An empirical investigation of effect of sustainable and smart supply practices on improving the supply chain organizational performance in SMEs in India

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A B S T R A C T

Implementing sustainable and smart supply chain practices have a great impact on the performance of an organization. In today's globalized and highly industrialized world, sustainability is recognized as one of the highest priorities of all organizations. Evolution of internet-based technologies, digital platforms and big data analytics have paved the way for redesigning supply chains to be smart, agile, and resilient. Therefore, the implementation of practices related to these two concepts is found to improve the supply chain related organizational performance. This research aims to investigate empirically the impact of these two practices on improving the supply chain organizational performance in the Small and Medium Enterprises (SMEs) of India. This research considered the dimensions and the variables related to sustainable supply chain and smart supply chain practices in SMEs in India which were not considered in research contributions prior to this. Therefore, this research becomes a unique contribution to the existing body of knowledge. Empirical analysis was carried out on data from 92 SMEs from Telangana State in India, collected using a questionnaire. The directory of SMEs of Government of Telangana, India was used to select the cluster sample of SMEs as respondents, based on a criterion using exploratory research methodology. SPSS software was used to test the model. Regression and ANOVA were used for this purpose. Findings of this research reveal significant influence of sustainable and smart supply chain (SC) practices on improving SC organizational performance. Additionally, individually each of these practices also have a direct influence on the performance of SMEs. Obtaining responses from the representatives of SMEs was a challenge and limitation of this research while expanding the scope of this research to different geographical regions and clusters will be a topic for further research. The outcomes and results of this research provide significant contribution to the existing body of knowledge by filling the gaps and value-adding to the researchers, academicians, students, policy makers and industry practitioners.

1. Introduction

The Supply Chain Management (SCM) concept, its strategies and practices have emerged to be one of the most important aspects of successfully running a business organization especially during and post-pandemic period (Alshurideh et al., 2022). There is a growing awareness about SCM both in the academic side as well as in the industry. Organizations have been able to achieve competitive advantage through its effective implementation. SCM also enabled organizations to reduce their overall operations and supply chain costs, leading to increased profits and enhanced customer satisfaction through better product availability (Chen, 2019). These outcomes in terms of costs have resulted in improving the overall organizational performance (Anwer et al., 2017). Out of many emerging strategies in supply chain, two most important strategies, sustainable supply chain and smart supply chains have gained research importance by both academic researchers and industry practitioners (Fetter, 2019). However, it is found that there is a huge difference in terms of implementation of these two strategies of SCM between Small and Medium Enterprises (hereinafter termed as SMEs) and large size business organizations (Allaoui, 2019;

Ahmad et al.و 2020). Majority of SME organizations encounter multiple challenges in the implementation of these two strategies of SCM due to their lack of interest, lack of awareness, absence of skills, and interest in investing in SCM (Jesca 2019; Maureen et al.و 2020). To address this issue and research gap, this research focuses on investigating the relationship and influence of sustainable and smart chains on organizational performance in the SME sector. The research is an important and valuable contribution as it's a study on how SMEs can take leverage of two most important SCM strategies to achieve better performance.

Many researchers found that implementation of SCM strategies will enhance performance of SMEs in terms of their SCM capabilities (Hong & Jeong, 2006) by increasing their visibility, by providing long-term growth, by improving product availability and by making their organizations smart and sustainable in future (Ramakrishna, 2016; Ivanov 2020). It also provides them with the ability to quickly recover from any type of unprecedented disruptions and pandemics (Agigi et al., 2016). SMEs can also achieve competitive advantage through SCM. Globalization threw many challenges to SMEs in the world and especially in India (Rouhollah & Shivraj, 2011; Sharma, 2020). Traditionally, India is known for its huge contribution to the economy through the performance of SMEs and it is continuing. Support from the government through various incentives and training programs for knowledge enhancement have improved the confidence of SMEs. However, much more is required to be done in SCM. Therefore, this research is a timely and needy one to boost the abilities of SMEs in terms of performance related to supply chains.

To be competitive in the globalized business environment, SMEs need to be sustainable. To be sustainable, it is found that some of the internet-based technologies have the power to strengthen SMEs by transforming their existing SCs from linear to smarter, known as 'Smart Supply Chains (SMSC)'. These smart supply chains have the capability to provide competitive advantage to SMEs by effective information sharing, collaboration, integration, inventory, order and demand management across their supply chains. Some of the popular technologies used in SMSC are Robotics, Internet of Things (IoTs), Blockchain, Machine Learning (ML), Big Data Analytics (BDA), Artificial Intelligence (AI) and Cloud Computing (Jain et al., 2018).

Organizational performance is measured by various dimensions such as financial, societal, people, stakeholder opinion etc (Ballou et al., 2000). It is highly affected by the supply chain strategies of top management in which sustainable SCM practices and smart SCM practices have a significant role. It is important to identify which practices of these two strategies impact the performance of an organization. In the present research, this aspect is focused and the influence and relationship of sustainable and smart SCM practices on organizational performance is empirically investigated. The SME sector in India is highly competitive, structured, and supported by the government through various schemes and incentives for better performance. However, they face many challenges due to their lack of proper awareness about SCM practices and SCM technologies. Thus, this research enables the SMEs to take advantage of smart SC practices along with sustainable SC to enhance their overall organizational performance. Therefore, this research is conducted to explore the specific practices of sustainable and smart SC, their relationship with organizational performance and their influence on improving the performance.

2. Theoretical Framework

The theoretical framework of the present study is based on identifying the relationship and influence of sustainable supply chain strategy, smart supply chain strategy and their combined influence on improving organizational performance.

2.1 Sustainable Supply Chain

Sustainable supply chain management (SSCM) can be defined as:

"The strategic, transparent integration and achievement of an organization's social, environmental and economic goals in the systemic coordination of key inter-organizational business processes for improving the long-term economic performance of the individual company and its supply chains" (Carter and Rogers, 2008). It is also defined as the "management of material and information flows as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development, i.e., economic, environmental and social, and stakeholder requirements into account" (Seuring et al., 2008).

The concept of SSCM is an emerging one and has been gaining significant importance among academicians in the research area and practitioners in industry due to its effect on enhancing the performance of organizations, especially the SMEs (Shibin et al., 2020). In general, most of the research focused on three P's approach, i.e. People, Profit and Plant individually, but not by combining all the three aspects and the studies did not focus on the influence of smart technologies on achieving sustainability in supply chains (Mohamed, 2019). Linear SC practices are found to generate different types of pollution resulting in degradation of environmental resources (Liudmyla Deineko et al., 2019). Therefore, coordination, integration, information sharing and resilience lead to the sustainability in SMEs and improve their performance (Koh, 2017; Pettit et al., 2019; Papadopoulos et al., 2020). Implementation of all these sustainable supply chain practices leads to improvement of organizational performance in SMEs and makes them futuristic (Genovese, 2017). Stakeholder management, Sustainable

Supplier Management, Value Chain Governance, Green Supply Chain Initiatives are significant dimensions of Sustainable Supply Chain Strategy (Mohsen et al., 2014; Masroor, 2022), and they are also considered for the present study.

2.2 Smart Supply Chain

The emergence of internet-based technologies such as Big Data Analytics, Supply Chain Analytics, application of Robotics, Artificial Intelligence, Blockchain, and Machine Learning has paved the way for enhancing the ability of SCM to become 'smarter'. These technologies enable SMEs to easily procure, analyse and interpret the huge data related to the processes in SC systems (Savitz, 2013). These technologies are a combination of hardware and software which use several databases and sensors. They can make optimum decisions, like human beings and their usage is found to reduce costs related to data collection (Fu & Zhu, 2010). SMEs should take advantage of this digital era in revamping their SCM systems and processes to get cost benefits. These systems are going to dominate the SCs in future generations (McKinsey, 2016). SMEs can get huge benefits in the long run towards sustainability, if they can implement affordable internet-based technologies and apply big data analytics tools in their SC systems and processes, resulting in transforming their SC into a Smart SC (Chui et al., 2010). Most of the researchers (Gunasekaran et al., 2017) agree that application of big data analytics in SCM enables SMEs to obtain a useful model of decision-making and enables redesigning of their SCM towards a smart and sustainable one, termed as Supply Chain Analytics (SCA). Some of the objectives of SSCM such as agility and lean operations can be achieved by SMEs with the implementation of SCA (Chae et al., 2014; Alshurideh et al., 2023). Information Sharing, Application of Digital Technologies, Usage of Supply Chain Analytics are considered as dimensions for Smart Supply Chain Strategy (Chui et al., 2010; Gunasekaran et al., 2017; Kot et al., 2020).

2.3 Organizational Performance

Organizational performance is an important metric to analyse the achievement of objectives related to sustainability. Development of measurable outcomes by including sustainable systems and processes in the supply chain play a significant role. Additionally, optimising SC costs through lean and smart systems with the application of internet-based technologies will enable improved performance of SMEs. (Alshurideh et al., 2022).

Earlier research in SCM, tried to establish metrics related to SC for achieving improved organizational performance. Some of the popular contributions include that of Bowersox et al. (1999) and Gunasekaran et al. (2004). These two authors focused on performance aspects such as financial achievements, quality related to measures, value of assets, productivity, customer satisfaction. SC performance metrics were also considered at different hierarchical levels of the organizations. In SMEs, generally, there is less hierarchy due to their organizational size and a smaller number of employees. However, the outcomes of these authors equally apply well for SMEs too. Masroor (2022) considered knowledge management capability, strategic supplier partnership, and customer relationship as the three dimensions of Organizational Performance.

Research in organizational performance through SCM lacks a dedicated attempt in identifying specific measures and strategies (Gunasekaran et al., 2017). Therefore, the present research will be a valuable contribution to the existing research. Sustainable and smart supply chain strategies are found to improve the performance of SMEs. In the present research, the impact of sustainable and smart SC strategies on the performance of SMEs is studied. List of variables considered for this study based on the existing research is provided in Table 1 below.

Table 1
Variables of the study and their definitions

Variables	Definition	Reference
Organizational Performance	The performance of SC is a combination of several metrics related to the achievements of organization which are developed to monitor their accomplishment through SC.	Deshpande (2012)
Sustainable Supply Chain	Efficient utilization of items and information processes through mutual coordination among the members of SC to achieve the objectives of sustainability from people, plant and profit aspects by balancing stakeholder requirements	Seuring et al. (2008)
Smart Supply Chain	Utilization and implementation of internet based technologies and systems in the SC processes and activities.	Chui et al. (2010)

2.4 Indian SME sector

The Indian SME sector has been booming in the recent past. The annual growth rate of SMEs in India increased by 18.5 percent between 2019 and 2020. An amount of US$ 128.06 billion, which is a 40% increase from 2020 was disbursed to the SME sector. India has an exclusive ministry for SME which manages five constituents of this industry. The role of these five constituents is to support SMEs by creating awareness about government schemes and policies. Additionally, the government has launched a special scheme named Special Credit Linked Capital Subsidy Scheme (SCLCSS) for the services sector. Through this scheme the government intends to meet the internet-based technology requirements of SMEs and development of digital platforms. The Government of India also doubled the budget for SMEs in the year 2022 to boost their contribution to the economy (MSME reports, Government of India). Therefore, in order to achieve exceptional performance in future,

SMEs need the support in terms of redesigning their supply chains through the two most important strategies of making them 'Sustainable' and 'Smart'(Papadopoulos et al., 2020). Therefore, this research once again identified the right gap in the existing literature in this area.

3. Literature Review

A Systematic Literature Review (SLR) was performed to identify the dimensions and variables under each of the two SCM strategies as mentioned in the previous sections. This literature review initially explores the literature related to sustainable supply chains in the published articles in Scopus indexed journals through the databases EBSCO, ProQuest, Scopus, Web of Sciences and other popular research databases. Key words such as sustainable supply chains,

3.1 Sustainable Supply Chain Strategy and Supply Chain Organizational Performance

Implementation of SC practices enables improvement of production efficiency, availability of products, service level, reduction of cost and improvement of satisfaction among customers. Research indicates that some of the SMEs obtained positive results and improved their performance through SCM (Koh et al.; Kot et al., 2020), however, many other SMEs still need the appropriate implementation of these strategies. Mutual coordination, accurate information sharing, developing a plan for risks, smart SC systems will lead to improvement of SME performance, resulting in achievement of objectives of sustainability. SMEs should develop long-term strategies (Zalima et al., 2016) in the areas of sustainable and smart SC and look for emerging technologies to redesign their SC (Allaoui, 2019; Ahmad et al., 2020). Information Sharing, Customer Relationship Management, Supplier Partnership Management, Green Supply Chain Practices are the dimensions considered for Sustainable Supply Chain Strategy (Masroor, 2022) for the present study. In another study, it is concluded that three dimensions SSCS such as inbound sustainability, internal sustainability and outbound sustainability will influence the Supply Chain Organizational Performance (Ni & Sun, 2019; Le et al., 2022).

Based on the above discussion, therefore, the Hypothesis-1 is formulated as below,

H₁: *Sustainable Supply Chain Strategy has a significant impact on organizational performance of SMEs.*

3.2 Smart Supply Chain Strategy and Supply Chain Organizational Performance

In SCM, due to its diverse nature and complex network, a huge amount of data is generated. Areas of SCM which generate data are related to designing of product, network of SC, procurement, manufacturing, storing, and warehousing, distribution. Moreover, there is a huge amount of data at the sales points, which is called Point of Sale data (McKinsey, 2016). This huge amount of data needs processing, analysis, and interpretation with the help of prescriptive, predictive and descriptive analytics (Mohamed, 2019). Another important area of SCM is reverse logistics. Application of big data can provide better results in this area by helping the SME managers by providing them with accurate and timely information for better SC planning to improve their performance in terms of Smart SC (Fernando et al., 2018; Mohamed, 2019). The future of SC is going to be more complex due to globalization. However, application of internet-based technologies can make us smarter. Therefore, it is time for SMEs to explore new opportunities in the areas of SC partnerships and strategic alliances by taking advantage of smart SC systems and processes. These systems will improve the transparency, speed and accuracy of SC networks and systems of SMEs, enabling them to achieve better performance by reducing their costs of operations (Chui et al., 2010; Chehbi-Gamoura et al., 2020).

There has been an increasing awareness in academic research for recommendation of internet-based technologies for performance improvement of SMEs. In line with this, there is an immediate need to expand this area of knowledge as it is expected that the future generation of SCM belongs to these technologies for enhancing the performance of SMEs. Studies related to identification of smart supply chain strategies and their influence on improving performance of SMEs are limited (Anwer et al., 2017). Information Sharing, Application of Digital Technologies, Usage of Supply Chain Analytics are considered as dimensions for Smart Supply Chain Strategy (Chui et al., 2010; Gunasekaran et al., 2017; Kot et al. 2020).

Based on the above discussion, therefore, the Hypothesis-2 is formulated as below

H₂: *Smart Supply Chain Strategy has a significant impact on organizational performance of SMEs.*

3.3 Sustainable and Smart Chain strategies impact on Organizational Performance

Research studies indicate that if the supply chains of SMEs are redesigned to achieve sustainability and smartness, they can achieve better organizational performance and continue to survive the competition because of globalization. Both the strategies, if implemented combinedly, can influence the organizational performance effectively through supply chain management strategies. Sustainable supply chain strategies and practices such as inbound sustainability, internal sustainability, outbound sustainability, and green supply chain practices impact the organizational performance significantly

(Ni & Sun, 2019; Sharma, 2020). In the present research four variables i.e. Stakeholder management, Sustainable Supplier Management, Value Chain Governance, Green Supply Chain Initiatives are considered for Sustainable Supply Chain Strategy (Jorgensen & Knudsen 2006; Abbasi & Nilsson 2012, Seuring & Muller, 2008, Beifert et al., 2013; Mohsen et al., 2014) and Information Sharing, Application of Digital Technologies, Usage of Supply Chain Analytics are considered as dimensions for Smart Supply Chain Strategy (Chui et al., 2010; Gunasekaran et al., 2017; Kot et al. 2020)

Based on the above discussion, therefore, the Hypothesis-3 is formulated as below

H₃: *Sustainable and Smart Supply Chain Strategies have a significant impact on organizational performance of SMEs.*

3.4 Proposed Framework and Research Gaps

Based on the literature review and introductions sections, it is found that there is a need to identify the influence of sustainable and smart SC strategies on improving the organizational performance in a more in-depth manner. The existing contributions in this area are inadequate and moreover, specific research relating these two strategies is not clearly studied. The present research attempts to identify how the SMEs implement the sustainable and smart supply chain strategies and how these two strategies influence the organizational performance of these SMEs. The primary objective of this research is to empirically arrive at factors contributing to the improvement of supply chain processes for cost reduction and profit maximization through the two strategies considered for improving organizational performance.

Stakeholder management, Sustainable Supplier Management, Value Chain Governance, Green Supply Chain Initiatives are the dimensions considered for Sustainable Supply Chain Strategy (Jorgensen & Knudsen 2006; Abbasi & Nilsson 2012, Seuring & Müller, 2008, Beifert et al., 2013; Mohsen et al., 2014) for the present study. Whereas, Information Sharing, Application of Digital Technologies, Usage of Supply Chain Analytics are considered as dimensions for Smart Supply Chain Strategy (Chui et al., 2010; Gunasekaran et al., 2017; Kot et al. 2020). Knowledge management capability, strategic supplier partnership, and customer relationship are considered as the three dimensions of Organizational Performance (Masroor, 2022). Fig. 1 demonstrates the structure and relationship between the variables for the present study.
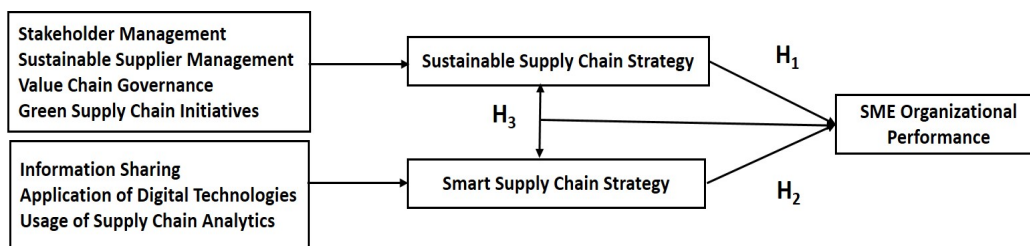

Fig. 1 Research Framework of the proposed study

The present research attempted to fill the gap in the existing research by collecting primary data empirically from owners, strategic and middle level employees of SMEs using a structured questionnaire as a research tool and survey instrument. The membership directory of Government of Telangana State, which is an authorized directory, is used for approaching the SMEs for data collection. The responses to the questionnaire were collected electronically through online mode of survey.

3.5 Research Methodology and Design

The objective of this research is to study the influence of sustainable and smart supply chain strategies on improving organizational performance. Four dimensions of sustainable supply chain strategy and three dimensions of smart supply chain strategies were considered based on the systematic literature review as mentioned in the previous sections. A structured questionnaire was used to collect the responses from the selected sample of respondents of SMEs. Details of questionnaire and sample size are mentioned in the subsequent section. A descriptive and analytical design was used in the research. The collected data was analysed using SPSS to obtain results related to demographic variables, reliability test, descriptive statistics, correlation, multiple regression for validating the hypotheses.

3.6 Sample Size and Sample Unit for Analysis

An SME from the directory of SMEs is selected for the target population based on two major criteria. The first one is that the SME should have a minimum of 100 employees and the second one is that the SME should have a minimum investment of $600,000. Based on this criterion it is found that 320 SMEs qualified to be the target population, out of which 240 SMEs were selected to be sampled based on diverse sectors of their business. A total of one thousand one forty mails were sent to owners, senior level supply chain managers and middle level managers of these SMEs in the selected sample. A total of 220 responses were received. The data was collected using a 40-item research questionnaire. The first section of the questionnaire contained

15 questions related to sustainable supply chain strategy. The second section of the questionnaire contained another set of 10 questions related to smart supply chain strategy. The third section of the questionnaire contained 15 questions related to supply chain organizational performance. The Liker 5-point scale (1-Strongly Disagree to 5-Very Strongly Agree) was used to collect the responses for each question from the respondents.

4. Results

The results of this research are presented in this section.

4.1 Demographic Analysis

The demographic data of the research related to the personal characteristics of the respondents is presented in Table 2. The results reveal that out of the total 220 respondents, 60% of the respondents are males and 40% of them are female. In terms of demographic variables such as age, most of the respondents were between 41-50 years of age and 88 were above 50 years of age.

The data related to demographics is displayed in the following Table 2.

Table 2
Demographic Data

Item	Description	Frequency (N=220)	Percentage (%)
Gender	Male	132	60.0
	Female	88	40.0
Age	25-30	5	2.27
	31-40	15	6.81
	41-50	112	50.90
	>50	88	40.00
Designation	Owner	85	40.0
	Sr. Management Executive	74	33.6
	Middle Level Supply Chain Manager	46	20.9
	Technology Manager	15	6.82

N=220, Male=60%, Female=40.0%

4.2 Reliability, Descriptive Data and Correlation

The reliability test was conducted through Cronbach's Alpha. The results as shown in Table 3 indicate a significant and good reliability value to conduct further tests and analysis. The values of Cronbach's alpha for all the three variables SSCS=0.88, SMSCS=0.87 & OP=0.76 show that they are adequately reliable for proceeding with further tests and analysis. The descriptive tests conducted on the responses resulted in M=3.9, SD=83% for SSCS. Similarly, for SMSCS, the values as displayed are M=3.6, SD=72%. The values for both the variables provide a satisfying extent to agree. Whereas, for OP, the values are M=4.1, SD=74% reveal that most of the questions are highly agreeable. The results of correlation indicate a strong relationship between SSCS and OP with a value of 0.728 and significant at **P<0.05 level. At the same time, SMSCS also displays a strong and significant relationship with OP with a value of 0.687 and a significant value at **P<0.05 level.

Table 3
Validity, Descriptive & Correlation Summary

Variables	Cronbach's Alpha	Mean	Std Deviation	LS	AS	OW
Sustainable Supply Chain Strategy (SSCS)	.88	3.9	0.83	1		
Smart Supply Chain Strategy (SMSCS)	.87	3.6	0.72	0.864(**)	1	
Organizational Performance (OP)	0.76	4.1	0.74	0.728(**)	0.687(**)	1

SSS=Sustainable Supply Strategy (M=3.9, SD=83%), SSCS=Smart Supply Chain Strategy (M=3.6, SD=72%), Organizational Performance (M=4.1, SD=74%) *P<0.001, **P<0.05

4.3 Multiple Regression

The results of multiple regression performed on the responses for sustainable supply chian strategy are shown in Table 4 below.

Table 4
ANOVA analysis of Sustainable Supply Chain Strategy (SSCS) Variables

	R	R^2	F	Sig	Df	Dimensions	β	t-value	Sig*
Organizational Performance						Stakeholder Management	.225	3.12	.000
					4	Sustainable Supplier Management	.518	7.82	.000
	0.744	0.586	57.0	.000	216	Value Chain Governance	.020	1.78	.005
					220	Green Supply Chain Initiatives	.172	3.14	.003

*Level of Significance (α<0.05)   **Critical t-value (df/p) = 1.66

The results of multiple regression performed on the responses received for smart supply chain strategy are shown in Table 5

Table 5
ANOVA analysis of Smart Supply Chain Strategy (SMSCS) Variables

	Df	Dimensions	β	t-value	Sig*
	3	Information Sharing	.238	3.36	.000
Organizational Performance	217	Application of Digital Technologies	.362	3.28	.001
	220	Usage of Supply Chain Analytics	.178	2.84	.006

R = 0.676 R² = 0.462 F = 56.2 (0.000)
*Level of Significance (α<0.05)   **Critical t-value (df/p) = 1.66

4.4 Hypothesis Testing

Table 6
Hypothesis testing using regression coefficients

Hypothesis	Relationships	β	R^2	Adjusted R^2	p-value	Status of Hypothesis
H_1	SSCS → OP	0.732	0.522	0.516	0.000	Supported
H_2	SMSCS → OP	0.682	0.446	0.418	0.000	Supported
H_3	SSCS → SMSCS → OP	0.718	0.538	0.521	0.000	Supported

*P<0.001, **P<0.05

5. Analysis and Discussion

The results of this research reveal very interesting outcomes. They clearly indicate that the two most important strategies of sustainable supply chain and smart supply chains have a highly significant impact on the organizational performance, especially on its supply chain related organizational performance.

The results of multiple regression on sustainable SC strategy and performance of SME organizations shown in Table 4 indicate that strategies related to sustainable supplier management have a very high significant influence on organizational performance of SMEs with β = .518 and t=7.82. Management of suppliers in SMEs is one of the priorities in SCM for achieving sustainability, leading to improvement in organizational performance. Practices such as Supplier Relationship Management (SRM), Supplier Development Programs (SDPs) and Vendor Managed Inventory (VMI) in SMEs are major aspects of Supplier Management for achieving sustainability (Masroor, 2022). Stakeholder Management with β = .225 and t=3.12 is the next dimension of sustainable supply chain strategy influencing the organization performance. Similarly, Green Supply Chain Initiatives and Value Chain Governance also influence organizational performance in SMEs (Ramakrishna, 2016; Ivanov 2020).

The multiple regression results in Table 5 indicate that application of digital technologies dimension in supply chain with β=.362 and t=3.28 has highest significance on organizational performance. It is followed by the influence of Information Sharing with β=.238 and t=3.36 and usage and application of Supply Chain Analytics with β=.178 and t=2.84 dimensions on organizational performance of SMEs (Jain et al., 2018).

The results in Table 6 reveal that all the three hypotheses are supported due to significant R2 values p values. It indicates that Sustainable and Smart Supply Chain Strategies have a significant influence on improving organizational performance (Fetter, 2019).

6. Conclusions

Based on the analysis and interpretation of responses collected from SMEs through an empirical survey using a structured questionnaire, it can be concluded that the two most important strategies of SCM i.e, Sustainable and Smart Supply Chain Strategies have significant influence on the supply chain organizational performance of SMEs. It is also concluded that by focusing and by implementing on the four dimensions of sustainable supply chain strategies (Alshurideh et al., 2022) and the three dimensions of smart supply chain strategies the SMEs can improve their organizational performance and achieve long-term sustainability. SMEs are most vulnerable for disruptions and unprecedented risks and disturbances when compared to large size organizations. Therefore, the outcomes of this research are very useful to SMEs in India and in all the other regions of the world to counter such disruptions in their supply chains.

7. Recommendations

Therefore, the owners, top management and senior level employees of supply chain in SMEs can achieve improvement in their supply chain related organizational performance by redesigning their supply chains by focusing on sustainable and smart supply chain practices. It is important for SMEs to manage their suppliers and other stakeholders to achieve sustainability. At the same time, they also need to focus on their value chain and green supply chain initiatives by focusing on making their production and distribution environmentally friendly. It is also recommended that SMEs should commence implementation

of affordable digital and internet-based technologies and SC analytics (Gunasekaran et al., 2017) for better information sharing to transform their existing linear and traditional SCs to smart SCs.

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