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## EDITORIAL

### **Agility of the Supply Chain**

It's been almost 40 years since Keith Oliver of Booz-Allen-Hamilton first introduced and then developed the Supply Chain Management concept. Although the term appears even in an article from 1898. The supply chain represents a lot of companies linked to each other and which outline the flow of resources transformation into products and services. K. Oliver defined SCM as the process of planning, implementing and controlling operations in the supply chain. Supply chain management aims to increase the value of the product offered. A solution to this effect has been offered since 1985 by Michael Porter who defined the value chain and value system, needed to create a competitive advantage. Over time, other solutions have been identified to create the efficiency of the supply chain, many of them used today. One trend was, for example, the globalization of the supply chain. But lately some new trends are emerging.

Companies have multiple options for getting products to buyers. They can use indirect channels, or they can sell directly to customers via the Internet or a sales force. Since profit margins vary depending on which channels are used, the firm must decide on the optimal channel mix. Companies compete based on innovation, customer experience, quality, and cost. Time to market is critical because the window of opportunity can be small.

Supply chain performance is measured with efficiency-related metrics such as asset utilization, inventory days of supply, products costs, and total supply chain management costs. In this sense, the management of the company must know the firm's value system as well as suppliers, customers, and suppliers' suppliers.

Today's supply chain is broad and continually evolving, which means that it must be agile to be effective. Consumers have multiple choices in how they purchase products and they expect high levels of customization. Also, supply chain sourcing has become very fluid. The ability to rapidly reconfigure your supply chain is essential to successful businesses. An agile supply chain can deliver on those expectations.

Machine learning is especially useful for large, dynamic data and it is applied in logistics technologies to enhance warehouse management systems, supply chain visibility or supply chain planning. Advanced analytics provides the ability to extrapolate the current



environment to make profitable decisions. Robots, drones or autonomous vehicles enable new business processes to reduce the time for inventory checks.

Supply chain risk is everywhere, and it is tough to prioritize. Consequently, companies need to start evaluating and confronting cyber risk at every level. A buyer may discover financial issues when increasingly late deliveries, inefficient alignment of supply and demand causing unnecessary inventory and production, capacity constraints and inadequate sources of funding.

An integrated supply chain is a process wherein every phase is streamlined and inseparable. A non-integrated supply chain is disconnected and functions in silos. Integrated supply chain allows a company to focus on assets that would allow reducing waste and costs. Increasing efficiency can save money through reduced warehouse space and lean supply chain for more profitable operations. The ability to be flexible and adapt to different situations is important in any competitive industry.

Many of the changes made in SCM have arisen from new theories applied in management, such as Resource-Based View (RBV), Agency Theory (AT), Just in Time (JiT), Theory of Constraints (ToC), Time Based Competition (TBC), etc. And innovation in management is a continuous process.

*Gheorghe Militaru*  
Deputy Chief Editor

## ABSTRACTS

### **Modeling of the Intermodal Terminal**

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*ABSTRACT: Whereas most of the finished products are transported in containers which are the primary means facilitating intermodality, it is estimated that in XXI century, intermodal transport, along with technological improvements of the transshipment systems, will be the main international trade element, because is considered to be the most effective way of managing „door to door” international transport activity. The hubs of intermodal transport network are represented by intermodal terminals and by the efficiency of their operation largely depends the proper functioning of the entire intermodal chain. Transfer points are the most sensitive links in terms of efficiency and reported to the entire intermodal transport system generates the highest costs. In the intermodal terminals operating in the public system case, all transport demands to be treated are considered to have equal priority. Intermodal terminals activity privately operated can be modelled using the absolute priority treatment demand model. By serving prioritized entities with different characteristics the total duration of stationary system and implicitly stationing costs can be significantly influenced a total duration of stationary system and implicitly stationing costs.*

**KEYWORDS:** intermodal terminal, traffic flow, low priority demand, high priority demand, input stream, traffic entity

## Using Technology Acceptance Model to Adopt Intelligent Banking

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*ABSTRACT: This paper analyses the impact constructs of the adoption of intelligent banking among Romanian consumers, the correlation between them and also, demographic factors will be taken into account (age and gender). The main basis for this study is the extended Technology Acceptance Model (TAM), mainly aimed at the study of information systems adoption. George, an application from Romanian Commercial Bank, the first smart banking, is a new highway to make banking: totally intelligent and digital. Based on empirical research, using a technology rating model was developed a modified TAM for consumer acceptance of Internet Banking. There are two important factors in TAM: Perceived Ease of Use (PEoU) and Perceived Usefulness (PU), which are of particular importance to the attitude towards the use of a new technology or information system through the behavioural intention to use. For the verification of variables' correlation, it was applied Structural Equations Model, adapting to the questioned sample. Results and conclusions are partly supported by the developed hypotheses, presented after the reliability test (calculating Cronbach's Alpha). The significant effect that influences the attitude toward using George is made up of behavioural intention to use, perceived usefulness and the perceived risk towards intelligent banking.*

**KEYWORDS:** online banking, George, intelligent banking, TAM Model, perceived usefulness

## Distribution Capacity in the Supply Chain Management

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*ABSTRACT: In the last century the focus in business has shifted from production to distribution. The economic and political crises set ordeals to the effectiveness of production and the implementation of products and services. The incompatibility between the production and distribution capacity is an issue of particular importance, especially for companies and organizations functioning in the sphere of services. The interrelation between capacities can be critical for companies and problematic for their contractors and clients. Managing the channels for implementation in modern conditions presupposes flexibility, dynamics and transparency. Using the marketing tools in managing capacities in conditions of multi-channel distribution is of exceptional importance for using the abilities of the production capacity and decreasing the cost of missed benefits for companies. Economies of scale in production and implementation are prerequisites for the development of companies' innovation activity and improving their overall competitive positions on the market or in particular market segments. Investments in distribution and maintaining relations with consumers are among the key factors for the success and sustainability of companies.*

**KEYWORDS:** distribution, capacity, multi-channel distribution, economies of scale, innovations

## Logistic Performance in Supply Chain Management

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*ABSTRACT: This paper presents a theoretical conceptual model for creating performance through logistics performance, customer satisfaction and financial performance for a whole supply chain. The problem for both practitioners and researchers is that supply chain performance is difficult to measure. This study incorporates an established measure of logistics performance as a surrogate for supply chain performance. Logistics is clearly a supply chain function in that it links manufacturers and customers although those customers may not be the ultimate customers in the supply chain. Furthermore, in the context of logistics performance, customer satisfaction is a key construct, as it provides marketers and business owners with a metric that they can use to manage and improve their businesses. The scope of this work is to evidence that a supply chain focus will enhance logistics performance, which will ultimately result in improved organizational performance.*

**KEYWORDS:** logistic performance, value, attributes of performance measurement, customer satisfaction

## Skills for Virtual Communication

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**ABSTRACT:** *The use of new information technologies is in line with the provisions of European Union force for the third millennium. The objectives are: describing and analyzing the main features of European projects in e-learning; specifying the benefits of the widespread use of new information technologies; identifying ways of capitalizing on the computer for each of the specialties; arguing why the computer use in the study for each subject and at any time of enrollment; listing some of the advantages of belonging to a virtual community; describing of virtual educational communities; enrolling in virtual educational communities; requesting for inclusion and participation in these communities active and sustained; looking for educational information on virtual support necessary to optimize the educational process, increasing the quality and timeliness of teaching performance; participating in forums on educational themes, making an exchange with other teachers in Europe; communicating in a virtual manner, in English effectively with teachers, pupils/students from other cultures; designing virtual learning units; designing and developing of content to participate in the European educational community pages.*

**KEYWORDS:** virtual communication, social networks, social media, Facebook

## The Emotional Relationship Between Company and Client

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*ABSTRACT: Through the implementation of Customer Relationship Management (CRM) systems, multinationals today manage to control globally the quality of customer experience. The fluidity of information flowing within organizations through CRM systems brings businesses very close to the customers. Nowadays, customer satisfaction is less important for businesses than client-company emotional bonding. Customers, today, are seeking for emotional positive experiences, not only to buy something. In order to improve the relationships with today's customers, businesses need to diversify their marketing methods. Exploring the business-client emotional link is a marketing technique currently used to reach customers with messages that matter to them. Current CRM systems have not yet developed the capability of identifying, storing and using psychometric data, relying so far on storing and using demographic information. The paper proposes an informatics model for improving the client-company relationship, based on the emotional marketing approach through specific marketing processes. The utility, architecture, how to use, implement and test the IT model to improve the client-company relationship are presented. The proposed IT model can be implemented independently as a marketing tool or integrated as a marketing model in the CRM system. The proposed IT system is designed to collect and use relevant customer information, supporting companies that do not have marketing budgets in offering personalized experiences that form long-term business-client relationships.*

**KEYWORDS:** CRM systems, company-client relationships, emotional marketing, psychometric information, marketing processes

## The Main IoT Application

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*ABSTRACT: The research aim is to analyze the evolution of the main IoT applications in the business environment in areas such as retail, medical, smart home, smart city, agriculture, logistics and automotive. The areas of application presented have been structured into two main categories, IoT applied to community-based services (agriculture, medical, smart city, smart homes) and IoT for service-oriented solutions (retail, logistics, automotive) as many academic studies have identified the potential for improving businesses by using IoT in these areas of activity. At the same time, the research identified the main development trends in the IoT fields of application. To analyze these trends, we identified the scientific articles in various scientific databases and used the Google search engine and Google News database to analyze the potential growth of these areas of application. The implementation of IoT solutions provides a new perspective for business owners, both to generate higher revenues and to facilitate efforts in order to meet customer needs. IoT technologies will change how end-users interact with objects around them, aggregate customer behaviour information, and improve business performance by using data volumes generated by devices using IoT technology.*

**KEYWORDS:** IoT applications domains, IoT digital resources, IoT online visibility, IoT industries, IoT market trends, scientific IoT resources