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*Ewa Płaczek
Sebastian Twaróg*

**DEDICATED LOGISTICS PROVIDER FOR
BLOOD DONATION PURPOSES ON THE
EXAMPLE OF BLOOD SUPPLY CHAINS
MANAGEMENT IN POLAND**

Despite prolonged downturn in many European countries, including Poland, the service sector has been experiencing constant development. This applies to logistics in particular, which thanks to operations of transport, freight forwarding and storage is dubbed the barometer of economic growth. The logistics service sector i.e. providing broadly defined logistics services is currently expanding at a vast rate of knots, both in terms of GDP contribution as well as the number of operating companies – 146 thousands and industry employment – 622 thousands (Polish Transportation Report..., 2011, p. 24). Logistics companies found themselves in this favourable position due to high flexibility and venturing forth with risky business undertakings.

The global character of today's marketplace and threat from global competition mean that companies are forced to stay on top of their game through exploring new and ever-efficient ways to run their business which ultimately aims to translate to commercial success. In this case, success means more customer-centric approach and operating in profit centers*. Exploring new opportunities for running the business is nothing but catering for ever-higher customer needs. Today's client will not just settle for mediocre, satisfactory services, but often expects provided services to be ahead of his expectations, whilst being a comprehensive, coherent and quick-to-deliver service. Thus, the question should be answered: how all that will impact on logistics service providers? What this means, is undertaking actions to grab customer attention and reach wide audiences. However, in order to deliver on those objectives, one has to explore the issues facing customers from the standpoint of end-consumer. This boils down to reorganisation of the traditional and creating a modern Value Chain. A modern Value Chain is customer-centric, revolves around customer needs, priorities and opportunities to satisfy them. The client constitutes the first and critical link in the chain, subsequently resources and key competences are taken into account.

Taking into account the aforementioned, one should consider delegation of operating the blood supply chain** management*** which caters for blood donation in Poland, composing 21 independently operating regional blood donation

* A profit centers are an area of business environment from which the company can drive profits.

** blood supply chain – cooperating public blood service organisational units as well as blood donors and receivers, between whom the flows of blood and blood components and connected information are realized. See (Szołtysek, Twaróg, 2009, p. 18).

*** blood supply chain management means decision procedures concerning: 1) integrating physical flows and information flows of blood and its components between supply chain actors, 2) synchronising blood supply (donations) with demand for blood and its components in order to benefit health of individuals receiving blood and its components, assuming highly efficient blood supply system. Managing those chains might pose a considerable challenge to chain managers, among other (or above all) due to unpredictability of blood demand. See (Szołtysek, Twaróg, 2009, p. 19).

and hemotherapy centres (RBDaHC), to a logistics operator and conditions of such arrangement*.

This option should be realistically considered only when RBDaHC (being partner in supply chain), having realised the need to implement logistics management: 1) will delegate the issue-related tasks to its own employee and fail to quickly obtain resources (material and human resources) required to logistically manage blood supply chain, and a decision will have been made for RBDaHC to assume responsibilities of blood supply chain coordinator; 2) will make the decision to delegate medical and logistics tasks, while trusting the latter with professional logistics service provider. Then, key logistics competences have to be found in organisational environment. This involves identifying the competent entity, which on behalf and to the benefit of RBDaHC would take over duties related to managing flows (blood and its components, information, supplies and other) within blood supply chain i.e. would control it. In practical terms, that would mean all supply chain partners have to voluntarily follow the lead of an objective entity, which has an active interest in optimising the supply holistically (Hoppe, 2009, p. 111) – logistics provider. In that way, the logistics provider engages in managerial relationships within the finally formed, wider supply chain. Note that logistics providers (in line with declared affiliation with specific entities) vary from ordinary carriers and operators offering package of services (tailored to specific customer needs) to 3PL operators (*Third Party Logistics*) or even 4PL (*Fourth Party Logistics*)**. Mentioned last group are entities which own assets, key managerial competences in logistics capable of expanding their skill base, especially creating information systems based on experiences and specialist knowledge (See: Kempny, 2008, p. 22).

3PL operators (4PL as well) are experienced in efficiently managing supply chains within business environment, to a lesser extent – within humanitarian environment. One should spare a thought, whether a versatile logistics provider would guarantee, or incentivise integration of blood supply chains operating within social areas (social logistics)***, where human rights play a key role in making economic and organisational decisions****.

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** or superior, listed in reference books, which are not commonly classified and doubts are cast over their viability and usability.

*** Social logistics – *is the art of efficient management of material flows and associated, socially valuable information, in order to create particular spacetime values (and complementary goods) which are needed by the society and assure its well-being.* (Szołtysek, Kołodziejczyk, 2009, p. 22).

**** Proper integration means adhering to social logistics principles in management. When managing blood supply chains, decision makers should underpin their decisions with social and organisational rationale when taking decisions.

Logistics operators tend to address the ever-frequently articulated needs concerning demand for specialist logistics services signalled by organisations operating in the health care industry and humanitarian aid, by offering bespoke package of services. Thus far, however, performance of those companies, where under normal operating conditions logistic teams deal with budget-tight circumstances, was not satisfactory for ordering parties. This is due to demanding from logistics providers to redefine their bundle of goals when making operational decisions. At the heart of the issues lies the fact that here effectiveness should have higher priority than operational efficiency. Decision support systems used by 3PL operators usually do not adhere to that requirement. Also the personnel, educated by the Polish education system and polished off through practical experience, displays subdued social sensitivity, strongly stagnated and consolidated cost-saving habits thus the decisions they make are business-savvy as opposed to humanitarian.

In the spirit of this discussion, note that independently of logisticians' competences which should be developed differently today (Szołtysek, Otręba, Twaróg, 2012, pp. 543-551), the decision about selecting a logistics provider should be based on skillset addressing the needs of particular blood supply chain. 3PL operators seem to be a good choice for integrating blood supply chain at the preliminary stages. Displaying the aforementioned skill set, is according to S. Hertz and M. Alfredsson (2003, pp. 139-149) enables distilling four types of 3PL logistics providers (Figure 1):

- standard logistics providers – the most fundamental form of logistics provider. These companies provide services including transport, storage and distribution as core logistics functions.
- service developer – these logistics providers, on top of fundamental services, provide value added services as under normal business conditions: *cross – docking*, packaging and bespoke services. In order to deliver on delegated tasks, service providers require a reliable information system.
- customer adapter – logistics provider operating upon client request, by taking over completely its logistics operations. The 3PL provider improves logistics dramatically and rapidly. Their actions are aimed to provide core services at the cost of developing new services.
- customer developer* – this is the highest level that a 3PL provider can attain with respect to its processes and activities. This occurs when the 3PL provider integrates itself with the customer and takes over their entire logistics function. The ability to collaborate with customers relies on *know – how*, developing knowledge and designing supply chain.

* This type of logistics provider might resemble the one referred to by Anderson Consulting as logistics integrator.

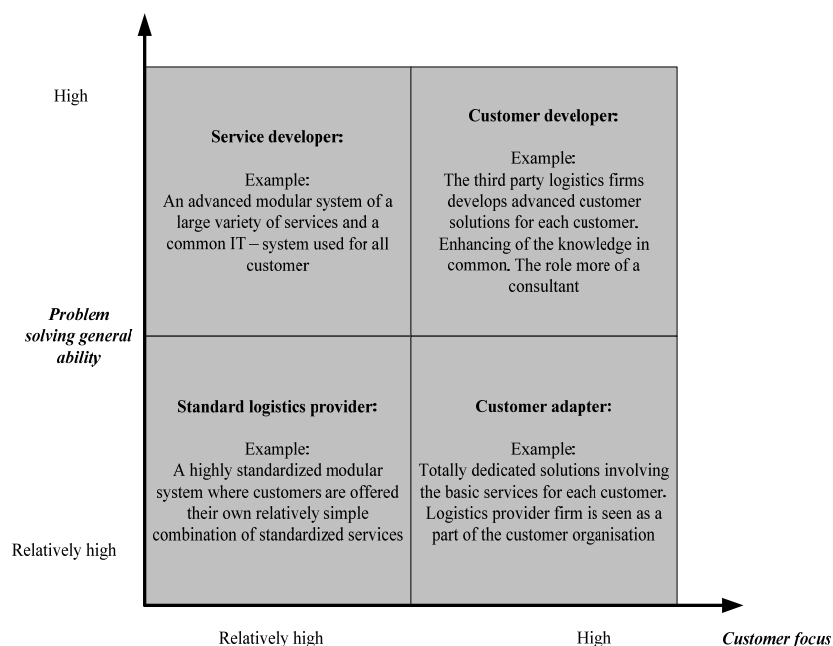


Figure 1. Classification of logistics providers, according to the ability of problem-solving and meeting customer expectations

Source: (Hertz, Alfredsson, 2003, pp. 139-149).

By taking into account logistics needs of blood supply chain management, when logistics becomes ever-important for efficient operation of the entire blood donation system and there are no traditionally developed logistic structure, medical and quasi-medical competences are the absolute top priority upon choosing 3PL provider, then a customer developer (dedicated logistics provider) should be considered.

The aforementioned doubts concerning aligning qualifications and experiences of logisticians with specific demands of blood supply chain management suggests looking for desired 3PL provider among new, purpose-established entities, which own their own, right-for-the-job assets, organisational structure, objectives and communication mechanisms. Under domestic conditions, such entity would own resources related to National Blood Services and logistics operators. Nevertheless, bearing in mind experiences from other fields*, where management and core values are different, it is fair to say that such “event”

* Widely described in the articles on new logistics applications, for example: (Szołtysek, Otręba, Twaróg, 2012, pp. 543-551; Szołtysek, Twaróg, 2011, pp. 23-31).

would cause a multitude of conflict and would have negative impact on blood supply chain management. The alternative for appointing a dedicated logistics operator is delegating the function of blood supply chain coordinator to companies operating on the Polish market, which are experienced in providing unusual services. Competitors forced to share the market with many logistics provider have to engage in a kind of market game. It is based on the win-win rule and the premise is that each logistics operator (offering similar services to its competitors), strives to find an element/service differentiating its from the others. Said element/service: 1) is difficult to copy by the competition; 2) is innovative to a various extent; 3) would have to entice customers and retain them long-term; 4) put the company ahead of the curve and in front of the competition.

Undertaking actions aimed to give position of dedicated logistics provider involves above all specialisation of logistics services designed for specific industries, including the medical industry. High barriers to entry due to required infrastructure, IT systems and highly specialist know-how, considerably limit the viability of operating on a niche market. Usually, niche sectors are serviced by companies which thanks to owing the required skill set and resources are fully capable of taking advantage of market opportunities and willing to take the inherent risk. Hence, it is fair to say that the position of dedicated logistics provider is not for every company offering logistics services. Instead, it is exclusively reserved for some logistics providers. Among such companies operating on the Polish market are *FM Logistics* and *DHL*.

FM Logistics not only does transport medicine and medical equipment as part of logistics operations for the medical industry, but also human organs saving lives. In order to address special requirements of this operation, it created a system encompassing medical facilities (hospitals, pharmacies, wholesalers) as well as individual patients. Services provided by *FM Logistics* comply with provisions of the Good Distribution Practices code, and are delivered using correct tools, which are under constant supervision from Main Pharmaceutical Inspectorate (Janicki, 2010, pp. 8-9).

DHL on the other hand, had launched its *Medical Desk* aimed at pharmaceutical industry companies (clinical trials) and medical companies (health care, laboratories, scientific centres). That department specialises in dealing with temperature-sensitive parcels, such as medical samples (sent for laboratory experiments) and laboratory research results from academic scientific centres. *DHL* have duly expanded its logistics network and technological support – it created a wide range of packaging varying by weight and storage capacity, maintaining constant temperature over given time period (WWW1).

Hence, blood supply chain coordination can be delegated to purpose-established company with its own, fit-for-the-purpose assets, organisational structure, objectives and communication mechanisms. This solution might spark a multitude of conflicts and could have a negative impact on blood supply chain management. Delegating control to an external entity, specialised in providing a wide range of logistics services could be a potentially alternative solution. The decision to collaborate with an external entity might not be the easiest one. A successful decision, on the other hand, would increase efficiency of blood supply chain, while a wrong one would generate additional costs, blood supply chain losses and diminishing the value* of organisation among its stakeholders.

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* In case of blood donation this refers to non-material values.

