

A Typology of Service Classification for New-age Services

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Abstract

Service classification criteria are used to segregate service organizations into specific categories and generalize marketing interventions for them. The rise of the internet and peripheral technologies in the past couple of decades led to the emergence of 'New-age services', which employ the internet as the core of their operation. These service organizations often may not adhere to service rules and constructs laid out by classical service literature in the past. This paper discusses a set of novel classifications for meaningfully classifying New-age services. The study employs an exhaustive review of service literature from the past four decades and attempts to structure gaps in the existing literature from a New-age service point of view. The propositions made for service segregation criteria and services themselves are expected to aid managers in adopting suitable marketing interventions for New-age services, channelizing marketing efforts efficiently, thus improving return on marketing investment (RoMI).

Keywords: Internet Services, Lovelock, New-age Services, Service Classification, Services Marketing, Service Typology

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1. Introduction

Service classification has historically helped marketers identify differences between services and implement marketing strategies specific to certain service types. The importance of the classification of services has been emphasized by both classical and neo-classical researchers (Bucklin, 1963; Copeland, 1923). Until up to the 1980s lot of researchers were bringing to fore the idea of the difference between the service and goods, and the detailed research on service itself was not a mainstay. During the 1980s, researchers delved deeper into constructs of services and found out significant differences between the products and services.

In one of the most influential works in services marketing, Zeithaml et al. (1985) argued that services, due to their unique and differentiating characteristics, notably—intangibility, the inseparability of production and consumption, heterogeneity, and perishability, are significantly different from the products. This was in line with other researchers who had written on this subject in the past. The fundamental difference between the product and the service were identified as intangibility, by Berry (1980) and Shostack (1977) and the inseparability in the production and consumption of services, by Gronoros (1978) and Upah (1980). Heterogeneity, which was defined as the difference in service output or performance at different times, was defined by Knisely (1979), while Bessom and Jackson (1975) argued that services could not be stored unlike products and hence they are perishable in nature.

The first differences within the service firms were recorded and discussed when a basic classification was attempted by the researchers based on—primary customer group, geographic spread, duration of benefits to the customer, and need for the customer's presence during service production. Arguably, the most significant work on the classification of services was done by Lovelock in (1980) and (1983). The classification criteria identified by Lovelock are used even now to differentiate between the services. In his research he introduced, five classification criteria to segment services in groups that would create a generalization for specific services, hence making it more plausible to conceive and implement marketing strategies for these services. However, it is important

to note that these classifications were identified in the mid-1980s, and there has been a tremendous change in the nature and existence of services since then. This has also been posited by many researchers who believed that research in services marketing got stuck with identifying differences between services and products or building on 'old knowledge' without much questioning and new exploration (Berry L., 2000).

The key premise of this paper is the rise of New-age services – the internet-based on-demand services, and how the existing classification criteria for services are not particularly relevant in segmenting these services. Khalifa and Liu (2003) posited that internet-based services had witnessed substantial growth, both from the new internet businesses as well as from the more traditional ones. The explosion in the field of on-demand services facilitated by the rise of the internet and peripheral technologies created newer opportunities as well as uncharted landscapes for businesses. It has affected multiple areas of service offerings like information dissemination, customer access and acquisition, service delivery, and post-purchase engagement (Peterson, Balasubramanian, & Bronnenberg, 1997; Reichheld & Scheffer, 2000).

The changing technological environment and consistent change in consumer behaviour have led to a consistent contradiction by the new-age services with the traditional concepts, thus leading to an evidence gap for the existing service classification frameworks. Further, constant innovation in the field of technology based on the internet, resulting in evolution in service access, and delivery, has further resulted in a knowledge gap (Miles, 2017) about services.

This paper, inspired by the evolution of services in the internet age, extends the classification literature of services marketing that was consolidated by Lovelock (1983) in the mid-1980s. Further sections of this paper discuss the definition of the new-age services and subsequently lay down reasons for the need for a new classification for these new-age services. Finally, an eligibility criterion for new-age services and five new schemes for the classification of new-age services have been proposed. Marketing implications for each of the five schemes are also discussed.

2. Defining the New-age Services

Berry (1980) defined service as a deed, act, or performance that brings about a desired and requested change in the condition of a person or possession belonging to a person or entity. Parsuraman et al. (1988) argued that services are different from goods due to their inherent characteristics – intangibility, heterogeneity, inseparability, and perishability. In their research based on the Service-Dominant Logic or SDL, Vargo and Lusch (2004) added the co-creation and customer relationship dimension to the definition of services in order to differentiate them from products.

While services have always been significantly different from products, they have been different within themselves. Services have been transforming with time in business models, operational structure service offerings, and pricing strategies. These changes have also led to making services ubiquitous and thus easily accessible to customers (Panwar & Khan, 2020). One of the major reasons for this shift has been explained by Arthur (2017) by identifying a major shift towards the rise of technologies like the internet. The new age of services is brought upon by the transformation, which rests on the foundation of interconnected devices with the help of the internet, which makes physical distance, human interaction, and spatial constraints superficial. Favourable influencers like affordable smartphones, better technological infrastructure leading to improved network connectivity, and faster speed (Panwar, 2020) have played a considerable role in the rise of internet-based new-age services.

So can traditional services, which have simply integrated internet-based functionality into their business on various aspects, be called new-age services? Not quite. Panwar and Khan (2020) argued that the new-age services have their core in the internet-based functionality, so much so that it becomes their core competency. It is no wonder that the cab-hailing app, Uber, the global e-tailer, Amazon, and the food-delivery start-up, Zomato all call themselves 'technology' companies. These companies are the true epitome of New-age services because their core competency is internet-based, technology-driven solution delivery. This is true to the extent that the end solution of these new-

age services need not be a completely innovative offering, but a traditional service like a cab for the local commute (Uber) or home delivery of food (Zomato). However, what is remarkably different are the ways in which the customer can access the service and how it is delivered (Panwar, 2020). The next section of this paper discusses the traditional classification for services that have been in use for more than three decades and how new-age services show divergence from the traditional service marketing rules and behaviour.

3. Traditional Classification for Services and Divergence of New-Age Services

The idea behind the classification of services has been to group similar services, which makes the implementation of several strategies easier and practical (Lovelock C., 1983). Lovelock (1980; 1983) proposed five schemes as a response to five questions that were posed.

These questions were related to the nature of service, the relationship between the service provider and the customer, scope for customization, demand and supply scenario for the service, and means of service delivery. The underlying classification schemes were – (i.) Nature of services delivery; (ii.) Type of relationship between the service organization and customers; (iii.) The extent to which the service worker can exercise his judgment while providing services; (iv.) The extent of customization allowed; (v.) The extent to which the demand fluctuates; (vi.) The extent to which supply is constrained; (vii.) The number of sites that customers can visit for service, and (viii.) Place of delivery of service.

Some other classifications were proposed concerning the differences between goods and services (Judd, 1964), the role of customers in the service transaction (Rathmell, 1974), the target of service (Hill, 1977), means of service (Thomas, 1978), demand and procedure based classification (Lovelock C., 1980). The most recent additions to the list of the classifying parameters were made by Zeitham and Bitner (2003). These parameters were – (i.) Service target, (ii.) Degree of tangibility in the service, and (iii.) The degree of customer contact required for service delivery.

As observed, a majority of literature on the classification of services is from the pre-internet or early-internet era. Thus, newer channels of service dissemination like e-commerce, web-based and app-based access and delivery were not dealt with the detail it deserves (Heinonen & Pura, 2006), except for a few (Meuter, Ostrom, Roundtree, & Bitner, 2000). Some researchers also concluded that service literature is not readily applicable to internet services due to their differences from traditional services (Lovelock & Gummesson, 2004). Many of the New-age services display behaviour that challenges the foundation of the existing service literature, including that of the classification schemes that were agreed in the past. For example, human-less service interaction, including access and delivery, is one of the consistent features of these services (Brown, 2000), which was not discussed in the traditional service literature owing to the lack of their existence at the time when these researches were undertaken.

The new-age services are also diluting many more criteria of classification that were laid out for traditional services in the past. The service characteristics postulated by Zeithaml & Bitner, 2003, outlines four aspects of services that make them different from products. These characteristics then formed the basis of service marketing literature, including the much-discussed service-dominant logic and service marketing mix.

However, with the changing nature of services, these characteristics got diluted to an extent. For example, Internet-based functionality has transformed the essence of service experience led by service encounters, which were formerly agreed to be 'high on touch' in nature (Bitner, Brown, & Meuter, 2000). Okun (1981) contended about four decades back that there is a 'hotel problem', where the customer does not know the prices of different rooms in a hotel, is the service good, and how responsive the staff are. He can answer these questions only after 'experiencing' the service. The problem existed because services could not be touched, felt, or experienced before actually buying them (Levitt, 1981). Today the customers can find out the prices of more than one hotel at a time, compare them with other websites to see the best price, check the rating and reviews about the customer service and policies of a hotel, etc., without even physically visiting the

hotel. Not just that, hotels have started to provide virtual tours of their hotel through augmented reality and virtual reality. Therefore, the guests can check the rooms, lobbies, and recreational areas with rich visual cues without hassle, overcoming the intangibility handicap.

Services were also argued to be heterogeneous, leading to different service experiences at different times for different customers. The major reason for this aspect of services was the role of service workers in service. Such a manual intervention would lead to different service performances at different times (Zeithaml, Bitner, & Gremler, 2012). However, streaming platforms require zero manual intervention to deliver services. Adding to that list is the other services like payment wallets and even ticketing platforms where there is no manual intervention by the service workers. This aspect of increasing automation in services has rendered human intervention redundant. With no space for manual intervention, the new-age services offered have become standard and homogenous.

For a long, education in classroom form was considered a service that fits into the inseparability aspect of services (Lovelock & Wright, 1999). It was argued that one could not attend a lecture without being in the class as service production and consumption can only happen simultaneously, which was the thumb rule that differentiated services from products. However, with the advent of MOOCs and online courses where lectures can be pre-recorded, the service production happens at a time much before the service consumption happens. Similarly, a missed webinar hosted on GoWebinar can always be downloaded and watched later, much after the service is produced. The ability to download service and experience it any time later at convenience has helped in making service production 'separable' from service production.

Another traditional service characteristic was perishability, which was the inability to store services for future consumption. However, some new-age services can be created, irrespective of the time of consumption, and be stored for future use. Video content apps allow creators to create content and schedule it for later broadcast on the platform.

Thus, the content is created much in advance and stored for a later release depending upon the traffic and engagement objectives that the creator might have.

Owing to these violations manifested by new-age services that challenge the set order, it is of importance to expand research on the new-age services while appreciating that these services are as different from traditional services as they are different from products. New-age services do not completely conform to the concepts and foundations laid down and hence require newer sets of rules to explain the nature of these services with more accuracy. The further section proposes the eligibility criterion for the new-age services, which is followed by the section on classification criteria proposed for new-age services.

4. Eligibility Criterion for New Age Services

The new-age service eligibility criterion defines a screening approach that can segregate New-age services from the traditional services. The question that one has to ask to decide if a service classifies to be a new-age service is:

- What and how much is the role of the internet in the service?

This question helps in scanning services based on what role does internet plays in service touch-points like access and delivery. This criterion helps to bring forth the differentiation between the two services, which have varied dependence on the internet for their functionality. In the e-retail space, an Amazon customer has to necessarily login to its website for accessing the app and order products. There is no other way to order from amazon apart from accessing their website or app (by the customer or the agents/kiosks collaborating with Amazon). Other functions like payment, order tracking, modification, and cancelling of the order are all done in the app or website even though the final delivery is physically due to the nature of the product. It is hence safe to assume that Amazon has a high dependence on the internet for its functioning.

However, how is an e-tailer different from a retailer, which also employs the internet for its access? Take an example of an Indian retail chain like D-mart. It has its own app that allows customers to look at the products online and order them from their nearest store or a stock point. Hence, customers can buy from D-mart. So does that make D-mart and Amazon the same? The answer is No. The reason is that, the online or app-based access and service that D-mart is providing is an add-on service to its customers, while its primary service remains the store-based retail set-up. This nuanced difference between Amazon and D-mart is what causes a divergence between the two businesses. This acts as a critical differentiating criterion between a traditional service and a New-age service, even though they may have some similarities in terms of use of the internet for their working. It is the extent of reliance that a business has on the internet for its functioning, which separates a New-age service from traditional ones. It is depicted in Table 1 below:

Internet-Dependency	Definition	Example
No Internet	<ul style="list-style-type: none"> • Unorganized services which continue to be present in the physical set up with no presence online for access or delivery 	<ul style="list-style-type: none"> • Local 2-wheeler service point • Local barbershop <ul style="list-style-type: none"> ◦ Continue to be accessed and deliver service through local physical set up with no presence online
Plus Internet	<ul style="list-style-type: none"> • Traditional service businesses which have integrated internet into their access and delivery set-up • The online services are to add convenience to the customers • Physical set-up is still a strong channel and online set-up acts a secondary channel 	<ul style="list-style-type: none"> • D-mart • Indigo <ul style="list-style-type: none"> ◦ Historically been traditional services but have integrated internet and app-based application to provide convenience for the customers while the primary channel remains to be a traditional channel

Internet Plus	<ul style="list-style-type: none"> • Internet as the core of functionality • Extends out into brick and mortar set up for higher penetration • Available through the internet as well as a physical set-up both for access and delivery while online set-up is primary 	<ul style="list-style-type: none"> • Lenskart • Nykaa <ul style="list-style-type: none"> ◦ Started as a pure internet service and then branched out into a physical set-up for access as well as delivery
Pure Internet	<ul style="list-style-type: none"> • Internet as the core of functionality • Service access requires internet connection hence highly dependent on internet • Service delivery may or may not have a physical interface of human connection 	<ul style="list-style-type: none"> • Netflix <ul style="list-style-type: none"> ◦ Access, as well as delivery, requires internet • Uber <ul style="list-style-type: none"> ◦ Access through the internet but service delivery has a physical interface)

Table 1: Eligibility Criterion for Services to be classified as New-age Service

Thus for this paper, the New-age services have been defined as those services that have internet-based functionality as the core for access and delivery of the services. Hence, new-age services from the above classification are defined as— *(i.) Pure- Internet-based services* and *(ii.) Internet-plus services*. Since the other two categories do not have internet-based capabilities as core or central to access and delivery, they do not qualify as new-age services for the service offered. The further schemes proposed in this paper are strictly applicable to the new-age services only (Panwar & Khan, 2020).

5. New-age Service Classification and Marketing Implication

The New-age service classification has been developed based on five key questions. Each of the questions corresponds to either the eligibility criterion or the classification. These are:

1. Classification 1: What is the duration of the service relationship between the service provider and the customer?
2. Classification 2: How long does the customer have to wait for service delivery after access?
3. Classification 3: What is the level of homogeneity that the service can offer?
4. Classification 4: Is there a possibility to store the service performance/deed?
5. Classification 5: What is the role of the service provider in the overall service deed?

Each of the five classification criteria discussed below has been accompanied by its respective marketing implications.

Classification 1: Relationship duration between the service provider and customer

Service interaction refers to engagement between the service provider and the customer. This interaction is a function of all service elements – service set-up, service worker, service process, and service customers (Zeithaml & Bitner, 2003).

Relationship Duration	Definition	Example
Transaction	<ul style="list-style-type: none"> • The relationship between the customer and the service provider lasts only till the service performance or deed lasts for a single transaction • Short-term 	<ul style="list-style-type: none"> • Uber • Make My Trip <ul style="list-style-type: none"> ◦ The customer and the service provider are only tied to that one transaction that the customer undertakes ◦ The customer can choose to do or not do the next similar transaction with the service provider with no monetary cost involved

Tenure/ Membership	<ul style="list-style-type: none"> The relationship is for a given tenure irrespective of the number of service transactions that take place during that tenure Mid-term to long-term 	<ul style="list-style-type: none"> Netflix subscription for a month Zomato Gold for a year <ul style="list-style-type: none"> The customers usually subscribe for tenure or membership irrespective of the number of times they watch content on Netflix or order food on Zomato The subscription cost is to be paid irrespective of the customer using or not using the service
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Table 2: Classification 1: Relationship duration between the service provider and customer

Services can be classified based on the duration of the service relationship. This is important since the duration of the relationship decides the level of engagement the service can aim for with the customer. Classification based on relationship duration can lead to – transaction-based services; and services that are duration based as depicted in Table 2.

Service Marketing Implication: For dependent transaction services, the service experience is strongly influenced by the service delivery at that one instance, making the service delivery a make or break ‘moment of truth’ (Zeithaml & Bitner, 2003). On the other hand, tenure-based services also have a strong influence on service delivery on the service experience, but the service provider has many other handles to manage the customer experience. For example, these services are connected with customers for a longer period and have access to the service consumption pattern, which means that they can create suitable offers and target effective communication to the target audience.

Further, while transaction-based service providers need to make efforts for every 'next transaction, the cost of providing service could be much higher without customer loyalty. Hence, efforts must be made to ensure that post-purchase cognitive dissonance among customers is limited and loyalty is generated. Tenure-based services, since they have already managed to acquire a customer for a longer time, they must ensure that the services offered are valued and appreciated by the customers. This emotion must lead to an action by the customers to renew their tenure or membership with the service provider when the time comes.

Classification 2: Instant Gratification or lack of it

The speed at which service is delivered is a key aspect for new-age services. Many new-age services thrive on the promise of delivery speed (without compromising on quality). Uber's service experience is a function of how soon can it provide you with a cab. Amazon has been experimenting with reducing its delivery time and came up with a 2 hours delivery (Choudhury, 2018). Flipkart has launched a hyper-local delivery service that promises home delivery of groceries in 90 minutes (Ahmed, 2020). The 'as fast as we can' syndrome is a way to provide instant gratification to customers. For a long, lack of instant gratification (especially for e-commerce deliveries) was cited as a reason for a customer to look at an offline set-up for the instant gratification related to buying a new product or service. Anand et al. (2011) cited that the service delivery speed affects the overall perceived quality of the service provider for the customer. New-age services can be segregated based on how soon are they capable of providing the core service after the customer has purchased it. This has been depicted in Table 3 below:

Gratification	Definition	Example
Instant	<ul style="list-style-type: none"> The service access and service delivery happens almost at the same time (or at the same time) The customer does not have to wait for a scheduled or deferred delivery of services sometime in future 	<ul style="list-style-type: none"> Paytm Netflix <ul style="list-style-type: none"> The customer is able to access/purchase the service and receive the service at the same time. The paytm transaction is executed and the Netflix content can be watched the moment customer access the platform

Time-lapsed	<ul style="list-style-type: none"> • The service delivery does not happen at the same time as it can happen at varied time in future • The customers are attuned to deferred or delayed gratification of the service 	<ul style="list-style-type: none"> • Medlife • Swiggy <ul style="list-style-type: none"> ◦ The transaction is executed but the delivery of the core service does not happen at the same time ◦ The customer has to wait for a deferred service since the service is always scheduled for a later day or timeslot ◦ The deferent or the scheduling could be for anything between 30 mins to a couple of days
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Table 3: Classification 2: Possibility of Instant Gratification from the Service

Service Marketing Implication: The core services acquired by the customer can be delivered in a wide frame of time. The gratification experienced by the customer by acquiring a service hence can be immediate or delayed. In case of immediate gratification, the service purchase/transaction and the service delivery happen at the same time with almost no to zero time lapse. On the other hand, delayed gratification means that there is a significant and observable time difference between the service purchase/transaction and service delivery.

The time-lapse expected and accepted by the customer depends upon various assumptions, which include the specific need for gratification and value judgements about the service (Katz, Blumler, & Gurevitch, 1974). In the case of New-age services, the speed at which the services function is becoming a major service differentiator. Uber was preferred by many because of the faster availability of cabs. Netflix, with its content, made the DVD rentals and multiplexes look old school because the gratification in its case happens almost immediately. The grocery war between Amazon, Flipkart, and Big Basket in India is currently squarely based on reducing the time lapse between service purchase/transaction and service delivery (Nair, 2017).

Service providers offering immediate gratification often need to ensure that their service inventory is up to date and does not make customers wait for it. Hence, while firms providing immediate gratification have an inherent advantage, it also means that the supply chain must be in accord with the service promise by these companies on instant gratification. Service providers, which have a time-lapse between service purchase and service delivery, have a buffer

time and ability to mould service delivery for a better experience.

The time-lapse between service purchase and service delivery is dependent on two major factors – (i.) Does the delivery require customization and hence additional time to create the right offering, (ii.) How much time does it take to deliver from the nearest stock point/hub/partner? Standard offerings need less customization, less time to sort, pick, and pack. It considerably reduces the time required to prepare the offerings for the customer. A dynamic hub and spoke model that identifies and predicts sector- or area-wise demand with spike predictions and uses a hyper-local model for e-commerce distribution would significantly reduce the delivery time. With these techniques, the customer's gratification time can be greatly reduced, thus handing over a clear differentiation to the service firm.

Classification 3: Level of Homogeneity in Services

For a long time, heterogeneity was used to describe services so that services are not standardized or homogenous. It makes every service performance different from the previous one. However, there was no standard way to define and evaluate the performance of a service objectively from the customer point of view (Rathmell, 1974). Making service faster and cheaper was the gold standard for many years, which viewed services as routinized actions that must not be wasted too much time on (Judd, 1964). The heterogeneity of services is multi-fold as more than one aspect contributes to the service performance and to the spirit of nature of services.

Heterogeneity was a function of the service workers as well as the service customers (Lovelock & Gummesson, 2004). When Rathmell (1974) argued that this heterogeneity was much less problematic in machine-intensive service industries, it was quite evident that as the services became more technology-based, the level of heterogeneity would also go down, making way for homogeneity.

While a majority of New-age services fit quite aptly into this prediction since they are internet-run and technology dominated in their functioning, a few services do not comply with this definition. This classification criterion demarcates the two sets of services based on their level of homogeneity, as depicted in Table 4.

Level of Homogeneity	Definition	Example
High Homogeneity	<ul style="list-style-type: none"> The services offered to the customers reflect a high level of homogeneity among various service interactions by different customers Usually possible with services that have higher technology component allowing for standardization 	<ul style="list-style-type: none"> Spotify Zoom <ul style="list-style-type: none"> The service experience in terms of functioning and process remains standard and the chances of varying experience are lower. These services are fairly homogenized in nature The variability in service offering, if at all, could be a factor of uncontrollable external factors like the smartphone performance and data connection speed
Low Homogeneity	<ul style="list-style-type: none"> The services offered are as heterogeneous as argued for services Standardization could be low to medium depending upon the extent of the role played by the technology 	<ul style="list-style-type: none"> Oyo Rooms UrbanClap <ul style="list-style-type: none"> The service experience in terms of functioning and process can change from one transaction to another The variability could be of any extent depending upon the level of automation of the service since service delivery, in this case, is physical in nature which attracts variability The external factors have limited impact since only the access is dependent on technology but the actual service delivery is dependent on the actual physical delivery

Table 4: Classification 3: Level of Homogeneity in Services

Service Marketing Implication: Homogeneity of service is closely dependent on two complementary factors – the level of automation that the service has and the level of human interaction that the services involved. A higher level of automation automatically reduces the need for human interaction. Standardizing services has been considered important for services due to inherent heterogeneity, leading to inconsistent service performance and unfavourable service experience.

Lovelock and Gummesson (2004) argued that growing automation has made it possible to achieve high degrees of reliability and consistency in service delivery due to the growth of the internet and peripheral technologies (Peterson, Balasubramanian, & Bronnenberg, 1997; Grove, Fisk, & John, 2003).

Classification based on homogeneity presents two sets of challenges for the two sets of service providers. For service providers that are considerably heterogeneous in their services, often due to a greater role played by the human or manual component, the difficulty is to standardize the service as much as possible. This would

help the customer evaluate the service on a consistent benchmark that is beneficial for the service and takes away the role of 'chance' in performance. The second challenge faced by these service providers is that unlike non-animated elements of service like set-up, process, and policy, the animated component of service, human interaction, is the most difficult to standardize due to dominant human traits like behaviour feelings, emotions, and motivation. Service providers who have a larger contribution in their service coming from the human element in their services must ensure a systematic and structured process of on-boarding, inducting, developing, and retaining these resources in the fold.

The second set of services emanating from this classification comprises automation-heavy services, which enjoy a fair to a high amount of homogeneity in their services due to limited to no role played by human interaction in the service delivery or experience. While this may look desirable on the face of it, it has its own set of problems. Lack of human interaction can sometimes lead to dissatisfaction, especially during exception handling and complaints management. When customers face an issue with a service, a high level of automation makes restricts the customer's ability to find and interact with a human interface, which may lead to dissatisfaction. Deployment of IVR machines and chatbots-based solutions for customer interaction has been associated with high dissatisfaction among customers (Panwar, 2020).

The second problem these service providers face is the lack of human touch. Customers like to engage with service providers that effuse human-like traits like compassion and empathy for their customers. The service quality framework given by Parsuraman et al. (1988) highlighted empathy as one of the five critical dimensions that customers use to evaluate service quality. Human interaction has also been identified as the source of genuineness and (mutual) respect between an organization and a customer (Solnet et al., 2019). Thus, lack of human touch can limit the ability of firms to build and maintain trust with customers.

The problem is set to aggravate as organizations are promoting the self-service concept to plough efficiency (Salomann, Kolbe, & Brenner, 2006), thus

fundamentally changing the way customers interact with firms to create service outcomes (Meuter, Ostrom, Roundtree, & Bitner, 2000).

Service organizations must work on a multi-pronged approach to handle these challenges. From the service delivery point of view, designing and executing services with a 'fail-safe' framework would reduce the instances of customers needing extensive support and thus human touch. As for automation and deployment of AI for service support, the AI systems must not be put to the frontline without training these exhaustively on a spectrum of data and cases. An untrained system that cannot solve customer issues leads to dissatisfaction (Panwar, 2020).

From the customer point of view, co-creation must be co-designed, too (Panwar & Khan, 2021). Often organizations unanimously take decisions regarding co-creation, which the customers may not completely agree with, but have to comply anyway, which would inevitably lead to frustration and dissatisfaction. Systems that are designed keeping in mind the customer journey and are intended to add value to the customers are well-accepted over systems that add pain to the customer journey for achieving a myopic efficiency goal.

Classification 4: Service Storage Ability of Service

Perishability was historically related to perishable goods like milk and poultry, but it found its application in service literature as a trait of services, which made them different from products. Edgett and Parkinson (1993) posited that perishability of services means that services cannot be saved or stored for reuse later. The argument found its application in capacity utilization, too, suggesting that unused capacity at a given period due to lower demand cannot be utilized at another period when the demand is high.

New-age services do not necessarily conform to the perishability norm and can be stored and saved in a way that can be utilized at a different time and even by a different customer. However, not all New-age services diverge from the perishability construct and continue to be perishable in nature. Classification 4 demarcates new-age services based on their storage ability as depicted in Table 5:

Storage ability of service	Definition	Example
Storable	<ul style="list-style-type: none"> The services can be created in advance and be saved or stored for accessing later by customers. The service instance here may or may not be the access instance. The stored services can be used by different customers at the same time 	<ul style="list-style-type: none"> Downloadable Online lecture Live event recording for broadcast at a later time <ul style="list-style-type: none"> Service providers can create a service entity (an online downloadable lecture or a downloadable event video file) which can be stored for providing the customer with access to it at a customer convenient time later The customer has access to watch these service performances for as many times as they want to since these services can be stored The service content in these cases is been prepared in advance and is made available to customers with time flexibility (Countering the inseparability construct as well of service) The time flexibility can be offered only if the service can be stored
Not storable	<ul style="list-style-type: none"> Despite being a new-age service, these services have to be consumed at the time and place of production as these cannot be stored These services continue to be perishable in nature and cannot provide time flexibility to the customer 	<ul style="list-style-type: none"> Practo Paytm <ul style="list-style-type: none"> The service in these cases cannot be store for future use by the service provider Advanced doctor's service cannot be stored for customers who will need the check-up later. Similarity Paytm cannot create transactions in advance for the customers to use them later, just in case there is a heavy traffic sometime in future delaying or cancelling transactions for customers

Table 5: Classification 4: Service Storage Ability of Service

Service Marketing Implication: New-age service organizations segregation is defined by the firm's ability to store services for the future. This gives a strong handle to organizations for balancing demand and supply of service. It must be noted that the perishability in this scheme is from the organization's point of view, which is different from perishability from the customer point of view. However, the ability to store service performance or deeds is not unique to the New-age services. Live performance and offline lectures could always be stored in electronic form, challenging services' perishability construct (Lovelock & Gummesson, 2004).

However, what makes New-age services different in this regard is the seamless nature of service performance, service storage, and service revisiting systematically. Access to these stored services can happen at any time and at multiple times by the organization to deliver these to customers at a flexible time. These organizations can manage the demand-supply equation for their businesses efficiently.

However, while the recordings of lectures and shows may offer a very close alternative to the actual performance, but there may still be some experience gap with recorded services. Finally, virtual recorded lectures and events miss real-time audience feedback that can be incorporated in real-time to improve service performance.

Classification 5: Role of the Service Provider

The evolution of the internet and subsequent technologies has also led to the rise of different business models for services. A new branch of New-age services has emerged, focusing on solution delivery more than the core solution itself. The transformation has led to a scenario where the solution delivery is considered a core solution or critical to it at least (Panwar & Khan, 2020).

One of the major service delivery transformations is in the form of what is known as multi-sided platforms or often called 'match-makers' (Evans & Schmalensee, 2016). Multi-sided platforms (MSPs) are service platforms that bring together two or more interdependent groups of customers. These platforms have recently risen to economic and business prominence in many industries (Hagiu, 2007). A new classification of services emerges with the rise of multi-sided platforms that often act as a facilitator between the actual service provider and the end customer. This is based on the service provider's scope, which could be of a facilitator or of an end-to-end full-scope service provider. Hence, the fifth and the final classification for New-age services is based on the role of the service provider, as depicted in Table 6.

Service Marketing Implication: Segregation of new-age services based on their role in service access and delivery creates two sets of services – the full-service provider and facilitators. Services that offer a full service to customers have a service-scape that handles all aspects of service delivery. By virtue of their control of the supply system, these services are more agile in their functioning. Control over delivery also ensures that these services can tweak their offerings as per trends and can be more responsive to customer needs and wishes.

Role of Service Provider	Definition	Example
Full-Service Provider	<ul style="list-style-type: none"> These new-age services own the complete service scape from on-boarding to post-purchase service for a customer While there may be some part of service that they may outsource, this is completely in the background and for all practical purposes, the customer is only dealing with them 	<ul style="list-style-type: none"> Zoomcar RentoMojo <ul style="list-style-type: none"> The service offered (car on rental or home appliances on subscription) is owned in totality by the service provider The service, as well as service delivery, is in control of the service provider adding to the flexibility of operations and customer service
Service Facilitator or Match-maker	<ul style="list-style-type: none"> These new-age services act as a match-maker bringing together a producer of service and a customer of service While they may not themselves produce the service, they are the single touch point for the customers for all business transactions from access to post-purchase feedback and complaints 	<ul style="list-style-type: none"> Red Bus Swiggy <ul style="list-style-type: none"> The end solution offered in form of service is by a different service provider, but the service delivery is owned by the service facilitator Customers do not have to reach out to the actual service provider for any concerns with regards to the service For all practical purpose the customer experience is a function of, and a driver that influences – the service facilitator's brand

Table 6: Classification 5: Role of the Service Provider

However, this business model is usually an asset-heavy model, making the business-sensitive to costs. For the same reasons, scaling up for these services is a problem, as scaling up requires a lot of upfront capital for the service. Further, the spread of focus and resources across multiple business activities leads to inefficient expending of certain resources. Service facilitators have their own challenges and advantages courtesy of

their business model. Facilitators adopt an asset-light model, with no involvement in delivering the core service, that helps them overcome the entry barrier for capital-intensive industries like passenger transport and even airlines, albeit as an intermediary. However, it also gives them limited control on service experience as someone else designed and offered the final solution. Thus, they instead focus on consumer convenience, flexibility, and ease of access for customers.

While service facilitators have been around for a long, the advancement in internet and peripheral technologies have been key to their phenomenal rise in the past two decades (Evans & Schmalensee, 2016). Service facilitators face the challenge that they do not own the core service and are dependent upon other service providers. Poor service delivery despite better non-core services across the service journey may still hurt the image and trust that customers have in the service facilitator. Since service facilitators often act as multi-side platforms, they have to choose between treating one side of the platform (customer or the service provider) as a profit centre and the other as a loss leader, or, at best, as financially neutral (Rochet & Tirole, 2003).

Full-scale service providers must look at all the touch-points of the service experience and evaluate the criticality of each with the help of service marketing tools like service attribute determinant (Zeithaml & Bitner, 2003) and SERVQUAL (Parasuraman, Zeithaml, & Berry, 1988). It can help service organizations identify pain points and low hanging fruits to improve the service experience for customers. Further, in their official customer communications, full-scale service providers must highlight their ownership of service-scape and its value offering to the customer. It would take home the point about their service offering and create a differentiation based on the core of the business model, which is service-scape ownership.

Service facilitators, on the other hand, should impress upon highlighting those areas of the overall service they are part of and their contribution to overall customer service. Service facilitators must be able to create trust among the customers that transcend the asset or service ownership limitation.

This is possible by engaging with customers consistently and adding value to their service journey. Finally, these service facilitators must ensure that the customer does not see them differently from the service provider, which may lead to heightened service acquisition risk perception due to the involvement of multiple players. A seamless service experience for customers all through the customer purchase journey is critical for the success of service facilitators.

Conclusion

The need for service classification was long identified to help create generalizations for services that can be used for creating and implementing marketing strategies for similar services. Out of several classification criteria proposed by many service-marketing researchers (Judd, 1964; Zeithaml, Parasuraman, & Berry, 1985), the most widely used classification was proposed by Lovelock (1983). However, many researchers pointed out that the age-old classifications and other service marketing constructs have not kept up with time (Peterson, Balasubramanian, & Bronnenberg, 1997; Grove, Fisk, & John, 2003). In essence, the evolution of services has made it critical that the older constructs of services marketing be revisited and updated to services in the current times or new-age services.

This paper attempted to underline two major concepts concerning the above findings. Firstly, an eligibility criterion as a basic entry point to differentiate and define 'New-age services' from other services has been defined. This criterion would help researchers define closely the nature of services based on this segmentation. Secondly, after defining New-age services, these services are further classified with the help of five classifying schemes. For each of the schemes proposed, marketing implications and possible interventions have been highlighted.

The proposed eligibility criterion and classification of new-age services is based on five questions. The eligibility criterion and scheme classification are identified to respond to these questions. These questions touch upon the role of the internet in service (as an eligibility criterion) and five schemes that help classify New-age services. The five schemes are – (i.) the nature of the relationship between the service provider and the customer, (ii.) the instant

gratification in services, (iii.) the possibility of homogeneity in the service, (iv.) the ability to store service for future use, and (v.) the actual role of the service provider.

The first classification segregates services based on how long the duration of service lasts and the nature of this relationship. Services have been identified to be either transaction only or tenure basis (subscription or rental) in nature. The ability of a service to be able to provide instant gratification or not is the basis of the second classification. The level of homogeneity that can be maintained for a given service creates two sets of service providers as defined by the third classification. The first set can maintain near-perfect or high homogeneity, while the second set cannot do so due to the nature of service.

The fourth classification identifies two sets of services based on the ability of service providers to save or store services after producing them and then sell or distribute these services later. One set of service providers can achieve this with the help of electronics storage, while the other set exhibits a more traditional nature of service, like the inability to store the service for future use. The fifth classification differentiates service providers as full-service providers and service facilitators (multi-sided platforms). These two services have dissimilar service scopes and are beleaguered by dissimilar marketing challenges.

The paper thus countered the traditional wisdom of segregating services from products with the help of service characteristics: Intangibility, Heterogeneity, Inseparability, and Perishability. This paper has argued with the help of multiple examples and observations that new-age services seldom conform to these set characteristics. These characteristics have been strictly defined as the gold standard to differentiate services from products. Using the deductive logic, the new-age services would wrongly end up being classified as products instead of services since they violate three of the four characteristics identified for services. This violation by new-age services further strengthens the case of developing new constructs by revisiting the older ones. These new constructs must be broader in nature and acknowledge the significant transformation of services.

Academic researchers could benefit from this classification as it demarcates the new-age services from the older ones. Further research can be undertaken to study if different services within this domain exhibit similar or dissimilar traits. Marketing implications could be delved into for each of these services to create a common set of exhaustive guidelines that would touch upon aspects such as conception, design, communication, delivery, and post-purchase service. Managers could benefit from these classifications by employing marketing interventions for services belonging to a common classification, hence avoiding the need for specialized and extremely narrow execution, which may be expensive to undertake on the go.

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