ROLE OF CRM IN SUPPLY CHAINS USING THE PROCESS PORTAL

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Abstract

The expansion of customer orientation of entities operating in the logistics chain is the primary objective in the cargo transport services market. Focusing on specific customer processes is one way how to adapt the offered services to the customer's requirements. The aim of the study is to introduce the possibilities of application of the Customer Relationship Management (CRM) in logistics chains, in that the main role is the relation between the customer and forwarder or cargo operator.

The definition of the CRM and its enforcement as a philosophical means of providing the services in the transport market leads to the implementation of a process portal that supports the full range of processes, and in turn generates a comprehensive transportation product. It means creating an operational and economic concept that combines the potential of CRM and Internet portals cooperating with the concept of operating systems. It includes marketing, sales and service processes, as well as the operation of the portal and the customer support process. In order to support these processes, the main features of information systems adapted to different process tasks are introduced. In these relationships, it is necessary to specify the coordinator of the logistics chain, which may be a freight forwarder, intermodal transport operator, or perhaps even a cargo operator. The realization of the process portal implementation in the context of CRM allows the supply chain coordinator to focusing on individual customer needs, as well supporting the entire customer process of transport and logistics using modern ICT. The specific feasibility of the process portal will depend on the operator and the environment. The decision-makers are customers, partners, accessibility and existing ICT infrastructure. The process portal is a tool to promote a

coordination of freight transport in order to use sustainable transport modes and providing services at the required quality level.

Key words: process portal, cargo operator, logistic chain, transportation services, comprehensive product

1. INTRODUCTION

The customer usually requires several products and services in the customer process. They must find out for themselves (e.g. the goods transport process) by contacting multiple sellers (for example, freight forwarders, and carriers), evaluating bids and coordinating actions (e.g., finding bids, shipping conditions for different carriers). Sometimes they have a little experience of these processes. Modern companies have moved on to support the entire customer process. Enterprises offer all the products, services and information the customer need in a single place, leading them through the process and adding value. There are integrators and specialists for these processes. In this process, an enterprise aggregates all services and information for a particular customer process. In doing so, they will integrate their own services and services provided by co-operating partners. Products and services can be implemented on a so-called process portal. An integral part of the process portal is the CRM strategy (Customer Relationship Management).

CRM is currently often appearing as part of a company strategy in different sectors. CRM with the customer´s needs is in the focus of the business, whereby the company redefines its processes and jobs, and then afterwards it will support the appropriated technologies. Modern software technology allows the creation of a detailed client profile by keeping its purchase, payment, and contact service history in the database. This information, when properly used, becomes an effective tool for non-price competition. Knowledge of customer preferences allows you to increase sales volume without using a costly advertising campaign. The CRM system built in a professional way will positively affect the business. The result is a change in the company's thinking from product-oriented to customer-oriented, and consequently, profit growth and business goals.

The CRM approach has received increased attention as a marketing concept during the last decades, both amongst practitioners and in academia, for instance Sin et al. (2005) and Vorhies (2009). The number of papers and books on CRM appears to be increasing incrementally, and the implication from this is that a new sub-discipline of marketing research is emerging. There is a great variety of topics that have been addressed in CRM research. There is a need for reflection on this establishing research field, and consideration must be given to identifying trends and relevant topics for further research.

A fundamental problem in CRM research is that, at present, no common definition what CRM is. The author prefers perspective to see CRM as a matter of integrating business processes in an organisation, for example Buttle (2004), Khalid (2001), Palaram (2010), Becker (2009), Chang (2010) and at the same time as business strategy (Morgan, 2009 and Dutu, 2011).

Not to mention that most of known studies did not provide a theoretical or a practical model for the process portal in context of CRM processes adapted for logistic supply chain. According to the above, the main problem of the research is the extent of the relationship between CRM and process portal in the logistic chains.

In the research were used the basic methods, as analysis, brainstorming, synthesis, methodology of process imaging and others. The main research uses process modelling, process analysis as well interview with experts in the field of CRM and in the field of supply logistic.

The aim of the paper is to analyze CRM processes following the definition of a process portal in the transport sector. This concept is intended to bring about the development of services provided in rail transport and logistics. Throughout logistics and distribution chains it is possible to consider different entities that will be the operators of the process portal supporting the customer process of transportation and logistics. Attention is focused on forwarding and cargo operators (railway undertakings).

2. CUSTOMER RELATIONSHIP MANAGEMENT

The rapid development of the application of Customer Relationship Management (CRM) and software solutions has produced a numbers of definitions, for example see Danglmaier & Helmke (2001), Bach & Österle (2000), Schmidt (2001), and Lendel (2009).

These have common features. This definition is often used:

Customer Relationship Management is a collection of marketing, communication, business and service processes and an organization (enterprise) supported by an appropriate organizational structure and technology. They enable them to manage customer relationships, tailor their offers according to their needs and wishes. These relationships then have a direct impact on the rationalization, optimization and overall efficiency of all activities that are somehow related to these relationships. Customer relationship management is part of the corporate strategy and becomes a part of corporate culture. Technologically, it is increasingly exploiting the potential offered by the Internet.

Customer Relationship Management is therefore an enterprise concept aimed at acquiring customers and maintaining long-term relationships with them. It is often referred to as CRM by the English Customer Relationship Management. However, CRM needs to be understood as a concrete solution for customer relationships, particularly in the area of information technology. CRM is a tool to help improve the way you work and communicate with your customers, to convince them of the benefits of a long-term partnership, to consolidate the market position between sales, customer service, marketing, and all the components that work with the customer. CRM integrates human resources, processes, and technologies to maximize the relationship with all customers, including "e-customers", in-house customers and vendors. CRM is increasingly using the Internet and mobile technologies.

CRM goes considerably further than the classic marketing that is focused on selling products to a group of customers. The focus is on keeping the customer with

respect to the surrounding market where the customer has more choice than in the past. Instead of trying to convince as many customers as possible that the currently available product or service is the best solution to their problems, suppliers are currently focused on getting the best for their customer. They are then subsequently trying to meet those needs as much as possible.

Creating a customer database, which will increase the sales volume, is a process that begins with basic information about customer purchases. In particular, they need basic information such as a name, mailing addresses, e-mail addresses and phone numbers, but also other information as a way of communicating personal interests. You can still move a step further with these types of customers so that they evolve by using CRM solutions. The imposition of a past relationship with customers can build the basis for personal information on every customer.

If the enterprise is able to satisfy their customer, this is a major success. However, it is equally important to know, as they had to, why. This information will form the basis for further decision making. One of the most important pieces of information is how much this company gained and what it cost them. For these reasons, it is therefore imperative to transmit information to the opposite direction, that is, back to the management and evaluation systems. Otherwise, there is little likelihood of successful decisions and eliminating unsuccessful ones.

3. CRM PROCESS

Implementing the management concept with customers requires reconsideration of customer-related business processes that contribute to the business model.

The implementation of CRM is related to the implementation of the process portal and the definition of sales channels. Process architecture must be tailored to specific requirements according to the number and type of channels used, while IS architecture is influenced by sales channels. Many features are completely independent of the sales channels, while some are relevant only to certain channels. The four channel types of "man-man", "man-machine", "machine-machine" and "multistage channels" (Stäger, 1999) will be distinguished by the characteristics of the various channels important to the transport undertaking.

CRM activities are ongoing in marketing, sales and service processes. In principle, the customer in the interest phase (start of contact) is served by the marketing process. Contacting during the recovery (advisory) phase as well as the buying phase is ongoing in the sales process, and part of the purchase phase as well as the after-sales activity is covered by the service process.

In a complete customer process, a customized shopping cycle usually runs multiple times. It can then take place on a process portal that will support the entire customer process - marketing, sales and services.

The basic and first step to understanding the customer is to know all the products and services they use. This is difficult if the customer communicates with the company in different ways (personally, by telephone, e-mail, etc.). The customer expects that all these so-called sales channels are equivalent and that all previous contacts with the company will be known to employees. A number of products have been created to

record all customer contacts (CRMs), which will provide information on previous interactions during the next contact (the necessary link to analytical CRM). It is important that these applications are accessible to all employees who come into contact with customers. Contact recording increases the consistency of mutual communication, but does not lead to a perfect understanding of customer needs and wishes. Each customer has an individual behaviour, but some groups of customers have similar needs. In order to do this, we need to analyse the information we collect and look for links between them. This is an analytical CRM, a set of tools for analysing and predicting customer behaviour.

A key issue for the proper commissioning of all CRM systems is the interconnection of all components of these systems and integration with other enterprise systems and processes. Otherwise, there is a risk of fragmentation of customer data, duplicated business activities, uncoordinated campaigns and unscheduled sales and services with all the negative consequences, such as increased costs and loss of customers.

4. PROCESS PORTAL TASKS

The first step to the process portal is to create the Internet portal. Many internet providers have adopted the concept of a portal and called their own sites with portals where they provide search support by various search engines (e.g. google.com). Although the portal is defined as "a website that the user uses as a starting point from which he or she uses the internet or uses it as a point of reference to which he is still returning" (Gašparík & Lendel, 2010), the concept of the portal now has a lot of wider practice significance.

Pils (2000) defines the Internet portal with the following characteristics:

- The portal supports the user or their needs,
- Offers different functionalities for specific target groups, based on business processes or personal preferences,
- Bringing together the interests of customers and users, collecting the various data sources centrally and providing aggregate information from them. This creates a unified surface for different data and system platforms.

The Internet portal differs from the classic website by integrating the activities of different sources and the selection and preparation of activities is tailored to the requirements of the target group of the Internet portal.

Integration can be achieved at multiple levels. In the simplest case, the Internet portal provides only lines grouped (e.g., links to internet pages), integrating all the activities into a single surface with a highest level, so the user can no longer directly see from which source the contents come from. Activities include not only information but also various applications such as discussion forums, auctions, ordering or execution banking systems. Different sources can represent different systems in one enterprise of the portal operator or different partners who offer their activities through the portal.

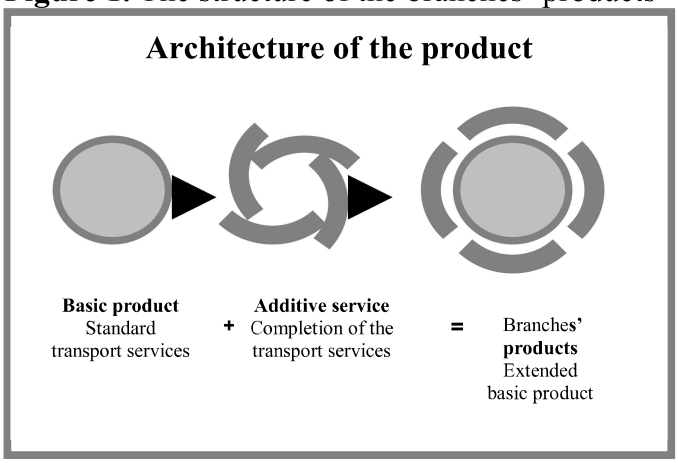
Internet portals along with operating systems and the CRM concept form a conceptual basis for process portals.

Both web portals and process portals integrate information and activities from different sources and the customer is available in one place. While the web portal is just one web page with certain properties, the process portal is an economical-business concept that supports customer service orientation through the use of the Internet portal. Process portal activities are not only available over the internet but any sales channels can be used as appropriate. For economic reasons, however, most activities and information are offered over the internet. Typically, individualized activities are provided on the WWW page.

The portal operator defines the business strategy after assessing its position on the transport market. It is necessary to offer a comprehensive solution to its needs, i.e. the overall sector product, not only the relocation from point A to point B, but to evaluate this basic product by ancillary services (see Figure 1).

A process portal is a customer interface. The portal operator focuses on the products and services of various vendors and third parties with whom cooperation begins. They are specialized in producing competitive products and providing them through a process portal. When a portal operator makes some products or services, it combines them with partners on their own portal.

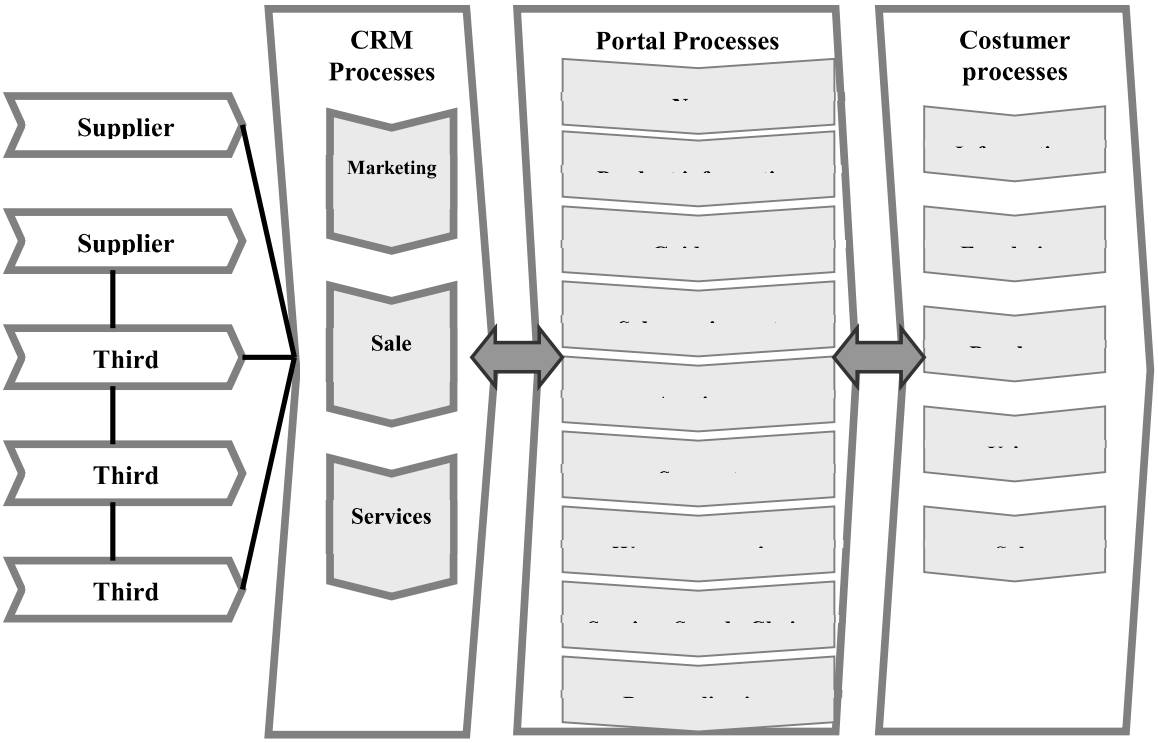
Figure 1. The structure of the branches' products



Source: Gašparík et al., 2016

From the operational and economic point of view, the cooperative operating system is the basis of the process portal. Operating systems address customer problems fully and efficiently. Therefore, individual isolated activities have so far been combined into integrated solutions that are needed for integrated problem solving. Often, operating systems are created by cooperating with external partners. An important activity of the process portal operator is to integrate proprietary and partner products and services. The frame design of the process portal structure is shown in Fig. 2.

Figure 2. The General Model Process Portal, where CRM processes play a supporting role for Process Portal activities



Source: Schmidt, 2001

5. PORTAL OPERATOR PROCESSES

In the process portal, all customer contacts have a relationship to CRM marketing, sales, and services. These processes are focused on the customer process or, more generally, on the purchasing cycle. When a customer interface is a process portal, then CRM processes are responsible for providing customer-driven activities through a process portal.

Other, mostly highly standardized services provide a process portal for electronic service providers. As a rule, it is the execution of a payment transaction, the execution of logistical activities or the provision of product catalogues. Electronic service providers are specialized in providing cost-effective activities on a large scale.

As part of the business architecture, it is necessary to process the strategic issues and options of the process portal operator, which will define key strategic components such as services or co-operation.

The process portal model characterizes the proposed processes and roles of the railway transport company in the provision of services. Compared to classic product sales, all the activities are associated with the marketing process, sales and services, but only the key activities cannot be attributed to the process portal operation. For complementary and networking activities, we need to design additional activities - the Portal Process that provides standard activities and customer support process that provides personalized activities (Keil et al., 2016).

The marketing and portal operation processes are managed by the portal operator and the sales, service and customer support processes are managed by the customer. The activities of marketing the provision of services consist of various sub-processes:

- Customer contact process involves customer interest following active contact of potential and existing customers,
- Sales management is driven by customer requirements,
- Product management represents the preparation and provision of products by the railway undertaking to customers, and is shown by operational efficiency,
- Service provision is an activity that occurs while providing products ordered by customers.

The marketing and portal traffic processes can be easily standardized, but must be tailored to the needs of a particular customer process or segment, but they are carried out everywhere without changes throughout. Conversely, only standard procedures can be specified for customer-driven processes that are modified in individual cases.

The basis for the formation of a business strategy is the coordinating position of the subject in the production chain. In terms of customer integration and bidding disintegration, an enterprise running a process portal should be the only entity the customer communicates with. The customer must be able to provide quality services, including additional services. An enterprise operating a process portal, together with its partners, offers a comprehensive range of services.

In the case of provision of transport and logistics activities, i.e. in the transport of goods and related services, it is important to identify the entity that will be the operator of the process portal.

The first option is that the process portal operator will be a rail transport company providing freight transport services.

The second option is that the process portal operator will be a forwarding company. The forwarder is, in view of his position, destined to operate a process portal.

A portal operator who does not produce any goods or services easily achieves credible neutrality. However, it may have difficulty in obtaining detailed product information from different vendors and have access to just a few customer data. For example, an established railway transport company has access to extensive customer data and information at least on its own products. However, to achieve neutrality, it must take measures (e.g. organizational or legal separation of the process portal from the realization of activities or cooperating with competitors).

The process portal operator must define what activities it will offer on the market and which customer processes it wants to promote. Processes to which they have procedural competences or can easily build are generally preferred. Based on the customer process, the specific activities will be offered, which can be provided separately (own key competency) and provided by external partners. The boundaries of the offered activities are again based on customer activities. They should merge those activities that are related to each other.

Another aspect is the business brand under which the operator will operate. Customers have greater confidence in portals that are operated under familiar names.

An important competitive factor is the reach. Just by using the Internet as a sales channel, the potential reach is multiplied. An enterprise that can really extend the reach of its own process portal has a competitive advantage.

Reported customers are not generally homogeneous in relation to their requirements. Depending on the number, age, transport, and distance, they have different requirements and are not as profitable for the portal operator. The target group is thus divided into customer segments for which the spectrum of activities is determined.

The third dimension, apart from activities and customers, is sales channels. If the customer requires total support for the access media, an enterprise must defined in the channel strategy which distribution channels it will use. An important role is played by the requirements of the customer process, the suitability of the activities for certain channels as well as the economic efficiency of the individual channels.

As a rule, the portal operator cannot provide all the activities themselves, so a cooperative concept is needed to co-operate with a partner. Different models or combinations thereof may be established in cooperation. The Neutral Portal Operator should allow access to different vendors without directly cooperating with them. Getting information is difficult in this case, but it is made easier by the Internet. If the partners undertake contractually, they are mostly obliged to provide information and conduct activities. However, there is a risk of a loss of neutrality. In any case, exclusive contracts with individual partners must be ruled out.

6. ANALYSIS OF CUSTOMER PROCESSES IN THE LOGISTICS TRANSPORT CHAIN

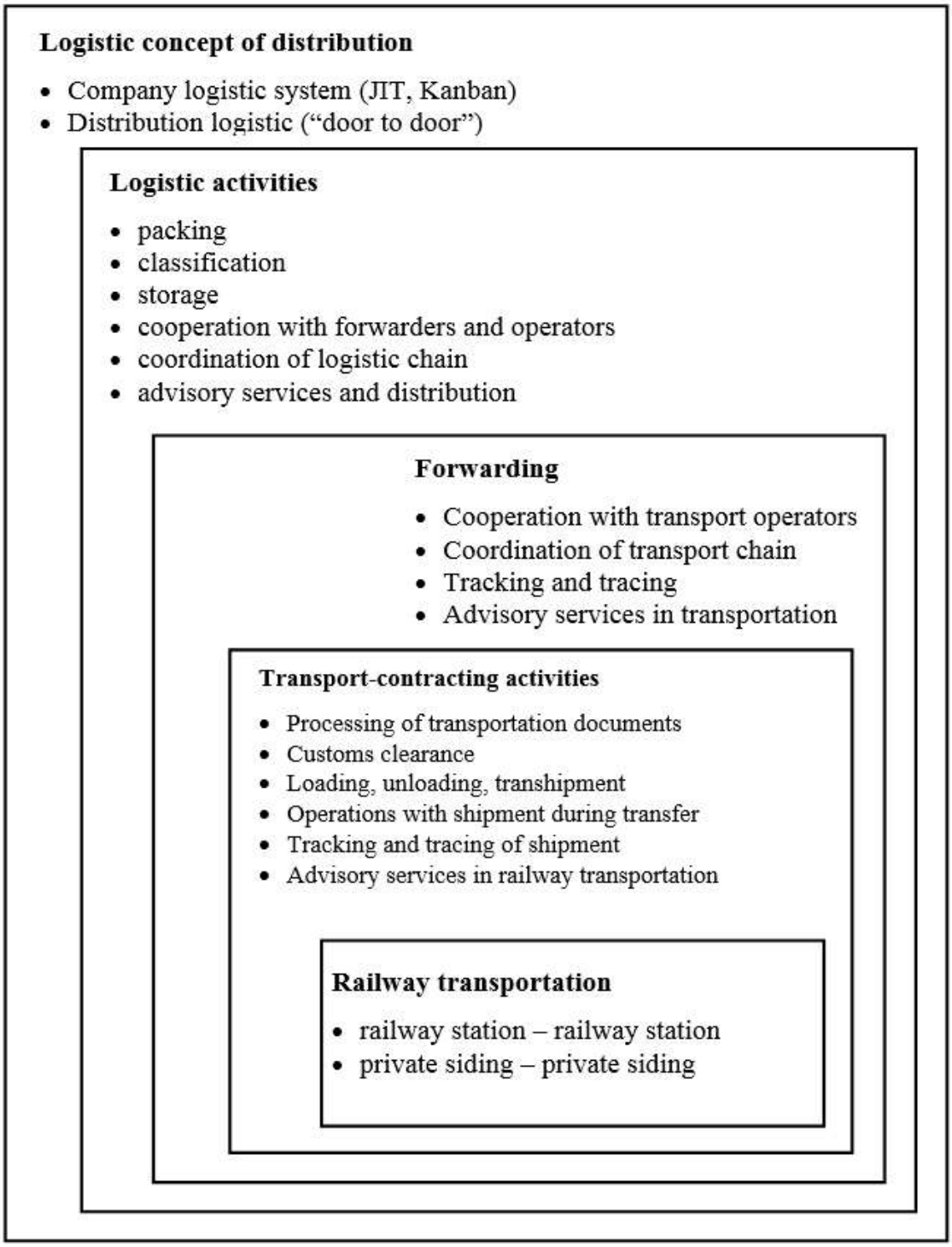
The process of designing process architecture and its evaluation is a customer process. The basis is a list of all the activities from which you can build a specific customer process.

The design of the main, management and support processes is displayed in the process map. The activities of the process portal are generally focused on specific customer activities, but they can be derived from a generalized, independent customer process. Based on these general activities, it is possible to construct any catalogue and lists that support customer processes in organizing different activities.

Basically, activities can be offered by any sales channels. For example, a freight wagon catalogue is published on the Internet, provided in an information office on paper or sold in book form. Not all sold channels are suitable for all activities. Often, many activities are provided for economic reasons only via cost-effective channels such as the Internet, in particular complementary activities to support customer processes that do not directly contribute to the business outcome.

Various activities vary widely in their features, leading to inconsistent process requirements and information systems that support the delivery of activities. To simplify architectural assessment, we suggest categorizing individual activities. Individual categories are assigned to the individual processes that are responsible for providing activities. The activity categories created will be applied in the various phases of the proposed architecture.

Figure 3. Position of railway transport in the logistic system



Source: Gašparík et al. 2016

When targeting a railway enterprise to a customer, it is necessary to know not only the transport needs of the customer, but also their wider context. In Fig. 3, the logistic concept illustrates its components. The carrier currently provides only rail transport and transport and procurement activities. Logistics activities are carried out at the enterprise level in the logistic concept. The forwarder is a link between service

providers (the railway undertaking, other carriers) and customers (the production company with its own logistic concept).

The railway undertaking has two options in the logistics chain:

- a chain article that is managed by another entity, or
- a logistics chain coordinator.

7. A PROCESS PORTAL LAY OUT UNDER THE CONDITIONS OF A RAILWAY OPERATOR OR FORWARDER

At present, the railway undertaking is only a passive member of the logistics chain, where the customer (or forwarder on his behalf) orders the transport of goods by rail. The function of the transport coordinator for individual carriers is usually performed by the forwarder. In addition to transport, the carrier (railway undertaking or cargo operator) provides basic transport and procurement activities. The first step of the railway undertaking to provide comprehensive transport and logistics services is to become a rail operator able to cooperate on the EU market. An important step is the fulfilment of the interoperability conditions, which involves the restructuring of resources, in particular the mobile park.

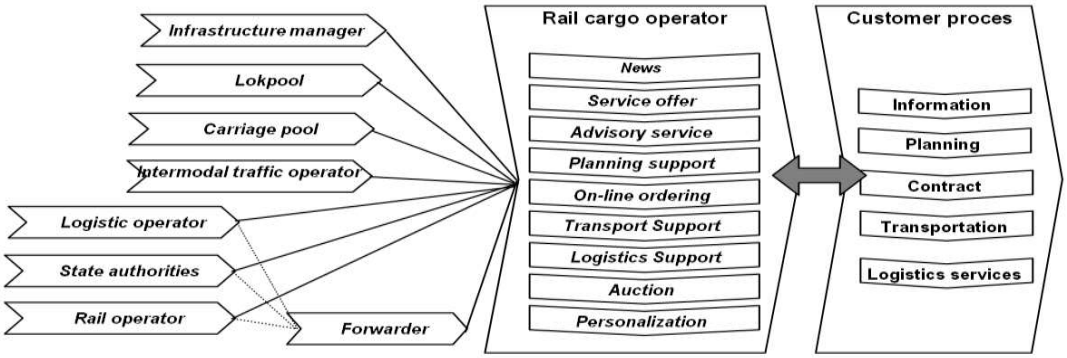
The second step is the pursuit of forwarding activities, i.e. the coordination of the transport chain across different modes of transport. A comprehensive door-to-door transportation, including supplementary and logistics activities, will thus be able to be delivered to multiple entities to achieve a more efficient execution and the customer can concentrate on their core business. This means, for example, taking over the private siding operation at the customer.

As a rule, the portal operator does not have all the competencies necessary to provide the activities. Therefore, it has to integrate several specialized partners as service providers. In order to provide these services, the portal operator will have to establish a contractual relationship with all relevant partners in the context of the trend of production chain creation and customer offer integration. The main partners are Rail Infrastructure Managers, Locomotive Pools and Wagon Pools, from which they will provide mobile means. These partners should also be trading partners in running a process portal. It is necessary to maintain the neutrality of the partners. These third parties can provide their services either through a process portal or directly to customers, and the process portal will be the intermediary only. The offer of services and other information can be prepared directly on the portal, but for example, consultancy is only mediated by the portal and must be provided directly.

The status of the railway undertaking or forwarder as a logistical chain coordinator is the starting point for defining the subject as a process portal operator.

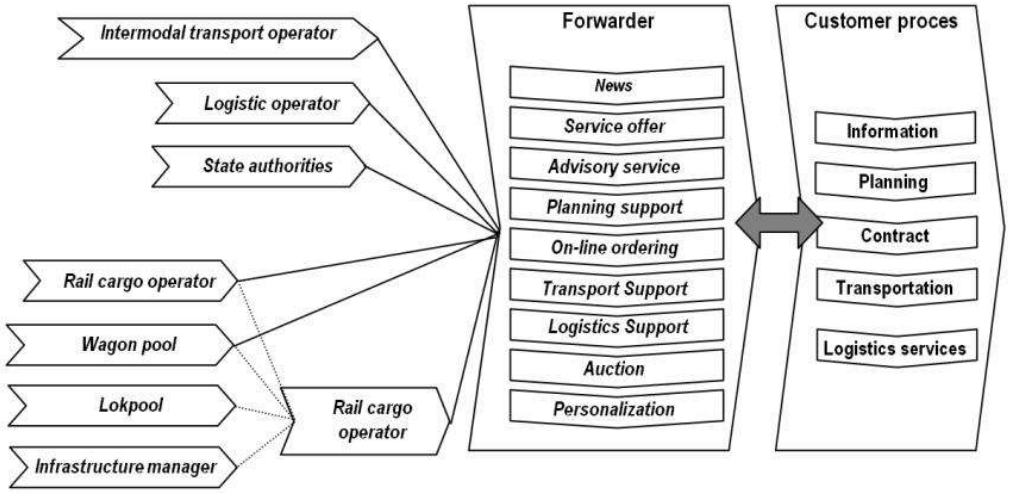
The process portal structure is derived from the general model shown in Fig. 1, while Fig. 4 and 5 show the recommended lay out of potential process portal partners for transportation and logistics on a general level, without their specification. This will be the role of the portal operator with the process portal architecture and trade agreements themselves. Figure 4 shows the structure of the portal for conditions, and the process portal operator is a railway undertaking. Figure 5 shows the structure of the portal for conditions, and the process portal processor is the forwarder.

Figure 4. Structure of the process portal for transport and logistics, if the operator is a railway undertaking



Source: Gašparík & Lendel, 2010

Figure 5. Structure of the process portal for transport and logistics, if the operator is a forwarder



Source: authors

8. PROPOSAL OF PROCESS PORTAL OPERATIONS FOR TRANSPORT AND LOGISTICS

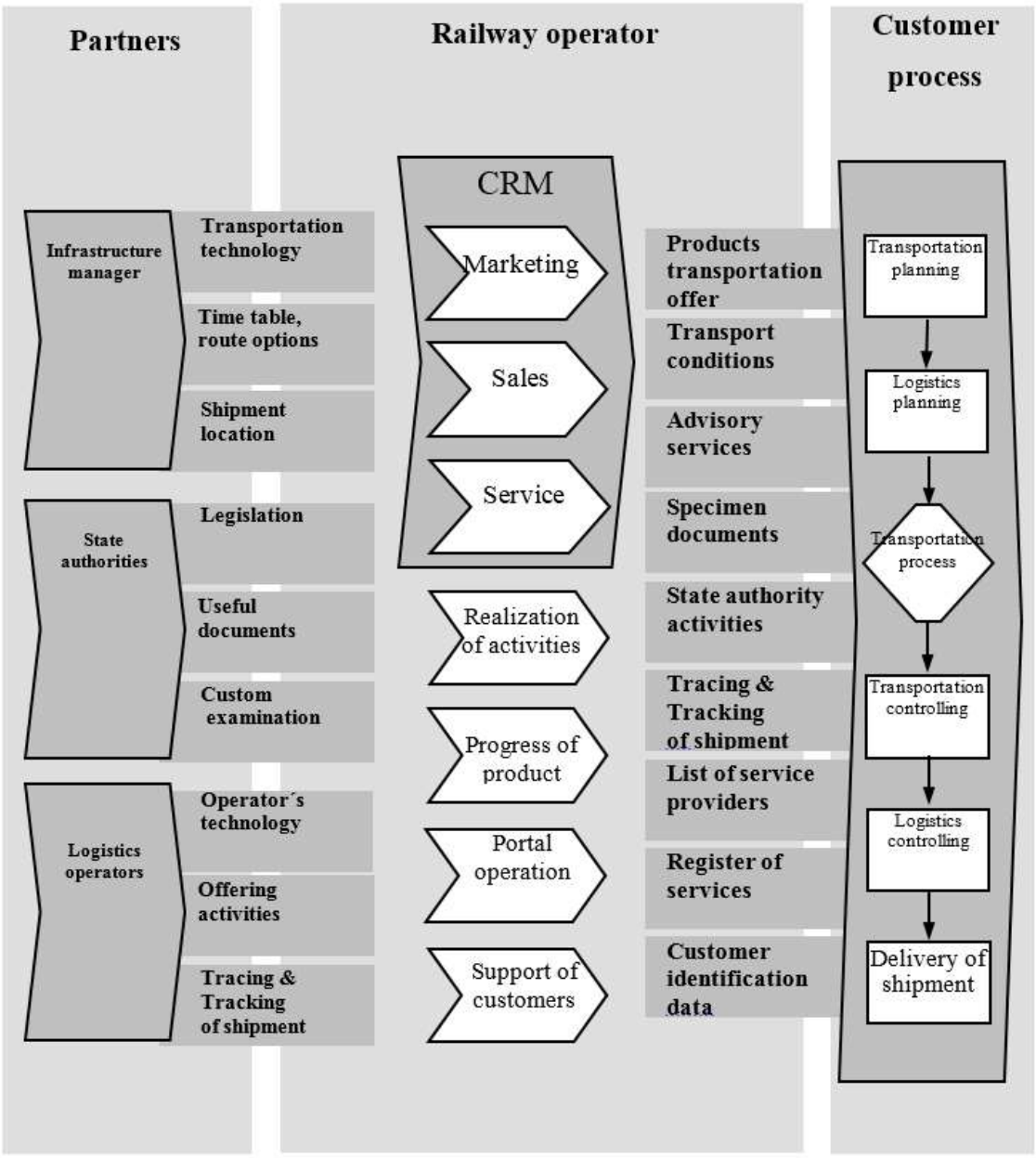
The composition of the process portal for transport and logistics is not dependent on the operator.

The proposed customer process of transport and logistics is initiated by customers, mostly by forwarders, by defining their transport requirements and logistics activities. The process portal will support the planning of the entire customer process of transportation and logistics activities, and the portal operator will provide the potential customer with an individual offer including pricing. The customer assesses the need for transportation only as part of the distribution process of products, goods or raw materials, and its interest is to make this process as efficient, top-quality and cost-effective as possible. In this respect, the operator will develop a complete transportation and logistics process plan for the customer as a comprehensive product

(see the comprehensive product Figure 1). If a customer asks to schedule certain activities themselves (e.g. explicitly designates a mode of transport, a transportation route, a railway wagon, etc.), the process portal offer will be available to them. The Process Portal will offer an overview of products, shipping conditions, wagon catalogues and shipping aids. They are also provided with a counselling service.

The customer will provide the necessary identification data and documentation and issue an order for the required shipping and logistics services. By uploading the shipment for shipment, the forwarder or railway undertaking is responsible for the transport and implementation of the agreed services.

Figure 6. The process portal for logistics and transport



Source: Gašparík et al. 2016

The portal operator informs the customer of the arrival of the shipment at the agreed place where it will be handed over to the recipient. The recipient can track the position of the shipment from the start of the shipment itself. Before the shipment arrives at the agreed destination station, the customer receives notification that the shipment is set to arrive. It is also informed about the course of logistical activities (unloading, transhipment, storage, sorting) and if these activities have been agreed with the operator portal, and respectively with his partners. After receiving a shipment, the customer process ends with financial compensation for the services provided (usually the sender applies).

The process portal has to provide all the activities and operations that this customer process consumes. The framework activities are shown in Figure 6 from the viewer's point of view. The customer process of transportation and logistics as well as the activities consumed by these tasks are summarized in Table 1.

Tab. 1: Tasks and costumer activities in the transport and logistics process

Tasks in customers process: transport and logistic	**Activities**
Definition of the requirement for transport and logistics activities	• The offer of transportation services • Offer of logistics services • Customer identification information • Goods data
Transport and logistics activities planning	• Analysis of customer requirements • Transport guidance • Logistics operator offer • Railway infrastructure information • Conditions and technology of transport • Transport uniform rules and tariff • List of railway stations • NHM code • DIUM – distance table • Timetable • Price calculation • Overview of the requirements of the state authority • Freight wagons catalogue • Transport units catalogue • Transport tools catalogue • Offer of transport insurance
Order of transport and logistics activities	• Transport and logistics activities planning • Identify data of consigner, consignee and payer
Contract of carriage	• Transport and logistics activities order • Order of wagons, transport units and tools
Loading	• Time and place of apposition of wagon • Delivery note • Loading rules of wagon • Weight of shipment

	• Logistics operator offer • Forwarding and logistics operation (choice of wagon, loading operation, etc...)
Creating the transport documents	• A shipping report • Transport documents • Price calculation
State authority providers	• ID number of consignor, consignee and payer • Transport documents • Custom documents
Changes by transportation	• Transport and logistics activities plan • Requirement of transport of carriage
Acceptance of transport and logistic changes	• Disposition with shipment • Liability, formal reports
Tasks in customers process: transport and logistic	**Activities**
Monitoring of carriage	• Transport and logistics activities plan • Information about the shipment location
Arrival of shipment to delivery station	• Entry in the Delivery Book • Entry in the Wagon Book • Writing the formal reports • Activities of the state authority
Organisation of unloading (transhipment)	• Taking of shipment message • Logistics operators offer • Forwarding activities
Wagons handover	• End unloading message • Unloading of wagon • Cleaning of wagons • Return sheet
Organisation of logistics activities	• Technology of logistic operator • List of logistics operators • Activities of logistics operators
Shipment arrival message	• Information about shipment location
Take-over of shipment	• Transport and logistics activities plan • Transport documents • Report of delivery of wagon, transport units and tools
Financial compensation	• Consignment note/invoice • Individual calculation of price

Source: authors

In table 2 there is a summary of the activities provided by the process portal for transport and logistics within the customer process. Activities are broken down

according to the classification listed as key, supplementary, networked, standard and individualized.

Certain services of the process portal will be provided by the shipper or Railway undertaking, in particular those belonging to its core competencies. This is important, for example, when offering individual sellers. Additional services are provided by the portal operator in a supply manner through business partners.

However, customer-driven sales, customer service and customer support must be tailored to the specific customer process.

Processes are poorly structured and demanding not just in the customer process, but also in the processes of the railway undertaking. Individual tasks do not follow in a single order. Some aspects of the technological processes in rail transport and logistics have been published by Halás et al. 2013, Ližbetinová et al, 2012, Čejka et al. 2016.

Table 2. Process Portal Activities for Logistics and Transport

Net activities		*Personal settings and support* ID data of consignor and consignee Valid contract of carriage Data about the shipment Distribution plan
Additional activities	*Specific information by costumers processes* Transport rules Effective plan of transport Logistics activities (warehousing, transhipment, sorting...) State authority activities Insurance of transport *Lists of external partners* Managers of infrastructure Rail operators Logistics operators Intermodal transport operators Road hauliers Locomotive and Wagon Pools Custom Authority *Transport agreements* Transport documents (domestic and international consignments notes) *Information about products of third subjects* Technology of logistic operator Intermodal units catalogue Custom proceedings	*Messages managed by the real situation* Information about the changes in transport Shipment locations Actually prohibition of loading the shipment

Key activities		
	Information about forwarder products Transport services Special solutions Additional services Exchange rate	*Individual recommendations* Transport planning Logistics activities planning *Supports* Lists of tariffs , DIUM, NHM codes Catalogue of wagon and transport tools Customs documentation An order of carriage ***Contract*** Contract of carriage Forwarding contract Contract of warehousing, rental contract,…
	Standard	**Individual**

Source: authors

9. CONCLUSION

The customer assesses the need for transportation only as part of the distribution process and their interest is to make this process as efficient, top-quality and cost-effective as possible. In this regard, the process portal operator as a logistics chain coordinator will develop a complete shipping and logistics process plan for the customer. Designing a process portal concept involves coordinating activities in cooperation with business partners to provide a comprehensive product.

Implementing Customer Relationship Management in the field of transportation technology itself will build on ICT and human resource implementation. From a CRM point of view, however, rail transport technology is only a means of achieving customer satisfaction. The customer perceives the whole process as a whole and evaluates its outcome. In conjunction with the forwarder's activities, the desired result can be achieved.

In particular, the customer requests:

- Minimum time from the start of the transport request to its implementation,
- Simple administration associated with the carriage of goods,
- Acceptable price,
- The possibility of performing cargo handling only on working days and mostly at the time of day, as long as these operations are carried out by themselves and the production is of a time-discretionary nature (the number of such customers in the system of individual wagon consignments is predominant);
- Regular and numerous connections,
- Reliable shipment of intact shipments,
- Fast delivery at certain times for some commodities,
- Accurate information about the services offered and the current state of transport,
- Additional complementary services completing the complex product in the logistics chain.

The railway transport company only has a few possibilities to implement the required quality requirements of the customer. It is limited by economic efficiency, the technical and technological parameters of each wagon system, as well as other limitations. The interchange between customer requirements and the possibilities of a railway undertaking is most often reflected in the speed of delivery and the cost of transport and other services. It is important to regularly measure customer satisfaction (Stopka et al., 2016 and Černá et al., 2017).

The customer assesses the access of the railway undertaking in particular to the planning of the shipment and to inform on the course of the shipment. In a commodity organizational structure, the customer is easier to orientate and selects the department of the commodity he wants to transport. The solution for anything that is unclear or for problems is facilitated by new communications and sales channels.

To support the entire transport process technology, the creation of a process portal for transportation and logistics processes will be significantly contributed to by the implementation of modern IS / ICTs with a considerably accelerated and accelerated consultancy processes, transport orders, including complementary and logistics activities, to support the entire customer transport process.

The customer submits an online order. The data they present will be stored in a single data warehouse, to which all workers involved in a particular shipment will have access. As a result, the customer will be spared from duplicate data provision and employees will work more efficiently. The form of the bill of lading will be exclusively electronic. Higher integration of information systems within the enterprise will improve the synchronization of the shipment transport activities themselves not only at the shipment station and destination station where the transporter and the carrier is the most cooperating, but also at the station where the customer enters the process only in the event of extraordinary circumstances.

The proposed process portal concept provides the basis for exploring other aspects of logistical chain support through a process portal, especially with an emphasis on the specifics of the transport sector when planning detailed activities. Presented descriptive model is a start point in modelling process to reach an applicative model of process portal, database model, IS model etc. In the future research authors will extend the suggested model with details which should make the model more usable in praxis.

The CRM research field is heavily dominated by the experiences from large organisations and this is a crucial bias in CRM research. Supply chain logistics and transportation especially is very important in economies in generally. The adoption of a CRM approach, including its emphasis on ICT enabled marketing practices, is a means of remaining competitive – and also in developing new competitive advantages in this new competitive landscape. There is an evident need for research on CRM practices, including the implementation of the CRM approach, in a supply chains and in transport companies in general.

It is an accepted fact that the concept of customer relationship management neither has been fully verified, nor empirically assessed to determine the strength of the relationship between dimensions of customer-relationship management and logistic chain. Moreover, this study uniquely extends the body of knowledge by explaining the theoretical possibilities of the mediating role of CRM (planning and

implementation) in the relationship between process portal and logistic chain performance.

It is worth mentioning that this paper will also raise awareness among logistic operators to pay more attention to CRM dimensions, process portal capabilities, and assist them in improving logistic chain and competitiveness. However, the fact remains that this study has its limitations. First, because it is in dire need of further verification by collecting data from the logistic operators and transport operators to test the proposed model and further investigate the hypothesized relationships. Second, the model is more focused on the logistic chain and therefore, there is a need to test it in different sectors such as the financial sector.

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