



The Impact of Data Analytics on High Efficiency Supply Chain Management

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Abstract

Change is inevitable, so when supply chain (SC) managers strategize for future years, they must deal with challenges of the global supply chain management (SCM) issues. Leading trends over the last couple of years tend to be the increasing value of big data and analyzing the information through analytics. The information has tremendous value; businesses must capitalize on the assortment of information by proper and in-depth evaluation with the usage of big data analytics (BDA).

This article seeks to spotlight the changing dynamics of the SC managing atmosphere, to recognize the way the two leading trends will influence SCM in future, to demonstrate the advantages which may be derived, and to generate suggestions for providing SC managers if BDA is adopted. The process of deriving value from the large quantities of information within the SCM is defined. It is demonstrated, through examples, the way SCM location might be influenced by these brand-new developments and trends. Within the examples, BDA have been adopted, utilized and applied effectively. Big data and analytics to draw out value coming from the information can create a big influence. It is clearly suggested that chain administrators pay attention to these two trends, since better usage of BDA can ensure they keep abreast with innovations modifications, which could help improve company competitiveness.

Key terms: supply chain management, big data analytics **JEL Classification:** M10, M21

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1. Introduction

The chain management is a "living, transforming thing" and extremely powerful. This has continued to be apparent in the last fifty years. The area has progressed with actual physical division, as it was first identified during the 1960s, to what is currently usually regarded as a characteristic which entails the whole organization (Ayed *et al.*, 2015). The location where the focus was on working towards strategies for lessening price and enhancing service. The focus has shifted to ensure that an economical, predictable and reliable program is implemented. Many advancements and business source preparation, supplies need preparation, effective customer reply, buyer connection managing, seller management listing, commuter routes management methods, just-in-time inventory management, factory management systems, complete quality management, collaborative





preparation, forecasting, and then replenishment, and other methodologies have contributed to this progression (Bedeley & Iyer, 2014). The role of data engineering and PCs was crucial to embracing the advancements that had been activated tremendously with the ever-improving engineering and increased computing power.

Additionally, different outside factors like disasters have brought the interest of SC experts on various management methods to improve the SC (Beck, 2018). Environmental concerns and sustainable development have been important in the advancement of eco-friendly strategies. Several advancements benefited SC in a good manner, while others have brought additional concerns for the SC. Nowadays, the BDA area is unquestionably abundant; older strategies and SC experts discover and then realize that inside a changing atmosphere there will usually be circumstances that are different, new challenges and new issues to be resolved (Bresciani *et al.*, 2021).

Among the main trends that have affected businesses over the last few years is the importance of achieving much more precise, data-driven insight to obtain efficient decision-making. With more advancements within IT, more abundance of powerful computing gadgets, the world has moved into the big data era (Daugherty *et al.*, 2018). Businesses now have access to plenty of data which they can use efficiently, but this could be accomplished via proper and appropriate evaluation, via the usage of analysis of these huge volumes of information. The potential impact is prevalent in numerous sectors, and surely in the SCM and strategies segments (Ghasemaghaei & Calic, 2020). The target of this report is to highlight and discuss various ideas around the advancements, indicate the way the SCM may be influenced and illustrate through good examples how they have been adopted, utilized and applied effectively. This research thus aims to present and provide SC managers with the insights and to spotlight, determine and discuss the different trends and concepts around big data and analytics. The paper shows exactly how SCM may be influenced by the advancements, using a selection of good examples, and how businesses have benefited from the advancements by improving their competitiveness (Hao *et al.*, 2019).

The content of this paper is divided into a few areas. A short literature assessment is provided in the subsequent portion, illustrating the importance of embracing BDA in the SCM atmosphere. In the next portion, the focus is on big data; the section will discuss what this involves, and whether this is an essential subject used by SC professionals. The study will also define analytics, what it is and how this, combined with big data, could be utilized to improve decision-making, eventually the competitiveness of businesses. Generally, there are still all those skeptical about whether this is anything valuable. SC analytics, or maybe analytics to SCs, could be the subject of the next portion. The following section is dedicated to the possible effect of BDA on SCM. Specific parts of SCM which may be influenced, in what manner, are also highlighted, whilst a selection of situations when scientific studies with real events are talked about. Finally, several concluding remarks and suggestions are provided.

2. Literature review

Technological advancements, including much more advanced programs, wireless methods, other has led a path for collecting enormous amounts of data. This technological innovation will not simply enable decisionmakers to generate choices more quickly, but will also allow big data sets to be analyzed faster, in order to figure out the right option for instances. Inventory quotes an article (Balbin *et al.*, 2020) that suggested that data volume will double every eleven years by 2020. The right way to continue with this escalating number of information sources is to use better BDA tools. Businesses which consume business analytics much more thoroughly feel they have increased their performance. In a survey carried out in 2019 by Ittmann (2015), SC professionals were asked about "innovations which generate SC". The target was to obtain the ideas of professionals on upcoming





SC trend, which may significantly influence SC in the long run. The two best strategic goals for SC professionals, which emerged at the survey, were to SC analytics and multi-channel fulfilment. Elaborating on SC analytics, the survey suggested: safety programs and methods gather information from various external and internal sources to create cutting edge insights which can certainly help managers reduce expenses, while maintaining functional agility and quality. Ittmann (2015) brings up the higher usage of BDA, as among the three trends in SCM to look at Keskar *et al.* (2022). Analyzing overwhelming quantities of data out of directories provides SC managers the capability to correct SC efficiency. Several good examples are pointed out exactly where this kind of evaluation can influence performance within the SC. Within an editorial, Montoya-Torres *et al.* (2021) suggest that big data is not simply a buzzword, but proper information evaluation, collectively with "the increasing mixture of online resources, programs and apps has heavy ramifications within the area of SCM that not only provides a chance, but additionally a big challenge". Their emphasis is on investigation, which is necessary exactly where SCM interacts with data science, big data and predictive analytics (BDPA). Additionally, they emphasize the benefits of abilities improvement, with certain focus on big data. All this has the possibility to revolutionize SC characteristics (Lekhwar *et al.*, 2019).

Gohar et al. (2018) also conducted a study to understand the comprehension of BDA among managers. The goal of this analysis was to uncover the greatest methods for utilizing big data for outstanding SCM efficiency. By the original selection, the study finds that there is currently almost no understanding among many of those interviewed about what goal big data can help fulfill, and what it implies for any potential future of SCM. The study finds many instances where big data, together with the proper utilization of analytics, have demonstrated enormous value. Nguyen et al. (2018) talks about an additional recently available instance within the political sphere. Big data used within the advertising atmosphere indicates a huge opportunity to turn advertising potentials and affect the buyer's behavior. Through the literature evaluation, there is plainly a concern that the crucial organizational feature of SCM will need to develop and adapt to BDA. It's been proven that many places have benefited greatly from BDA (Niebel et al., 2019). Presently, the world discovers itself in the era of big data, and many have recognized the value which may be attained from the evaluation of information (Santoro et al., 2019). There's little doubt on the possibility taken within the trends, so when a selection of SC experts has recommended, there is a requirement inside the SC fraternity to adopt the advancements, so as to constantly enhance the performance and competitiveness of SC. Leveling et al. (2014) signifies a part of skepticism and conservatism amongst SC managers surrounding the advancements. The goal of this report is thus to present all those within the market to what major data and analytics are, and, via a handful of situations, to hasten organizational adaptation, so as to achieve advantage with the use of big data.

Additional actual instances in which the volume of information built up grows nearly by the second would be the next:

✓ Walmart manages more than 10,000,000 buyer transactions every hour and imports all these directly into directories believed to contain over 3.5 petabytes of information.

✓ Radio frequency identification methods used by others and retailers can produce the information of typical barcode methods through hundreds of thousands of occasions.

✓ Each day Facebook manages over 350 million picture uploads, and the interactions of 800 million established customers, with over 900 thousand items.

✓ More than five billion individuals' text, browse and tweet on mobile cell phones around the world.

All the above instances reveal that great quantities of information are gathered, and always produced by everything around us. The web, each electronic procedure, portable cell phones, social networking, devotion flash memory card systems, etc., sensors are good examples of how information is produced and built up





(Wright *et al.*, 2019). Several instances discussed additionally reveal that this surge of information is going on inside the world of logistics and SCM. The important information uses your car to get intelligence from information, and to change that directly into a benefit for the company. Big data is nevertheless distinguished by four length and width, namely:

✓ *Volume* – the growing scale of data and data bases. These sizes can vary by using terabytes to petabytes of information.

✓ Variety – the various forms of data: unstructured and structured, multimedia, video, sound, text and more.

✓ Velocity – the pace during which information can be found, along with the throughput of all information. The evaluation of streaming information is also known as latency, specifically how rapid details could be analyzed. This is achieved increasingly more by embedding the information evaluation within the company's tasks.

✓ Veracity – the information quality, accuracy and correctness, that establishes both the trustworthiness of the information and the suitability. Coping with the dependability of information becomes essential.

Big data replaces how individuals' function. Zhu *et al.* (2019) offers many instances. It is not just setting up a method in which the company and its executives should sign up to realize value from all the information, but also inspire them to come together across different practical places. Insights coming from big data can allow all inside companies to generate greater choices (Silva *et al.*, 2020). Additionally, it can help deepen customer engagement, optimizing functions, avoiding fraud and threats, handling listing well, and capitalizing on brand new sources of earnings. This growing need for enhanced insights takes an essentially brand-new method. A method of drawing out significant value out of BD requires optimum processing power, along with abilities to evaluate the information and correct abilities (Shakya & Smys, 2021). When it comes to the SCM and strategies fraternity, this confirms the perspective of stock that the advancements surrounding big data are among the "most notable" trends within the field. It is obvious through the previously published works that great insights reside within big data, and the insights produced from the information could be leveraged for enhanced competitive advantage. It is today becoming apparent that because the importance of information will continue to develop, the present methods will not have the capability to deal with a ton of information.

Computing power of IoTs is growing every day, which enables businesses to deal with and resolve everincreasing data gathering and assessment issues. Because of advanced computer system engineering, increasingly more companies are key in the era of big data. This has caused the realization that there's value from evaluation of the information which can be attained by analytics. Babar and Arif (2019) provide advantages that businesses can have via this evaluation of information. All those suppliers with analytics take the lead in their fields, with good examples of firms that develop their companies on the capability to obtain, evaluate and act on information. Obviously, following an analytics method will increase a business's competitiveness and consequently the profitability. Gunasekaran et al. (2017) explains it succinctly: "People react to specifics. Logical individuals will make logical choices if you show them the proper data.". The strategies and SCM market are preferably positioned to gain from the technical developments along with the parallel methodological innovations by BD evaluation utilizing business analytics. Some examples of usage of BDA in SC are businesses managing their own SC, and all those contracting to third party strategies, suppliers deal with an enormous flow of freight, products, and goods every day while simultaneously producing big data sets (Daugherty et al., 2018). Countless shipments are monitored each day with regard to the origins to the desired destination, indicating data which include the information, excess fat, sizing, area, path, etc., of every person's shipment, throughout more and more networks (Shakya & Smys, 2021). It is the information monitoring, if it is the fundamental information, that likely contains large value and must be utilized. This utilization and analysis are perhaps nonetheless untapped, but increasingly





more businesses are adopting the innovations and experiencing and enjoying the enhancement of functional effectiveness combined with enhanced usefulness in addition to increased client satisfaction.

Exposure is a vital need to keep track of items in an end-to-end way through the entire SC. Hussein *et al.* (2018) found that almost no business can or even will have the capability to offer end-to-end SC exposure within the future. By sophisticated prescriptive and predictive analytics, it is starting to be easy to offer real time exposure over the SC and boost forecasting, transportation, production, replenishment, sourcing, demand planning and division procedures. Due to this much better presence, businesses can model SC data with increased accuracy, alter choices to come down to real time and use predictive and prescriptive analytics to resolve difficulties just before they happen.

3. Research method

Online resources are bundled together to construct capabilities for supply chain. Connectivity and data sharing are methods determined as organizational capital, which concentrates on the flow of info. Babar & Arif (2019) argue that the utilization of data analytics is dependent upon quality of data. Nevertheless, Gohar *et al.* (2018) postulates that quality, accuracy and accessibility are dependent on good delivery, depend on IT infrastructure. Therefore:



The suggested model

Source: Gunasekaran et al., 2017.

✓ H1: Connectivity is favorably relevant to data sharing.

The impact of connectivity and data sharing on BDA determine the mediation impact of best management dedication. Literature underlines the role of management, and Ittmann (2015) appearance directly into the best management opinions, and their influence on potentials and consequences associated with the assimilation of web solutions, whereas Hussein *et al.* (2018) checks out the mediating role of SC within the excellent assimilation of enterprise resource planning (ERP). Following the Fiore *et al.* (2019) viewpoint, connectivity and its methods develop "BDA acceptance" capability. Scholars Montoya-Torres *et al.* (2021) spotlight the role of supervisors within construction abilities, and help companies achieve competitiveness by upper hand. Managing dedication orchestrates power and production abilities. Notwithstanding the benefits of SC in the assimilation of solutions, literature is underdeveloped in the situation of creating BDA capability. Scholars propose that the validation of technologies (i.e., BDA) be the first phase of the assimilation operation, and then assimilation and routinization. Thus, each connectivity is influenced favorably on BDA validation under the mediation impact of SC. Therefore:





✓ H2: Connectivity underneath the mediation impact of best management dedication is favorably associated with BDA validation.

 \checkmark H3: Information sharing underneath the mediation impact of best management dedication is favorably associated with BDA validation.

BDA and BDA routinization assimilation explain routinization as "the everlasting feature of an organization's governance system to account for the incorporation of a technology" (Gunasekaran *et al.*, 2017). Zhu *et al.* (2019), based mostly on Gohar *et al.* (2018), argue that routinization is the second point (i.e., validation, assimilation) and routinization. To get the expected outcomes, businesses must recognize, routinize and absorb solutions. By Ittmann (2015) viewpoint, a business must build up BDA and assimilation features from the mediating construct of BDA routinization. Therefore:

 \checkmark H4: BDA is favorably associated with BDA assimilation underneath the mediation impact of BDA routinization.

BDA assimilation, SC efficiency, along with organizational results. Scholars spotlight the benefits of BDA for changing SCs. Gohar *et al.* (2018) mentions which BDA can help reduce SC expenses, improve efficiency, respond quicker to switching atmosphere, provide much more power in provider interactions with vendors, and improving product sales and businesses preparing abilities. Montoya-Torres *et al.* (2021) recognizes the good effect on the use of BDA on high efficiency. Nguyen *et al.* (2018) say IT enabled sharing abilities affect competitive advantage. Literature does not, nevertheless, check into post diffusion of BDA. What about certain aspects of the effect of creating BDA features, and their impact on SCP and organizational performance? Therefore:

 \checkmark H5: BDA assimilation is favorably associated with a firm's SC efficiency.

✓ H6: BDA assimilation is favorably associated with organizational performance.

The impact of SC efficiency on organizational results (Gunasekaran *et al.*, 2017) noted that a firm's SCP may favorably influence industry performance by improving financial performance and market share and by decreasing SC expense. Montoya-Torres *et al.* (2021) proposes the supply chain cost and delivery of quality services and products in exact numbers and exact times as methods of SC efficiency. Balbin *et al.* (2020) argues that SC methods (including quality and level of data sharing) can enhance organizational performance. Nguyen *et al.* (2018) mentions which SC efficiency favorably affects organizational performance, while inside a later analysis, Hussein *et al.* (2018) notes that SCP is favorably associated with organizational performance. Therefore:

 \checkmark H7: Supply chain efficiency is favorably associated with organizational performance.

Statistical control. Two control variables are provided. These variables are organization size (measured by total number of employees) and revenue produced by the group within a monetary year.

4. Research techniques

4.1. Tools development

This analysis relies on a survey-based method. The method was developed using suitable scales. They had been assessed on a five-point Likert scope with anchors which range from firmly do not agree (one) to strongly agree. The survey was pretested throughout two phases. The questionnaire was e-mailed to one hundred thirty-five SC specialists and supervisors in the American Production and Inventory Control Society (APICS).





Therefore, they are dealing with significant businesses interested in consultation services and then production. They have been directed to go through the survey method for framework, readability, completeness and ambiguity, and their reviews have been in the last survey method. All the exogenous constructs within the unit are operationalized as reflective. The reliant constructs organizational performance and SCP ended up being operationalized as formative constructs.

4.2. Data collection

This analysis relies on a cross sectional e-mail survey of producing companies, consultation services, e-commerce businesses, and engineering businesses within leading urban areas in the USA. The original test consisted of 350 companies produced from directories supplied by Babar and Arif (2019). The survey questionnaires have been delivered to major informants who are purposeful heads linked to SCM (logistics/transportation, purchasing/procurement), and operations management. Each survey incorporated a letter and telephone calls. This style is ideal for exploration during USA's distinctive public and cultural context, in which private human relationships mostly influence industry tasks, rather than motivation systems (Balbin *et al.*, 2020). Private associations and help from apex groups improved the result rate. 250 done and functional replies have been achieved, leading to a good effect speed of 71.04%.

5. Results and data analysis

The recurring plots by expected value, rankings, plot of statistics and residuals of skewness and kurtosis had been done. The highest complete values of kurtosis and skewness of the actions within the leftover dataset were 1.77 and 2.45, respectively. The claimed values are best within limitations (univariate skewness). Thus, neither the plots nor the data indicated considerable deviances through the common values.

5.1. Measurement validation

This analysis relies on a three-stage enhancement to cultivate steps that satisfy all the demands of dependability, validity and one-dimensionality. Both Cronbach's alpha and scope composite dependability (SCD) were utilized. Aside from a low number of constructs, no considerable distinction between actions was noticed. A widely used technique was used to compute discriminant validity and convergent. Products load along the planned constructs with standardized loadings more than 0.51 or even greater, along with preferably 0.75 or even higher, the SCR more than 0.75, and the average variance extracted (AVE) more than 0.01, and therefore convergent validity is available. Ittmann (2015) mentions that for discriminant validity, all the things ought to have increased loadings on their assigned constructs compared to other constructs. On the other hand, the square root on the AVE for every construct must be bigger compared to any sort of correlation estimation.

5.2. Common method bias

One factor check about the seven conceptually essential variables was done. The outcomes show that the seven variables are existing, and probably the most covariance defined by a single element is 20.15 per unit. Thus, typical technique bias is not apt to influence the results. Several regression evaluations with mediation assessments were used to evaluate the hypotheses because of the intricacy of available data and the model points. Most variables are mean centred to lessen the danger of multicollinearity of all interaction phrases. Multicollinearity assessments have been done by calculating variance inflation elements (VIE) for every regression coefficient. The VIE values ranged from 1.0 to 4.81, considerably under the advised threshold importance of ten.





Hypothesis	Beta coefficient	Mediation	P-value
H2	0.65	Partial	0.001
H3	0.72	Partial	0.001
H4	0.82	Partial	0.001

Hypotheses' assessment (H1, H5, H6, H7) got sight by utilizing regression evaluation.

✓ H1 was supported (≤ 0.82; t = 22.1; p = 0.01) for the prediction that connectivity is favorably linked with data sharing (IS), and the dimensions on the company didn't have a big impact.

✓ H5 was supported since BDA assimilation is favorably connected to SC efficiency (≤ 0.51 ; t = 12.3; p = 0.01).

✓ H6 was supported since BDA assimilation is favorably connected to organizational functionality (≤ 0.27; t = 2.8; p = 0).

✓ Furthermore, H7 was supported. SCP is favorably connected to organizational performance (≤ 0.25; t = 6.7; p = 0.001).

H2, H3 and H4 were analyzed using hierarchical mediation regression analyses.

✓ H2 regression check was carried out with connectivity as impartial varying, and SC as reliant adjustable. Connectivity has considerable impact on SC (≤ 0.65; p < 0.001). Another move was BDA on SC, which proved substantial impact on big data validation (≤ 0.23; p < 0.001). The third regression was BDA on SC and connectivity. It may be the immediate of connectivity on BDA (≤ 0.218; p < 0.001). The significance of mediating was analyzed by using check.

✓ H3 regression check was carried out as impartial varying and SC as reliant adjustable. It has considerable impact on SC (≤ 0.72; p < 0.001). Another action was validation on SC, which proved the substantial impact on big data validation (≤ 0.23; p < 0.001). The third regression was BDA on data top management commitment and sharing. Thereby, it may be the immediate of this on BDA (≤ 0.27; p < 0.001). We even further tried to evaluate the significance of mediating using the check. We discovered that partial mediation results can be found in the event of BDA.

✓ H4 regression check was carried out with BDA as impartial adjustable, and BDA routinization as reliant adjustable. The BDA has considerable impact on BDA routinization (≤ 0.82; p < 0.001). Another move was BDA on BDA routinization, which had a substantial impact on big data assimilation (≤ 0.018; p < 0.001). The third regression was BDA assimilation on BDA validation, and BDA routinization. It may be the immediate of BDA validation on BDA assimilation (≤ 0.07; p < 0.001). In addition, the significance of mediating was analyzed.

6. Discussion

6.1. Theoretical ramifications

This study conceptualizes BDA assimilation as a three-fold procedure concerning assimilation, routinization and acceptance. In addition, it thinks about the effect of information and abilities on SCP and organizational performance. The analytical difference between BDA and BDA assimilation can help perfect the argument that connectivity is likely to be mediated by SC to obtain BDA validation, and that will be the initial action to assimilation analysis. RBV argues RBV is applicable for comprehending BDA assimilation, this capability which depends on bundling connectivity, and its (resources), and impacts favorably on SCP plus organizational performance, and the achievement of competitive edge in a high SC amount. The role of RBV within detailing BDA is discussed in





the activities and provides chain managing literature (Gohar *et al.*, 2018), however, not in relation to organizational performance and SCP; research by Ittmann (2015) promises that SCP is favorably linked with financial performance and market. The analysis deals with this gap, plus argues that BDA assimilation is favorably related to organizational performance, extending research focusing on its role, data sharing and chain integration, transformation on SC and high general performance. This analysis conforms to Montoya-Torres *et al.* (2021), who may have mentioned that BDA provides significant benefits within terminology of enhancement in SC expenses; advantages, responding quicker to modifying atmosphere, supplying better strength of interactions with vendors and improving product sales and businesses preparing abilities. Finally, this analysis attracts attention to literature, which spotlights the role of prime management in creating abilities with the orchestration of information, helping companies achieve competitiveness by upper hand.

6.2. Managerial ramifications

The mediating role of SC involving power and BDA spotlights that concrete meta structuring steps from leading to managing play a big part in assimilating BDA within businesses. Main managing must not only get materials (C and IS), but also dedicate for this approach by orchestrating, but also committing to useful resource bundling, as a way to create BDA assimilation capability, and realize higher organizational performance and SCP. In addition, the locating with which BDA assimilation abilities improve organizational performance and SCP implies that best administrators must have the capability to get (through for example outside acquisition) power and make proper BDA features to attain substantial organizational performance and SCP.

7. Conclusion

Watching what is happening across the world, considering the advancements in mobile technology and information, there's little doubt that we discover ourselves within the era of big data. Additionally, sophisticated computer system strength provides the evaluation of information in a more concentrated, bigger and faster approach than in the past. Companies must know more effectively about their forces inside their marketplace and then react quicker to modifications inside their environment to stay cut-throat (Bresciani *et al.*, 2021). The appropriate utilization of virtually any programs and strategy to help with this is important.

This short article attempts to introduce completely new advancements that demonstrate exactly how businesses in most sectors produce attempts to go from "gut-feel" decision-making to precise, data driven awareness to efficient internet business decision-making. Provide SC managers within the SC, and strategies atmosphere, must adopt the advancements to stay competitive, effective and efficient. Looking forward to product sales volumes, client tastes for products and solutions and optimizing hiking schedules, are several cases exactly where correct evaluation of BD has the capability that the company will be successful (Shakya & Smys, 2021). Additionally, comprehensive instances are discussed within the post. It is crucial that SCM and strategies choice creators pay attention to the reality that as information and analytics change companies, and the landscaping inside that they run, it unavoidably sets up extra brand-new requirements on management.

For every organization to achieve what has long been reported within this paper, it is essential to carry an entire selection of actions and steps. These contain facets, including, inter alias, operating throughout purposeful places, information recording, making sure of information integrity, information managing, techniques and tools to do the required analytics evaluation and the manpower capability necessary to accomplish most of this.

Even though all of these are excellent, there is simply no work to deal with in this document. Presently, the leadership electrical capacity in many companies is inadequate and undermining attempts to react appropriately and fast to the alterations, in order to produce the correct managing buildings and functions. Nevertheless, SC managers should not be found unaware, as modifications are happening and therefore unavoidable. The goal





of this information was to expose SC managers to the increasing significance of two fashion, which can be modified and affected by the SCM market in a huge way. Big data was identified and talked about, while analytics was reported as it is currently outlined and comprehended. Several uses are talked about, where big data with analytics are effectively applied, leading to the advantages which can be derived from the adoption and drive to data driven choices.

Finally, modification is not simple within every system. It is demonstrated from a selection of good examples how these have influenced SC in which the modifications are adopted. Big data is a simple fact, and analytics to draw out optimum value from the information can create a big influence. SC managers must pay attention to the importance of data driven choices. Mainly, it can be easy to continue to boost the performance of SC and for companies to stay cut-throat.

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