



Creating Solutions: Perspectives from Turkey

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Abstract

Traditionally it was possible to gain wealth or create competitive advantage by producing tangible goods. However, due to several factors such as developments in technology and economic crises, goods have become commodities and thus, the landscape of business has been changed. With this acknowledgement, companies began to use services in order to differentiate themselves from their competitors and to solve customer problems. These bundles of products and services (and also software and, knowledge) are called as solutions or integrated solutions that help companies to customize their offerings as they firstly try to understand the requirements of customers. The current study is an ongoing research in which we aim to understand the perfectives of both suppliers and buyers of solutions in white-appliances industry, in Turkey.

Keywords: Buyer-Supplier Relationship, Integrated Solutions, Supply Chain Management

Introduction

Approximately five decades ago, it was possible to create wealth either through producing tangible products [1]. However, several changes occurred throughout these years such as the economic downturns and the developments in science and technology. These forces along with the increased product commoditization that wears away competitiveness [2] have changed the marketplace and the landscape of the businesses. These changes brought slow growth rates and; reduced margins [3] shorter life cycles for products and thus; declining profitability [4] and these changes made organisations realize that “products are merely means to an end” [5]. Therefore, organisations are forced to find new ways rather than modifications in tangible goods in order to increase their competitiveness and profitability. As a result, the importance of services has been increased both in the eyes of practitioners and the scholars since they are sources for higher margins [6], continuous revenue streams [4], customer loyalty [7], and competitive advantage [5].

Since the conventional ways of developing competitive advantage are not enough to warrant the competitive success in several industries [8], organisations began to help consumers to solve their problems and achieve their ultimate goals [5] (p.366) through a shift towards services. This shift necessitates the integration of products and services in order to (re)acquire the competitive position in the marketplace and it requires several changes: (a) from products to solutions, (b) outputs to outcomes, (c) transactions to relationships, (d) suppliers to network partners, and (e) elements to eco-systems [26]. However, as value proposition is still a fundamental premise [2], in order to create competitive advantage in severe market conditions and deal with precise customer needs, companies start bundling products and services [3], which means they start to provide solutions for consumers.

Integrated Solutions

Integrated solutions are described as a combination of products, services and software which provides more value than stand-alone products [9]. A more detailed explanation has been given by Sawhney [5] : “an integrated combination of products and services customized for a set of customers that allows customers to achieve better outcomes than the sum of the individual components of the solution.”. Moreover, providing solutions is both an ongoing and a relational process in which the provider of the integrated solutions constantly tries to meet the demand of the consumer [7]. As known, the traditional view states manufacturers end the relationship with their product offering after the delivery. In contrast to this view, providing solutions starts before the manufacturing process as the provider tries to develop a definition for the requirement of a

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customer and, the process does not end with the delivery of the offering since consumers require post-deployment support from the provider [10]. Thus, customers are not willing to pay just for a bundle of products and services; they are buying solutions in order to make their operations trouble-free [4].

From practitioners' point of view, companies prefer to provide integrated solutions for their customers due to several reasons. All products and services become a commodity after a while [2]. However, providing integrated solutions overcome this barrier since it fosters differentiation through customized services and confidential knowledge regarding customers and industries [5] (p. 368). Through this extended knowledge regarding customer needs, providers of solutions would better understand the requirements of customer problems and provide them with unique solutions.

Moreover, organisations are doing more business with the existing customer through providing them with an extended product offering and, throughout this process; they take on some of the work that is traditionally done by customers [5] (p. 367). The author suggests that this create bigger market opportunity and thus, increase the market size. Similarly, the providers of solutions take the customers' risks and responsibilities on and as a result, they are able to develop more creative ways for components to be integrated as a whole which would increase the overall customer value [8]. This may, in turn, increase the competitive advantage of a company, since providing solutions requires integrations with the customer's operations [5]. This integration helps customer loyalty to increase and thus, the possibility of becoming replaced by competing company decreases [5](p. 368).

Solutions create steady revenues through fostering growth and profitability of organisations [11] and, thus providing organisations with lucrative [12]. For instance, IBM started its solutions-related businesses in the early 1990s and now these businesses make up 53% of its total revenue [13]. Moreover, the company has been able to maintain shareholder value stable and develop both capabilities that are difficult to copy and, customization which prevents commoditization [12].

Furthermore, there are also some improvements in managerial issues. For instance, providers of integrated solutions may gain new capabilities through the process such as system integration, operational service, business consulting and financing capabilities [4]. According to Neely et al. [27] these capabilities can be divided as market-based, social capital-based and, technological capabilities. As those capabilities provide solved problems for customers, providers become a strategic business partner [14] which in turn present added value for providers of integrated solutions. This also directly affects the perceived purchase risk of customers. In order to be strategic business partners, providers should act as competent and experienced, give detailed information about the way they generate the solution and, most importantly they should be committed, in this way they may decrease the perceived purchase risk of customers [15]. However, in order to have these qualifications, first organisations need to understand what their customers require. This forces them to build a relationship with them. Although, the relationship terminates with the deployment of the product in a traditional product-dominant logic; for customers, providing solutions means understanding the requirements of them, customization and integration of products, deployment of the solution and then being supported on an ongoing basis [10]. As Foote et al. [12] suggest in order to solve a problem of a customer, providers of solutions may even need to integrate operations of both suppliers and customers. Actually as Sawhney [5] states a solution without an operational integration generates a bundle of products and services, thus operational integration makes the difference (See Table 1 for an overview of integrated solutions advantages).

Table 1. The advantages of integrated solutions

Market Benefits	Solved problem(s)	Through differentiation created by customized services and confidential knowledge regarding both customers and industries
	Increased market size	Through extending product offerings for existing customers and arousing interest for potential customers.
	"a peace of mind" for customers	Through taking over the risks and responsibilities of customers and so, increase the overall customer value.



	Competitive advantage	Through creating loyalty as solutions require a deeper integration with the operations of the customer and developing a stronger relationship.
Economic benefits	Higher and steady revenues	
Managerial benefits	New capabilities	i.e.: Systems Integration Capabilities, Operational Service Capabilities, Business Consulting Capabilities, Financing Capabilities

Although the outcomes of the process are beneficial, it also presents challenges. Due to these challenges, organisations ought not to underestimate the movement towards providing integrated solutions [8]. Especially, the requirements that are associated with managerial improvement threaten the success of providing integrated solutions. For instance, internal inefficiencies of operations, that propose a challenge in itself, should be managed carefully [11]. Similarly, Windahl and her associates [3] claim solutions require a fit between technical/ product competences and the capabilities in terms of integration and relationships with partners without overlooking the importance of understanding customer requirements.

Another challenge presents itself within the process of providing integrated solutions and the characteristics of solutions. First of all, the process of providing solutions requires a change in the mind-set of the organisations thus; it is a management issue [16]. For example, top management needs to regard services as provider of high value [17]. Similarly, Solonen [11] demonstrates the need for cultural shift by stating a transformation towards an improved consciousness of consumer needs rather than the focus on tangible products. Thus, this culture shift necessitates time and resources [18].

One of the biggest challenges is probably the development of the capabilities mentioned above in order to integrate diverse parts of a system (as known as the integrated solutions) that are accommodated by an external network composed of suppliers, subcontractors and service providers [8]. Thus, interactions are needed for evolving from transaction-based ones to relationship-based ones [6] which can be accounted as a competence in which organisations form alliances and partnerships with their suppliers and consultants (upstream) for providing more efficient solutions [3]. Furthermore, organisations also need to form relationships with customers (downstream). For a provider of integrated solutions, this might mean becoming a “*part of customers’ ongoing operations (p.220)*” [3]. In this way, it is more likely to define requirements of consumers which are the first step of providing integrated solutions [10]. Thus, despite the need to control just the channel to the customer in order to have a profitable business as Davies [8] suggests, the channel/ network should include both the upstream and downstream sides of the value chain. As Foote et al. [12] recommend organisations should not go through this process alone since other partners (i.e.: suppliers, or distributors or customers) may have a positive impact on solution development through their skills or market knowledge. However, developing such a relationship is not easy because of two reasons: the need to build the synergy between the business units and departments and, the relationships of partners in the business network/value chain [19]. Moreover, these kind of long-term bonds needs an important degree of trust [14] which has a positive impact on the quality of the relationship and which triggers partners to accept risks. Therefore, as the authors state, the lack of trust in a relationship also brings out challenges and, due to these challenges, integrated solutions are considered to be too costly and risky to produce or buy [20]. (See Table 2 for an overview of integrated solutions challenges).

Table 2. The challenges of integrated solutions

Operational difficulties	Developing operational integration	As the alteration of the components of the product offering is not easy and it is difficult to change internal inefficiencies of operations.
Managerial difficulties	The mind-set of the managers and the workforce	Due to difficulty of changing the belief that services are add-ons and of the required culture shift.
	Developing capabilities and relationships	Due to the difficulty to build trust.



Although the literature is rich in terms of the definition of integrated solutions or the advantages and challenges of providing them, most of the studies are conducted within Europe. However, the situation presents some differences in Turkey. Since Turkey is a developing country and has an economy mostly dependent on manufacturing, we believe Turkey presents an interesting example. Thus, the aim of this study is to understand the perceptions of both the managers of providers of integrated solutions and the customers in terms of what they understand from the concept of integrated solutions and the process of providing it.

Research Methodology

As this study aims to gain deep insight regarding integrated solutions, qualitative research techniques are suitable for data collection. Since our aim is to gain insights regarding integrated solutions and since the concept is related with developing relationships, we need to build trust and collect this sensitive information from participants through in-depth interviews [21]. In addition, in order to be aware of naturally occurring behaviours and conversations, observation is useful to record [22].

In total, seven in-depth interviews have conducted which were with both the customers and producers of integrated solutions in business to business markets. In order to acknowledge the dynamics of the relationship between the partners in the supply chain, we first carry out this study with the managers of procurement departments of two famous white-appliances and electronics Company in Turkey. One of these companies is a Turkish company and it is one of the few Turkish companies which has a brand awareness around the world. The other one is a global white-appliances brand which set up a factory in Turkey. Both of the companies are known brand both in Turkey and around the world. These companies are considered to be appropriate for this research setting since, several previous studies have focused on this industry (e.g.: [28]) and, both of the companies claim they are providing solutions in their web-sites. Then, during the interviews, we also use snow-ball technique in order to select the suppliers from whom they are buying an integrated solution. With this attempt, the first and second company provide us with three and two names, respectively. From the first group, sales managers of two companies have agreed to conduct interviews, however; from the second group, we were able to conduct an interview with just one company.

Interviews are semi-structured, including a protocol specifying main topics with open-ended questions. In order to increase the credibility, iterative questioning techniques and probing have been used [21].

Interviews were conducted, each lasting between forty-five to sixty minutes, and recorded with the permissions of the participants. Interviews, then, transcribed and coded by following the suggestions of Strauss and Corbin [23]. First an axial coding has been performed by writing a code for each paragraph and/or sentence. After, through a selective coding phase, we grouped and compared data in order to reveal similarities and differences.

In order not to manipulate any data, triangulation between researchers and methods has been utilized. Triangulation between researchers provides us with diverse perspectives and explanations of the findings which enhances the validity of the results [24]. Furthermore, triangulation across methods (e.g.: in-depth interviews and observations) reveals the pieces of data, that may be overlooked by using just one method [22].

Findings and Discussion

In this section, we firstly present the perceptions of the buyers of integrated solutions and in order to ensure the anonymity of the procurement managers of two companies operating in white appliances and electronic industry, pseudo names are going to be used.

In both of the companies the procurement is divided into two departments as direct procurement and indirect procurement. Direct procurement is the activities related with the purchasing of all the ingredients and materials related with the actual products such as refrigerators and washing machines. Indirect procurement is described as the materials that are not directly used during the production of, for instance, a refrigerator, but used inside the factory such as catering or security services. Since our aim is to understand the perceptions of both the provider and buyer of integrated solutions, we focused on the direct procurement departments.



In terms of the definition of solutions, the procurement managers of companies were aware of such a concept although they name it as “*çözüm*” which is “*solution*” in Turkish. Although the literature is rich regarding providing definitions for solutions, for instance, Davies et al. [4] explain the term as “...to identify and solve each customer’s business problem by providing services to design, integrate, operate and finance a product or system during its life cycle. (p.40)”. This requirement of providing services to customers throughout the products life cycle forces companies to become strategic business partners [14]. Similarly, when asked about what they understand from the term integrated solutions, they use the words ‘solution partner’:

Buket (female, Company X): “*When we say integrated solutions in a supply chain, we mean solution partners...being a solution partner is not necessary for all the materials that we procure. For instance, if the material is easy to find, we don’t need a solution for that, we simply bid the suppliers and select the one with minimum cost. However, if the material is critical we need to form a strategic relationship with the supplier in order to share the risks.*”

Gökmen (male, Company X): “*Integrated solutions in a supply chain...It is not just related with the cost of the material. Apart from that, supplier needs to help us with logistics activities such as packaging.*”

As the above statements show, there needs to be a shift from transactions to relationships and, from suppliers to network partners when providing solutions [26]. Moreover, our respondents clarify what they expect from such a relationship with suppliers. The one thing which is indispensable is the quality of the product. The suppliers need to deliver high-quality products, and the aspect that they compete is the cost. Since both of the companies are cost-oriented, they expect suppliers to deliver the products with high-quality, but low-cost. Apart from that, one of the respondents explains the expectations from such a relationship:

Gonca (female, Company X): “*Quality, supplier needs to be sure about the product. Besides, inventory management is really important for us. Since it takes four months to procure a material from, for instance, far East, and, deliver the final product to the end consumer, we need to optimize this process. Moreover, the prices change constantly in our industry so; management of the inventory is significant.*”

Although the quality and cost is the most mentioned qualifications for a supplier to become a solution partner, the respondents point out the necessity to be flexible and rapid decision making. Moreover, although the literature does not mention innovation while defining integrated solutions, some of our respondents mentioned the need for creativity:

Gökmen (male, Company X): “*Nowadays, quality is not mentioned much because it is a must. Moreover there is a pressure about the cost of the products; therefore, in order to differentiate themselves, suppliers’ ability to design is important. How can they change the design, what they can offer becomes significant for us, because some products are produced by every company and thus, they need to make some innovations in order to be different from others.*”

Although innovation is defined as the introduction of a new product, idea or service into the market place by American Marketing Association, innovation may have some levels. According to [25], innovation can be divided into six levels, one of which is called as *new to the company*, meaning the product is not new to the market, but new to the company. In white-appliances industry, this form of innovation is more associated with integrated solutions. During our interviews, our respondents gave some examples of such integrated solutions. For instance, one of the suppliers of Company A came up with a creative idea. They found a material in China which increases the durability of a refrigerators’ deep freezer. The supplier showed the proto-types of the material to the Company X and, they found it very convenient. However, the supplier was unable to obtain the material from China due to financial reasons. In order to solve the problem, Company X supported the supplier financially and as a result, they now produce more robust refrigerators. In this way, the supplier actually took over some of the work that needs to be done by the company. This means the supplier understood what the customer needs and provide the customer with what is required. This finding shows the necessity of the first step of providing integrated solutions which is requirements definition [10].

In conclusion, our preliminary findings demonstrate similarities with the study of Tuli et al. [10]. In general our respondents describe a solution as the integration of products and services but, most importantly in order



to create solutions, the parties should see each other as partners meaning, for example, they need to be taking risks for each other. In that sense, as a buyer of solutions, companies expect suppliers to come up with good quality, low cost, innovative solutions with extra services, depending on the nature of the business, such as packaging or inventory management. In the following phase of the study, we are planning to increase the number of interviews, especially, with the suppliers of these companies as they are the providers of solutions in order to understand the other party's perception.

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