

Knowledge Managements' Relevance in Supply Chain Management Process of Indian E-Commerce Companies



Pratibha Jha, Bhaskar Karn

Abstract:- *In this research the value of knowledge Management in the Supply chain management process has been explored. Knowledge enabled Supply chain process actually increases the efficiency of business processes, as well as communication and collaboration among the employees. Rapid changes in the product and process innovation and customer demands are increasing the requirement for usable knowledge. Learning is very essential for the organizations but not sufficient requirement for improving its performance. Performance can be improved by sharing updated knowledge among the supply chain process and functioning through knowledge management tools. Improved performance also resulted from feeding data into software applications to derive algorithms for better decision making. This research is descriptive. The constructs and the variables were derived from past research and literature review. The question we sought to answer with this study was how to create the best connection between the business environment knowledge base and the SC management processes in order to reach optimal organizational performance. A relationship model has been developed using the PLS SEM tool to clarify that how by enabling knowledge management in the supply chain process facilitates the ability of online businesses to maintain competitiveness and productivity in an ever-changing business environment. A theoretical model was developed within a framework of supply chain learning and the variables were empirically tested by structural equation modelling using a sample of online sales organizations in India the results verified that organizations can enhance performance when they implement a systematic process for acquiring and applying knowledge in the SCM process. It is furthermore suggested that customer involvement should be actively sought through a variety of online promotions and services, and their interaction and feedback should be frequently evaluated.*

Keywords: Knowledge Management, Supply Chain, Online Selling, Structural Equation Modelling, Knowledge Enabled Learning.

I. INTRODUCTION

Knowledge Management (KM) is helping Supply Chain Management (SCM) into action by penetrating the powerful role of knowledge networks and virtual communities.

It provides a framework for managing knowledge in the entire networked SCM process. KM is a major enabler of SCM and a critical element in an information-intensive, multi-cultural enterprise environment. As the business environment is facing the turbulent economies combined with a hyper-competitive market has produced a real need for optimization within supply chains and one area where knowledge transfer across

the supply chain is gaining popularity is digital selling. KM's principles contribute to SCM by creating an environment where external stake holders form networked relationships with the organization's members and their knowledge base.

II. LITERATURE REVIEW

The nature of organizational knowledge

Knowledge turns into an advantage when an organization infers helpful data and incentive from its information assets in the normal execution of its capacities. As characterized by Tiwana (2000), "Knowledge is noteworthy huge data accessible in the correct organization, at the opportune time, and at the ideal spot for basic leadership". Knowledge isn't just data or information, it is extremely difficult to catch and systematize. "Knowledge is an unequivocal, foundational and hierarchical procedure, to make, move, incorporate and influence the related information, that information of a specific practical unit is connected crosswise over other useful units that contrast in upper hand" [12]. As expressed by Cao and Zhang (2011), "Associations have attempted to accomplish a more noteworthy store network coordinated effort that can use the assets and learning of their providers and clients. The inventory network coordinated effort improves community oriented bit of leeway and surely has a main concern weight on the hierarchical presentation, and collective preferred position is a middle of the road variable that empowers production network accomplices to accomplish cooperative energies and make unrivalled execution".

B. Supply chain management as applied to e-commerce

After the advancement of the management approaches and the fast globalization of corporate procedures, there has been a finished change in the business situation. Quick progression in data innovation and correspondence framework has brought about a ceaseless increasing speed in the rivalry. To support in this aggressive condition, organisations needs to concentrate on the information base of the association so as to boost efficiency.

Manuscript published on 30 September 2019

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"The elaboration and refinement of hypotheses on SCM occurred generally from the 1990s onwards as characterized by the [47] concentrating essentially on the accumulation of information from sellers and providers of items and administrations so as to include customer esteem". "From crude materials to completed items, the SCM framework should always accumulate data and make alterations in an opportune way" [58].

"Store network Management is the system of associations that are included through upstream and downstream linkage. In various procedures and exercises that produce an incentive as items and administrations in the hands of extreme clients" by Davis (1993). Organizations are utilizing web innovations to make learning empowered e-business frameworks for SCM that is helping it to streamline its conventional inventory network forms and guaranteeing effectiveness in the whole worth chain. "So as to effectively contend in web based business, organizations must build up another arrangement of operational abilities" (Fahey et al.2000). The solid focused condition makes it basic for organizations to ceaselessly develop with an accentuation on improvement at all focuses along the worth chain from providers to makers, merchants, wholesalers, retailers lastly to the end shoppers. SCM additionally underscores the requirement for joint effort among all wellsprings of data to upgrade the framework. "The inventory network execution improves by expanding the impact of market affectability, information precision, conveyance speed, new item presentation, brought together and synergistic arranging, process combination and viable utilization of IT devices" [2].

The profitability of an organization is upgraded by the fast assembling and sharing of data among the SCM elements, which improves item accessibility for retail organizations.

Internet business works in India are one of the quickest developing business divisions. In the most recent decade, there has been a gigantic change in outlook in the manner in which Indian online shopping from buying things in stores to web-based shopping. "Electronic trade (computerized selling) is characterized as purchasing and selling of merchandise and enterprises in return for assets and information utilizing an electronic framework like the web or some other PC organize" [44] There are four noteworthy classes of internet business: (I) business to purchaser (B2C) web-based business, (ii) business to business (B2B) web-based business, (iii) consumer to business (C2B) web-based business, and (iv) business to business to shopper (B2B2C) eCommerce.

In any case, in the present investigation, just the B2C empowered association was considered. India is the quickest developing web-based business showcase on the world. "The development rate is relied upon to be 51 percent as the income is required to develop from US\$ 39 Billion to US\$ 120 billion out of 2020. This association has additionally discovered that 100 percent FDI will be permitted in B2B advanced selling and the FDI under programmed course is allowed in the commercial center model of computerized selling" as studied by India Brand Equity Foundation (IBEF). "Another significant finding in this report is that shopping by means of a cell phone is conjecture to increment generously from half to 70% by

2020". In a report issued by PWC, "The Asia-Pacific nations are observed to be the best B2C computerized trade on the planet with offers of around 567.3 billion USD, up 45% more than 2012, more noteworthy than Europe (482.3 billion USD) and North America (452.4 billion USD). After the Asia-Pacific district, different zones following in the pattern were Latin America, the Middle East, and North Africa". Advanced selling is getting to be one of the most favored methods for making buys.

Knowledge-management systems for SCM

The 21st century SCM model transforms the way companies exchange information with suppliers, partners and customers in order to improve efficiency and profitability. And a major part of this model, which creates new opportunities for everyone associated with it, involves enhancements in knowledge acquisition and sharing. SCM uses powerful tools that allow companies to exchange and update information for managing the inventory, to minimize processing time, to speed up deliveries, and to enhance customer satisfaction.

Administrators mainly Managers can now rapidly, effectively and economically get to data from over the globe, and associations can enhance an item or administration from any area at any time. KM is the real emotionally supportive network for SCM and the basic component in a multicultural, transnational endeavour condition. "Watched results have demonstrated that KM procedures significantly affect production network execution which is decidedly directed by innovation and framework backing and inventory network coordination. What's more, it makes the Knowledge Management process more grounded in the lean and nimble store network process" (Sangari, et al., 2015).

D. Different Knowledge Processes

In this examination, the association between information empowered procedures and production network the executives was researched. We additionally analysed how enhancements in the securing of information and its application empowered learning in the associations. When KM is joined with SCM, it ensures that associations get the best learning for making and conveying items and administrations. As such significant experience and information of best practices would then be able to be productively put away and used all through the store network. The impacts of the Knowledge Management Processes on Organizational Performance – "information of procedure change" (KPC I) and "information of item stirring" (KPC II) "information empowered learning" or "learning frameworks" (SCL) and "store network process information of clients" (CR) were inspected.

1. Environment knowledge

Environment knowledge as proposed by Prusak: "is the authoritative versatility to the prerequisites of the present universe of business". In a concentrated by Claycomb et al. (2001), "Environment knowledge encourages in the consciousness of interest consistency, process change, and item beating.

Request consistency manages the learning expected to effectively foresee deals and the greatness of interest. Information identified with the ID and the executives of hazard and vulnerability in the outside situations is named as the earth learning and it causes the association to keep up its aggressive position in the market. Procedure change requires information connected with the need to change centre generation and coordination's forms.

Product agitating enrolls the information associated with the need to acquaint new items routinely and with act immediately when products become out of date". In this investigation, learning of procedure changes (KPC I) and information of item stirring (KPC II) have been incorporated.

2. Knowledge-enabled learning systems (SCL)

"The accumulation of scholarly capital of an association is the amalgamation of its advancements, encounters, abilities, and the executives forms and these are joined together to make the association's center skills" [34]. "Be that as it may, these capabilities or competencies are not similarly disseminated all through businesses since certain associations are better in creating and disguising them than others" (De Geus, 1997). "Supply chain gives a situation inside which all associations can exploit from learning procedures dependent on the exchange of abilities and information" [64]. Numerous associations have understood the significance of learning condition as it is significant for the individuals in an inventory network to accomplish productivity and for execution improvement.

3. Supply chain process: knowledge about customers (CR)

The concept of customer process knowledge is explained as customer-specific information acquired through focused research and the involvement of customers in discussions at community meetings and through social media contacts. And how can the customer's insight are made operational and implemented into sales and other supply chain processes. The greater the effect of environmental risk and uncertainty then the more pronounced the impact of KPC I and KPC II on organizational performance.

E. Knowledge Management and Organizational Performance.

Organizational Performance can be conceptualized as the outcome of two separate and independent performance factors – overall performance and resource performance.

1. Overall Performance (OP)

Knowledge empowered inventory network the executives has turned into a significant apparatus for increasing upper hand and improving hierarchical execution. The rivalry is no longer between associations yet among the interior store network forms. The operation has been considered as the needy build in this exploration and was estimated by a piece of the overall industry, in general, item quality, focused position, and deals and benefits over the most recent three years.

2. Resource Performance (RP)

The other ward variable which is incorporated as a build-in this research is asset execution. The knowledge-

empowered SCM executes a request to make and keep up a reasonable upper hand in the dynamic condition. It ought to underscore more on tapping, sharing, and rationing inferred information and the all-out learning base of the organization. An organization's learning base incorporates unequivocal and implied information and exists inside in the business just as inside the association's outside associations. Associations are concentrating on advancement and the procedures that convert development into new items and administrations. Information sharing inside the association encourages in improving the absolute learning base which advances the development.

III. RESEARCH OBJECTIVES AND DESIGN

The chief goal of this research was to develop a conceptual model linking different aspects of knowledge management to enhance organizational performance in the knowledge-based supply chain process. The sub goals were focused on validating the model for accuracy and reliability in testing hypothesized relationships and developing a structural equation-based model through partial least squares structural equation modelling (PLS SEM) of the established factors. This research is descriptive. The constructs and the variables were derived from past research and literature review. The question we sought to answer with this study was how to create the best connection between the business environment knowledge base and the SC management processes in order to reach optimal organizational performance.

In particular, our hypothesis is that improved levels of knowledge management in the supply chain process leads to both, improved output performance and improved resource performance. Each of the Knowledge constructs, KPC I, KPC II, SCL and CR have positive impacts on output performance (OP) as well as resource performance (RP). This set of hypotheses can be summarized in the following structural model.

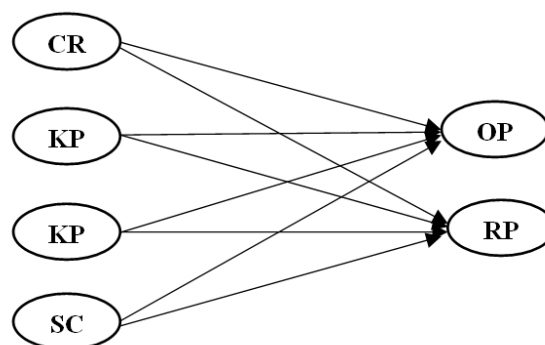


Fig 1: Structural Model showing Hypothesized Relationships between Knowledge Constructs and Organizational Performance Dimensions

A. Sampling Frame and Size

The primary data was collected from 120 e-commerce based companies in India, and complete responses were received from only from 78 companies. All questions required responses on a 5 point Likert scale. The battery of questions used was based on earlier operationalisations of the constructs in the literature.



B. Analysis Methodology

As is apparent from our earlier discussion on the knowledge constructs, each of these constructs subsumes many different aspects and is a broad dimension that requires measurement using a battery.

In other words, they are best thought of as Latent Constructs each of which needs to be measured using a battery of measured, manifest variables. This measurement problem and the fact that we are investigating causal relationships between these latent constructs automatically suggest Structural Equation Modelling as an appropriate analysis methodology for validating the hypothesized relationships.

"SEM multivariate information examination strategy is regularly utilized in research since it can test hypothetically bolstered direct and added substance causal models" [13, 32, 64]. "There are a few ways to deal with SEM. The main methodology is the generally connected covariance-based SEM (CB-SEM) utilizing programming bundles, for example, AMOS, EQS, LISREL, and MPlus.

The subsequent methodology is incomplete least squares (PLS), which spotlights on the investigation of difference and can be completed utilizing PLS-Graph, VisualPLS, SmartPLS, and WarpPLS. PLS is a delicate displaying way to deal with SEM without any suspicions about information dissemination" [3]. "Along these lines, PLS-SEM is a decent option to CB-SEM when the example size is little, the applications have a little accessible hypothesis and prescient exactness is foremost" [8,38,66].

Our sample size was small and the fact that we would not like to make assumptions about the distribution of the variables in the study with such a small sample size, we found PLS based SEM to be an appropriate methodology for analysis and validation of the hypothesized relationships.

The model was evaluated by basic condition demonstrating utilizing the fractional least squares technique. Since least squares are a dispersion free methodology, observational conveyances were utilized to test the theories and the t-test was utilized for factual essentialness. Furthermore, the bootstrapping technique was embraced on the size of the example of 78 for the principle impacts.

There are two kinds of estimation models in SEM. The Latent Variables can be estimated to shrink brilliantly or developmentally regarding the show factors. In intelligent estimation models, the show factors are results of a fundamental single reason and are, consequently, exceptionally corresponded. "Each show variable reflects (is an impact of) the comparing inert variable" [3]. In developmental estimation models, the Latent Variables are results of the show factors. At the end of the day, the show factors portray the substance of the Latent Variable. They are, subsequently, not required to be profoundly related. In fact, high multi co-linearity among the show factors isn't wanted. In a developmental estimation model, "the inactive variable is characterized as a direct blend of the relating show factors. Along these lines, each show variable is an exogenous variable in the estimation model. These pointers need not to co fluctuate like changes in a single marker don't infer changes in the others and inner consistency is no more an issue." [3]. In our exploration, different information

builds just as the hierarchical exhibition develops were operational developmentally. All things considered, the trial of uni-dimensionality like the Cronbach's alpha which is pertinent to intelligent estimation were never again required.

1. The measurement model for measuring the latent constructs is discussed below.

As mentioned earlier, two components of environmental knowledge were included in our research. The knowledge of process alteration (KPC I) was evaluated as an organization's capacity to:

- (KPC I 1) reduce time wastage in operations.
- (KPC I 2) build up a nonstop quality improvement program.
- (KPC I 3) produce just what has been requested by clients.
- (KPC I 4) anticipate that providers should abbreviate escort times.
- (KPC I 5) actualize plans for making requesting, accepting and different sorts of desk work from providers progressively productive.
- Information of item agitating (KPC II) association was operationalized as the association's capacity to react to and suit issues, for example,
 - (KPC II 1) occasional varieties popular and accessibility of crude materials.
 - (KPC II 2) passes in assembling execution, for example, machine breakdown.
 - (KPC II 3) insufficient or deferred arrangement of materials by providers.
 - (KPC II 4) poor conveyance execution.
 - (KPC II 5) trouble in embracing new items or adjusting to new markets and contenders.

Information empowered learning (SCL) was estimated utilizing the accompanying battery of show factors:

- (SCL1) in the production network process, an alternate purpose of perspectives is supported.
- (SCL 2) growing new experiences are significant for production network individuals.
- (SCL 3) individuals from the production network create numerous new bits of knowledge in their working.
- (SCL 4) new thoughts are commonly acknowledged by different individuals from the store network.
- (SCL 5) store network procedure underpins experimentation of new technique.

The production network process information about clients (CR) is estimated utilizing 8 articulations identified with whether the association:

- (CR 1) utilizes reasonable play in managing its clients.
- (CR 2) do visit cooperation's with clients to set up unwavering quality, responsiveness.
- (CR 3) do continuous subsequent meet-ups with clients for researching the nature of administration criticism.
- (CR 4) every now and again measures and assesses consumer loyalty.
- (CR 5) future client desires are entirely significant for the association.
- (CR 6) encourages clients' capacity to look for help from it.
- (CR 7) survey the formal and casual grumblings of its clients.



- (CR 8) intermittently assesses the significance of its association with its clients.

Yield Performance (OP) was estimated exhaustive an assessment of the association's relative exhibition in respect to different associations as far as:

- (Operation 1) Annual Sales.
- (Operation 2) Managing request fill rates.
- (Operation 3) On-time conveyances.
- (Operation 4) Customers' reaction time.
- (Operation 5) Shipping blunders of the items.
- (OP 6) Customers' complaints.

Resource Performance (RP) was measured according to evaluation of the organization's relative performance relative to other organizations in terms of:

- (RP1) Total cost of resources used in the entire supply chain management process.
- (RP2) Total cost of distribution, including transportation and handling.
- (RP 3) Total cost of manufacturing, including labour, maintenance and re-work.
- (RP 4) Cost associated with held inventory.
- (RP 5) Return on investment.

IV. RESULTS OBTAINED

As mentioned above, each block of indicators was inspected for multicollinearity consistent with our use of formative measurement constructs. A VIF of 5 was taken as the cut off point for evaluating multicollinearity. This corresponds to an explained variance of 80% when an indicator is regressed on other indicators of the block. None of our indicators had a VIF in excess of 5. As such, the initial model was evaluated with all indicators.

The R-square of the endogenous factors for the underlying model were 0.837 and 0.784 for OP and RP individually. We currently looked to the way coefficients and PLS loads. 500 Bootstrap tests of size 78 were created. The Confidence Interval strategy utilized was "Predisposition Corrected and Accelerated Bootstrap". One followed trial of hugeness at the 10% level was utilized to survey importance as our fundamental theory was that all way coefficients and external loads are sure. As referenced by Henseler et al. (2009), "The nonparametric bootstrap (Davison and Hinkley, 2003; Efron and Tibshirani, 1993) strategy can be utilized in PLS way displaying to give certainty interims to all parameter gauges, fabricating the reason for measurable deduction. When all is said in done, the bootstrap procedure gives a gauge of the shape, spread, and predisposition of the testing dissemination of a particular measurement. Bootstrapping regards the watched test as though it speaks to the populace. The strategy makes a huge, pre-determined number of bootstrap tests (e.g., 5,000). Each bootstrap test ought to have indistinguishable number of cases from the first example. Bootstrap tests are made by haphazardly drawing cases with substitution from the first example."

"The results showed that the only significant path coefficients were CR -> RP and KPC II -> OP. For the PL weights, we found that CR1 and CR2 had perverse negatively significant path coefficients. As such a model

purification procedure was followed by dropping these two variables" (Helm et al, 2010) [4]. For formative variables, dropping indicators presents a problem in that the meaning of the Latent Construct (in this case, CR) will no longer include the aspects measured by the indicators that have been dropped. As Helm et al. (2010) put it, "concerning formative variables, however, indicator deletion is problematic as "omitting an indicator is omitting a part of the construct" (Bollen and Lennox 1991)." Our new CR construct, therefore, does not include "using fair play with customers and "using frequent interactions with customers to establish reliability, responsiveness."

The PLS model was re-run with the refined definition of CR. The new model again had acceptable R-squares for OP and RP at 0.805 and 0.801 respectively. Looking at the bootstrap results, we now found that CR8 and OP1 had perverse negatively significant path coefficients. These indicators were dropped resulting in the two constructs being redefined in terms of content. For CR8, "periodically evaluates the importance of its relationship with its customers" was no longer a part of the CR construct. More importantly, however, our Output Performance Construct no longer includes Sales. It is, therefore, important to keep this in mind when evaluating the results that OP is Output Performance excluding Total Sales.

The PLS model was re-run. The last model had R-squares of 0.807 and 0.721 for OP and RP individually. Of the 8 ways incorporated into the model (see Fig 1), just CR-> RP and SCL-> OP were huge. Notwithstanding evaluating the measurable importance of the way coefficients, we took a gander at the impact sizes f2 [4]. "The higher the f2, higher the greatness of the impact and estimations of 0.02, 0.15 and 0.35 can be taken as shorts for low, medium and high impacts" (Boßow-Thies) [3] [4]. In the expressions of Henseler et al. (2009), "For each impact in the way model, one can assess the impact size by methods for Cohen's (1988) f 2. The impact size f 2 is determined as the expansion in R2 with respect to the extent of difference of the endogenous dormant variable that remaining parts unexplained. As indicated by Cohen (1988), f 2 estimations of 0.02, 0.15, and 0.35 connote little, medium, and enormous impacts, separately."

The path coefficients along with their p-values and effect sizes are shown in Table 1.

Table 1: Path Coefficients

	Origin al Sampl e (O)	Sampl e Mean (M)	Standard Deviation (STDEV)	T Statistic (O/STD EV)	P Val ue s	E ff ec t Si ze s
CR -> OP	0.209	0.319	0.315	0.664	0.2 54	0. 1 1 8

CR -> RP	0.923	0.422	0.645	1.431	0.077	1.593
KPC I -> OP	-0.133	-0.040	0.168	0.792	0.214	0.063
KPC I -> RP	-0.029	-0.077	0.282	0.103	0.459	0.002
SCL -> OP	0.542	0.481	0.351	1.543	0.062	0.660
SCL -> RP	0.234	0.184	0.393	0.595	0.276	0.085
KPC II -> OP	0.217	0.106	0.191	1.133	0.129	0.113
KPC II -> RP	-0.485	0.018	0.538	0.903	0.184	0.392

V. ANALYSIS OF RESULT

The results above are interesting because it shows that only two of the Knowledge Constructs have are showing significant impact on the Organizational Performance. Process Knowledge with Customers (CR) has a significant positive impact on Resource Performance. Supply Chain Learning Systems (SCL) which captured the supply chain's generation and dissemination of new ideas and insights only impacts Output Performance and does not have any significant impact on Resource Performance. Not only are these effects statistically significant, the magnitude of the effect sizes is large as well. It may be noted that while the effect size of KPC II -> RP is large, the coefficient is not statistically significant implying that there is sufficient noise in the data for the effect not to be detected. This, essentially, means that we do not have the confidence to interpret that path coefficient.

Taking a gander at the show factors that were considered to include this knowledge develops, we find that it is just CR6 (The companies encourages clients' capacity to look for help from it) that has a noteworthy external load in the estimation model for CR. Once more, for SCL, it is just SCL 1 (distinctive purpose of perspectives are empowered inside this store network) and SCL 4 (new thoughts are commonly acknowledged by individuals from the production network) that have critical external loads. In this manner, we may infer that among the learning factors, these are the main ones where the supervisor's view of information the executives are believed to positively affect apparent authoritative execution. The PLS loads alongside their p-values have appeared in Table 2.

Table 2: Outer (Measurement) Model Weights

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
CR3 -> CR	0.521	0.342	0.531	0.982	0.163
CR4 -> CR	0.283	0.228	0.228	1.241	0.108
CR5 -> CR	-0.119	0.013	0.296	0.401	0.344
CR6 -> CR	0.694	0.434	0.407	1.706	0.044
CR7 -> CR	-0.202	-0.079	0.218	0.928	0.177

IR1 -> KPC I	-0.300	-0.004	0.551	0.543	0.294
IR2 -> KPC I	0.066	-0.014	0.302	0.218	0.414
IR3 -> KPC I	0.616	0.269	0.482	1.278	0.101
IR4 -> KPC I	-0.209	0.032	0.405	0.516	0.303
IR5 -> KPC I	1.031	0.391	0.503	2.049	0.020
OP2 -> OP	0.004	0.025	0.491	0.007	0.497
OP3 -> OP	-0.457	-0.201	0.424	1.080	0.140
OP4 -> OP	0.616	0.422	0.365	1.688	0.046
OP5 -> OP	0.210	0.172	0.252	0.834	0.202
OP6 -> OP	0.642	0.394	0.489	1.313	0.095
RP1 -> RP	-0.255	0.219	0.814	0.314	0.377
RP2 -> RP	-0.197	-0.112	0.319	0.617	0.269
RP3 -> RP	0.622	0.270	0.440	1.414	0.079
RP4 -> RP	0.543	0.140	0.625	0.868	0.193
RP5 -> RP	0.793	0.211	0.571	1.387	0.083
SCL1 -> SCL	0.632	0.478	0.320	1.975	0.024
SCL2 -> SCL	0.240	0.237	0.307	0.783	0.217
SCL3 -> SCL	-0.169	-0.098	0.193	0.877	0.190
SCL4 -> SCL	0.482	0.324	0.242	1.995	0.023
SCL5 -> SCL	-0.428	-0.289	0.387	1.106	0.135
SSC1 -> KPC II	0.566	0.466	0.336	1.685	0.046



SSC2 -> KPC II	0.783	0.340	0.443	1.769	0.039
SSC3 -> KPC II	-0.114	-0.045	0.217	0.527	0.299
SSC4 -> KPC II	0.436	0.200	0.364	1.197	0.116
SSC5 -> KPC II	-0.353	-0.082	0.363	0.974	0.165

VI. MANAGERIAL IMPLICATIONS

Indian online selling market is increasing exponentially. So, it is very imperative for the organizations to keep it upright in the dynamic ever-changing market conditions. In terms of success in the digital market, knowledge sharing and using knowledge to create value for customers plays a frontal role. The entire study is based on managerial perceptions which may not be an indicator of actual levels of KM implementation in the Supply Chain. The impacts that we observed are also therefore, in terms of perceptions. The results indicate that managerial perceptions of Process Knowledge with Customers (CR) has a significant positive impact on managerial perceptions of Resource while managerial perceptions of Supply Chain Learning Systems (SCL) impacts managerial perceptions of Output Performance. This essentially means that managers may not be fully appreciating the role of different types of KM on output and resource performance. It has been indicated in earlier studies that environmental knowledge constructs like knowledge of process changes (KPC I) and knowledge of product churning (KPC II) are also important factors in enhancing output and resource performance. As such, managerial implications are in terms of changing perceptions organizations need to emphasize on how to change managerial sensitivities to include the environmental knowledge constructs and to widen the scope of KM understanding among managers. While this paper only looked at direct effects, it is important to consider whether the environmental knowledge constructs may have interaction effects in terms of moderating the effects of CR and SCL on Output and Resource Performance. The biggest problem of the management is to understand customers. Many organizations have started a 360-degree customer view by obtaining knowledge from every possible source. Because organizations that better understand their customers' preferences can sell more. Through the better use of Knowledge enabled supply chain management managers can capture voluminous amount of data and can convert into analytical formats for enterprise wise requirements. The knowledge can be deployed in such a way that it will help in developing intuitions of the managers who can rapidly take decisions in changing market conditions.

VII. CONCLUSIONS

The key points derived from the results of this research are as follows:

- The acquisition and application of knowledge in an integrated manner improved the performance of organizations by reducing costs, enhancing operational efficiency, and improving relationships with customers and suppliers.
- Learning is very essential for the organizations but not sufficient requirement for improving its performance. Performance can be improved by sharing updated knowledge among the supply chain process and functioning through knowledge

management tools. Improved performance also resulted from feeding data into software applications to derive algorithms for better decision making.

- The results showed that the only significant path coefficients were CR -> RP and KPC II -> OP. For the PL weights, we found that CR1 and CR2 had perverse negatively significant path coefficients. Secondly, it was found that CR8 and OP1 had perverse negatively significant path coefficients.
- It was also found that companies with effective KM programs have more flexibility because the system is capable of continuous evolution as need arises. Knowledge has to be shared to be useful and companies should quickly test and adopt new technology and not be averse to obsolescence when better methods are available.
- Customer involvement should be actively sought through a variety of online promotions and services, and their interaction and feedback should be frequently evaluated.

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