

Product versus Service: Old Myths versus New Realities

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Received: April 9 2013

Accepted: May 28 2013

ABSTRACT

This paper critically examines the old school unique characteristics of services namely, intangibility, heterogeneity, inseparability and perishability (IHIP) that have served as a differentiating line between services and products. Next, it looks at how the move towards services and technological advancements in the field has blurred this traditional differentiating line. And it acknowledges the contribution of various researchers in their endeavors to come up with new criterion to differentiate between a service and a product. And it concludes that no such a differentiation is universalizable, hence is an infeasible to proceed with. Finally this text points out some factors which have caused both the categories to entangle together such that they cannot be detached from each other.

KEYWORDS: Product, Service, Literature

INTRODUCTION

Differentiating a “Service” from a “Product”

Researchers and economists have long been trying to define a Service precisely in such a way that can differentiate it from a Product. About two decades ago, product versus service debate was useful in differentiating between two categories and this differentiation was fruitful in developing separate marketing strategies for each category. However, today, when manufacturing businesses are expanding their service component and both the fields are being integrated, the very nature of “product versus service” debate may obscure the necessary synergies between manufacturing and services business that are required for healthy growth of businesses.

Since the emergence of the notion of Services and its recognition in forming a separate part of a company’s marketing strategy (Lovelock 1983) there has been a consensus on taking services as different from products. Services are often regarded as having different characteristics as compared to products. Many approaches have been adopted to define a service. They are deeds and performances, (Berry, 1980) or a change of state of an economic unit (Hill, 1977) whereas products are objects or devices (Berry, 1980) which require a different approach for marketing. The most agreed upon characteristics of services are intangibility, heterogeneity, inseparability and perishability, known as IHIP. As noted by Lovelock and Gummesson (2004) these characteristics pose vexing marketing problems that are not faced by products and this very fact calls for treating services as different from products in marketing literature. Recent literature goes far beyond these four characteristics to differentiate services from products. Those efforts will also be discussed in this paper but I will start by examining each of these four characteristics.

Critical Examination of IHIP characteristics of services.

Today, most of the texts books, research papers as well as lectures are rich with IHIP characteristics to convey that services are different from products hence need special attention and treatment. Delineation of these attributes implied that anything that is intangible, heterogeneous, inseparable and perishable is a Service. *Intangibility* refers to immateriality of a service. *Heterogeneity* is variability in service delivery as opposed to homogeneity. *Inseparability* denotes the feature that production and consumption of a service is simultaneous and cannot be separated from each other. *Perishability* indicates that services can not be stored as inventory. Hereafter, each characteristic is adequately appraised with sufficient support from existing literature.

Intangibility:

Defining service as intangible is a notion invented by economists (Hill, 1999). It is an immaterial thing, which exists only in connection with other entities (Lovelock, 1983). The discussion about service intangibility in literature takes two forms; *first*, pre-purchase intangibility and *second*, whether the final *outcome* of a service is intangible?

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Researchers who present intangibility as a *pre-purchase* phenomenon contend that services cannot be tested and assessed in advance of purchase, an attribute that is not shared by physical goods (Kotler, 2003). But Lovelock (2004) argues that the same pre-purchase inability of experience applies to some products also (e.g. Medicine), hence is not a unique feature of services only. Moreover, technology has also contributed to nullify this effect, because the trend of telephone ordering and e-purchasing does not allow customers to have a pre-purchase experience. Furthermore, Lovelock (2004) counters the '*pre-purchase intangibility*' of services by pointing out that certain services rely on their tangible aspects to win customers, such as hotels or motels. Customers can even 'experience' the room and other facilities before making the purchase decision. Therefore pre-purchase intangibility of a service has been countered in modern literature.

Hill (1999) identified a new category of products called intangible products (a music composition or a chemical formula), which have all the economic characteristics of products, yet are intangible. Moreover, Araujo and Spring (2006) indicated that even tangible products can not be tightly bound as "tangible only", neither can services be strictly taken as "intangibles only". The products must be intangibilized to imbue their value into user's value systems and services must be delivered by means of some tangible entities (Araujo, 2006). Perceived consumer value also contributed in developing customer satisfaction that directly related with loyalty of consumers and positive intentions towards the specific services (Duman & Mattila, 2005; Ishaq et al., 2011a, b, 2012). Hence Intangibility cannot be a unique attribute of services only.

Heterogeneity:

A service is heterogeneous. It varies according to the context, requirements and nature of individual customer. Levitt (1972) presents an account of heterogeneity by pointing out that manufacturing of products occur "here in factory" in highly controlled environment, by closely monitored workers, so their standardized procedures results in homogenous products. Whereas services are delivered "there in the field" in flexible environment by loosely monitored people, so absence of strict standardization also contributes in bringing heterogeneity in service delivery and outcome is not uniform. However he points out that certain *services*, like McDonalds food service, can be standardized highly by developing and following strict operations such that the output becomes homogenous. On the other hand, certain products are manufactured on order, which leads to a heterogeneous output for *products* and mass customization for products also bears the feature of heterogeneity.

Among all other IHIP characteristics, heterogeneity (or variability) is relatively a recent concept (Lovelock, 2004) and has received attention in marketing as well as in operations literature. This variability exists in *perception of service experience* by customers as well as in *service production & delivery* (variability on the part of transformed resource and on the part of transforming resource). As far as the notion of variability in perception of *service experience* by customers (transformed resource) is concerned, this attribute is also shared by product usage, hence is not unique to services only (Lovelock, 2004). On the other hand, variability on the part of transforming resource (production and delivery) is instigated by the very fact of inseparability of service delivery from its production. Since it is *inseparable*, customers interact with service provider and intervene in production and delivery process, making standardization difficult. But Sundbo (1994) notifies that services can be delivered in modules.

Inseparability:

Service production/delivery is not separable from its consumption. Products are pre-produced at consumption junction services are not. Inseparability also refers to the interaction of customer with service provider for the process of service delivery thus called co-production. This notion focuses only on *process* of service delivery and completely ignores the *outcome* of a service (Gadrey, 2000). This outcome versus process duality is discussed in next part. This very fact of focusing only on *process* leads towards declaring a service as perishable that they exist only during their rendering. But considering outcomes of a service put serious questions to the notion of perishability.

On the other hand, the feature of modulization delineated above itself is a departure from the notion of inseparability. Many professional services combine their offerings in pre-produced modules (Sundbo, 1994). We can find numerous examples in literature and in practice to establish that the characteristic of inseparability cannot be generalized to all services. For example Lovelock (1983) indicates about ATM service, Lovelock (2004) exemplifies outsourced service like laundry and building repairs. Gadrey (2000) connotes to electricity service in which consumers don't interact with service providers while consumption of the service. Same is true for courier services. So we can conclude that inseparability is not a distinctive characteristic of services either.

Perishability:

Smith (1776) had stated that a service will "perish in the very instant of its performance, and seldom leave any trace or value behind them". This construct was been used to indicate that services perish at the instant of their production and cannot be stored as stocks. From customers point of view, service are perishable because

they cannot be saved, stored, reused or returned later but from operations perspective, it is more straightforward; productive capacity is perishable because it is explicitly time dependent. But this is not merely the case with productive capacities of services only.

As mentioned previously, the concept of perishability stems from the approach of considering only the *process* while ignoring the *outcome* of a service delivery. For example, the outcome of a cleaning service does not perish right after the cleaning is performed, it in fact remains and is observable also (Gadrey, (2000)). Moreover, Hill (1999) recognizes that services are measured in term of their outcome, for example transport service's outcome is measure in number of miles traveled or number of customers transported. And it is logically infeasible to debate the perishability of such an outcome since it can not be treated as a usable entity.

Since all the claims that services are different from products on four IHIP characteristics is not supported and can not be generalized to all service, hence it has failed in serving as a differentiating line to discriminate a service from a product. So the researchers did not rely on these traits for long, and kept defining and refining new distinctions. These approaches have been mentioned briefly in this paper.

Other Approaches for Differentiation:

Different approaches have been adopted in literature by researchers in their continuous search for a universalizable difference. (Gronroos, 1998; Gadrey, 2000) debated on the notion of outcome versus process in defining service. Araujo (2006) claims that identifying a product from a service is "dependent on the nature of producer-user interaction and the institutional structure of production" rather than on any specific feature of products or services. Contest of separate production of products as opposed to simultaneous production-delivery of services is also discussed extensively. Furthermore, Hill's notion of subcontracting between different entities for service delivery has also received attention in literature. All these approaches are not in mutual exclusion from each other, rather they are woven together in one way or another. Researchers claimed that creative marketing strategies designed for service quality with the help of its effective execution is always differentiate the services from its competitors (Naeem et al., 2011, 2012; Ishaq, 2013).

Outcome versus Process Debate:

In historical literature, service had been treated as "only a process" whereas product was viewed as an outcome of a production process (Gadrey, 2000). Product in a manufacturing business exists independently from producer as well as from user (Hill, 1999) and often acts as a mean of separating production from usage, hence producer-user interaction is also minimized (Araujo, 2006). Gronroos (1998) makes admirable efforts in describing that a product is always pre-produced as an outcome of production process. When consumers consume the product they actually consume the outcome of a finished process. It is "*outcome consumption*". On the other hand, for services, consumer is involved *before* the process is finished. Consumer's consumption process leads to final outcome for the consumer and that is when the process is completed. Thus, service consumption is regarded as "*process consumption*". On account of above-mentioned reality we can assert that at the consumption junction, Product Production is a *closed process* but Service Production is an *open process*.

Gronroos (1998) also notifies that different consumers may perceive same product differently, but *outcome (product) remains the same*. However, for service delivery, *outcome differs* for different consumer when delivery of same service is perceived differently. For the same reason, many service businesses cannot differentiate their outcomes from those of their competitors. According to this construct, automobile workshop's service is not repaired vehicles, but repairs. Repaired vehicles are the outcome of service. Similarly, McDonald's service is to cater the customer, and a satisfied customer (transformed resource) is the outcome. These outcomes are material and can last for a longer time nullifying the idea of instant perishability.

Hill (1999) also argued that outcome for manufacturing firm consists of separate entities, which can be stored and transported. Their production, in theory, can be concentrated at a single location. Whereas, according to Hill (1999) services do not possess any of these features. It is claimed that the entire production of service can not be restricted to a single location because it is dependent on the location of customer. But for certain services, like automobile workshops, service provider remains fixed to a single location and some other e-services can be transferred from one location to another. Thus describing a service as a process and differentiating its outcomes from outcomes of products on certain bases requires some compromises, and is not as simple and straightforward.

Gronroos (1998) notified that "in service, consumption and production have interfaces that are always critical to the customers' perception of the service" managing these interfaces is in fact interactive marketing. Similarly Hill (1999) also claims that servicing involves certain type of Sub-contracting between a customer and a service provider *prior* to sales agreement. This subcontracting is the instigator of *Relationship* between two parties, producer and consumer interact with each other, and it leads to customer's participation in the process of production of service. The most prominent evidence about customer's participation in production process can be established from Sampson's (2000) arguments on customer-supplier duality.

Sampson (2000) argues that for some services, customers act as a supplier to provide input into production process. For example, in a surgery, customer supplies his own body to be operated on and ends up being a transformed resource. He is supplier of raw material input (own body), which is processed (operated) and he himself is the output. Therefore one can establish that customer-producer relationship, their interaction and customer's participation to provide input into production process are critical to servicing. But the question to consider is whether these features are unique to services only? Gadrey (2000) disagrees. He contends that subcontracting and co-production between customer and producer can be observed in manufacturing concerns also (e.g outsourcing). Similarly customer relationship component in manufacturing businesses works similar to the notion of producer-consumer relationship of servicing (Levitt, 1981). Conversely, self servicing and standardized modulation in services has minimized *customer participation* in the process service production and their *relationships* with producers (Gadrey, 2000). Therefore, we cannot discriminate services from products from interactive perspective.

Many of the controversies in Product-Service discrimination were explained quite appropriately in Peter Hill's remarkable work to establish a new taxonomy for categorization of goods and services. Hill (1999) categorized products into two categories; Tangible Goods and Intangible Goods, and he identified unique characteristics for goods and for services that tell apart one category from another. Although he also attributed customers' interventions in production process to service production but clear cut and discriminative contrasting was based on the features such as Storability, Maintaining Entity, Establishing Ownership Rights, and Tradability.

Hill (1999) claimed that products are entities which can exist independent of their production. Since they separate production from usage by bundling certain features (Araujo, 2006) there can be a time lag between their production and usage (Hill, 1999). Because of these traits, Hill continues, goods can be stored *prior to sale* and/or transported from one location to another. On the other hand, services are not independent from their production hence cannot maintain their separate entities (Hill, 1999). Since they are not independent entities, they cannot be stored or transported. But this criteria becomes insufficient for some services like electricity (Gadrey, 2000), which does not involve any consumer-producer interaction during production as well as at the time of consumption, can be stored prior to sale and can also be transported from one location to another. Same is the case with internet service providing (ISP) (Araujo, 2006).

The argument, that a live performance can be stored on a recording medium and can also be transported after storage, is solved by Hill's new taxonomy in which he identifies them as Intangible Goods. As to the question of what makes them "goods" is concerned, Hill defends it by pointing out two features; First, They can maintain their independent entity after production. Second, ownership rights can be established over them. When product is bought or resold, ownership is transferred between two economic entities. These two features, according to Hill (1999), are like an acid test to tell a product from a service. Anything possessing these two features is a product and anything failing to bear them is a service.

Hill (1999) explains that for ownership, entire output of the production process should be a property of the producer. To fulfill this criteria, all the inputs should also be owned by producer, if there is any input that is not owned by producer, he can not claim ownership to all the output. It seems suitable since, in services, customer's input and participation discards the possibility of owning all the output by producer only. But as it was mentioned earlier, customer's input in manufacturing customized goods brings customer's intervention into production process of goods also (Araujo, 2006) and seizes the full ownership of output from product producer. Does it make that product a service? Hill (1999) also refers to such an example by describing that when a manufacturer outsources certain production activity or a production of a component, it just adds a service activity into the production process. The outsourced organization manufactures the product that is owned by outsourcing organization. In explaining this problem, Hill's unwillingly takes an institutional aspect of production into account. Hence we can say that Hill's differentiation is not based on technical aspects only. Moreover, Gadrey, (2000) points out that Hill's service definition includes social interactions, so it is socio technical.

If we build our arguments on these two notions, by taking into account social and institutional aspect seriously, departing from technical-only, we can pose serious questions to Hill's idea of "*maintaining separate entity*". Why should we ignore the institutional and social surroundings of a good in claiming that it maintains its *same identity* throughout the wear and tear of time? Does a reconditioned vehicle being sold in second hand market with a new registration represent the same entity as it had when it left the factory? Many modern economic theories require such a good to be considered as a different entity (Gadrey, 2000).

Moreover, Hill's criteria fails to justify tradability of services. Since tradability is associated with the ability to define and attach property rights to entities (Araujo, 2006) then how "services" are traded? (since transaction involves transfer of ownership). If customers don't receive ownership when they purchase a service, then what are they buying? (Lovelock, 2004). Lovelock (2004) tends to explain this issue by arguing on rentals and leasing services, that customers gain temporary ownership and right to use a product against a specified price under specified constraints. But when we look at complex "product transactions" they involve something more than just trading a product, instead two parties de-encapsulate their solitary existence and "interact" to transfer a body of knowledge and information (Baldwin & Clark, 2003). Therefore, even product transactions

involve service based exchanges (Araujo, 2006). We can posit a question here, that if services are immensely entangled in products and their operations, then why are we still trying to isolate them? Lovelock (2004) suggests that we should “declare victory” and should abandon the notion of a separate field.

A Move Towards Servicing:

Today in industrialized countries, more than 70% of the workforce is employed in service economy (“A service economy is defined as one in which more than half of the total labor force is employed by service sector”) (Mont, 2002). Even from the employees working in traditional manufacturing businesses, 65 to 75% of them perform service activities (Mont, 2002). And this proportion is growing gradually.

Several reasons have been identified for manufacturer’s move towards servicing. Manufacturing firms are finding it difficult to survive because products get mature resulting in limited profit from sales therefore they are going downstream into service aftermarkets to explore and extract more profits (Karlsson, 2007). Secondly, modern developments are focusing on “de-materializing” the economy by minimizing the product flow (Mont, 2002). The idea is to provide same utility through service instead of involving a product to alleviate burden from environment for greener development. Moreover, manufacturing firms aim to develop sustainable relationship with their customers through service to ensure customer retention and repurchase (Brax, 2005). All these opportunities are pushing manufacturing business to insert services as a core in their offering. Manufacturers are transforming themselves into service providers in such a way that product is merely a vehicle of delivering service (Araujo, 2006). Hence they should look to pursue a service based business strategy. But this transformation, if undertaken revolutionarily, can be risky and hazardous (Brax, 2005) because it involves “change” in organizational structures and frameworks (Mont, 2002) and includes unavoidable management challenges.

Concluding Thoughts:

All the exhaustive efforts by various researchers from last several decades have been failing to define a service as unique from a product. None of the product-service differentiation is universalizable to all products or all services under same logic (Gadrey, 2000). He contends that it is not feasible to completely distinguish products from services. Araujo (2004) also concludes that searching foundational differences between products and services is a misguided ambition adopted by academic writings and is still being fed to students. There is no separate manufacturing or servicing industry, there are only industries whose service component is bigger or lesser than the other component (Levitt, 1981). Traditional differences, although incorrect, but are less true now than they were when services marketing was born (Lovelock, 2004). The reason is, that industry has changed with a pace greater than the change in out taxonomies. Each differentiating criteria was more appropriate at the point in time when it was developed. But then, the introduction and advancement in information technology nullified many differences. But technology alone can not be credited for the change, in fact there are certain other economic factors that had instigated a move towards Servicing. This paper will shed some light on such factors.

Acknowledgment

The authors declare that they have no conflicts of interest in this research.

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