the connection between the two.

Lead times and inventory control are critical to a company's overall supply chain responsiveness and efficiency. The reduced lead time was analyzed as a factor in the manufacturing company's organizational performance analysis. Reduced lead time had a mean rating of 3.9 and a response rate total of 78.0 percent. Findings showed that e-procurement is most frequently used by roofing sheet manufacturers to cut down on time wastage and delays in product production and delivery to customers. The analysis also showed that while the company typically relies on stock supply, it occasionally uses single sourcing and just-in-time delivery. As stated in the literature by (Wang et al., 2008), efficient management of lead times is seen as a competitive edge since it can decrease supply chain expenses by reducing inventory quantities, while simultaneously enhancing performance and customer service through better product quality and service levels. As a result, all survey participants concurred that reducing lead time offers a competitive advantage to the company.

Forecasting produces dynamic logistics demand and is crucial for managers to use when making decisions. Forecasting was evaluated as part of the analysis of the elements influencing the manufacturing company's organizational performance. The variable received a mean score of 4.1 and an overall response rate percentage of 82.0. The outcome showed that the corporation continually takes

future demand uncertainties into account while planning output. Again, the corporation typically takes demand prediction into account in its effort to satisfactorily serve clients while being profitable. The organization also assesses the effectiveness of the supply chain in terms of achieving the customers' delivery goals. The organization does forecast in order to supply the order more confidently while encouraging information sharing to increase the accuracy of projections. Companies that provide fast delivery to their customers often pressure their competitors in the market to keep finished product stocks to ensure they can offer rapid order processing times (Coyle et al., 2003).

Resource allocation and utilization that is efficient have a significant impact on cost-effective manufacturing that increases profit margins for businesses and organizations. Resource planning and cost-cutting were assessed as organizational performance-affecting elements for the manufacturing company. The variable received a mean score of 3.8 and a response rate percentage of 76.0 overall. The results showed that the business strategically planned its resources to be used most effectively and efficiently, which reduced costs for the business. Additionally, the business increases production efficiency while concurrently lowering production costs per unit. To cut ordering costs and shorten order lead times, the organization is using an e-procurement application. The results of this study corroborate with that of Zhang and Liang (2006), they revealed that there is a causal link between performance and resource planning. They suggested that companies can benefit from their managerial skills, both within their inventory management teams and in coordinating between different inventory systems. This high level of flexibility in inventory services is a result of effective inventory management flexibility. This is because a flexible competency, which is a key aspect of internal management, provides the required systems and infrastructure for a company to attain the desired levels of capability.

Today's businesses must be quick and nimble enough to respond to changes in customer demand while maintaining little inventory. Manufacturers used to store a lot of raw materials, pile up work in progress on the shop floor, and fill up warehouses with finished goods. The reduced inventory level was measured when examining the elements influencing the manufacturing company's organizational performance. The reduced inventory level had a mean rating of 4.0 and an overall response rate percentage of 80.0. According to the findings, the business uses just-in-time delivery of supplies to ensure that it keeps a limited amount of inventory on hand. The manufacturer of roofing sheets typically reduces inventory in order to free up warehouse space and expand the area available for future production.

Conclusion

With this exploratory study, we put forward an exploratory model to link firm performance with the influencing variables such as use of Flexibility, Reduced Lead Time, Forecasting, Resource Planning and Cost Saving, Reduced Inventory Level in the 10manufacturing firms context. It is observed that the use of Flexibility, Reduced Lead Time, Forecasting, Resource Planning and Cost Saving, Reduced Inventory Level influence the organizational performance. The role of performing firms by means of the use of forecasting followed in the firm is explained. Forecasting and Reduced Inventory Level influences the firm performance to a significant extent as evident from the mean values. Firms can be benefitted from giving more importance to forecasting and reduced inventory level. These findings agree with the observations of Saini and Budhwar (2008) that the key factors of Indian firms act as informal and proceed without structured processes under the assumption that it will help them minimize cost and provide the necessary in – built flexibility in their operations. Reduced lead time and resource planning focus on internal markets may be attributes for the less proactive nature of firm key operations.

The results showed that the company can quickly adjust to changes in its business environment to meet customer demands effectively. Additionally, the company often mitigates supply chain risks by using alternative suppliers for procurement. The findings also demonstrated that the roofing sheet manufacturing company frequently utilizes e-procurement to streamline production and distribution, reducing delays. Furthermore, the company regularly considers production planning to address potential demand fluctuations. The study revealed that the company efficiently optimizes resources through strategic planning, resulting in cost savings. Moreover, the company enhances production efficiency while simultaneously reducing production costs per unit. Furthermore, the company employs e-procurement tools to shorten order lead times and reduce ordering expenses. The findings also highlighted the company's practice of just-in-time inventory management to minimize inventory holding, ensuring supplies are delivered as needed. Lastly, the study indicated that the company maintains an effective cash flow system and actively engages in inventory reduction.

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