

# Blended spaces, cross-channel ecosystems, and the myth that is service

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## Abstract

Service design and service designers have changed the way many companies and organizations think of their service offerings in relation to their overall goals, expanding their view of when a service experience starts and ends. However, this is still a company-centered view, eminently postmodern and unavoidably reductionist in nature. There is still room for growth within the field and in the way services are designed. This paper argues that a systems thinking approach positing multiple interrelated perspectives might be beneficial for the service design practice. Shifting focus from the single touchpoint to the global structure of the ecosystem and hence altering the way the problem space is framed, service design practice can gain a significant strategic impact and provide value to both individual actors and organization.

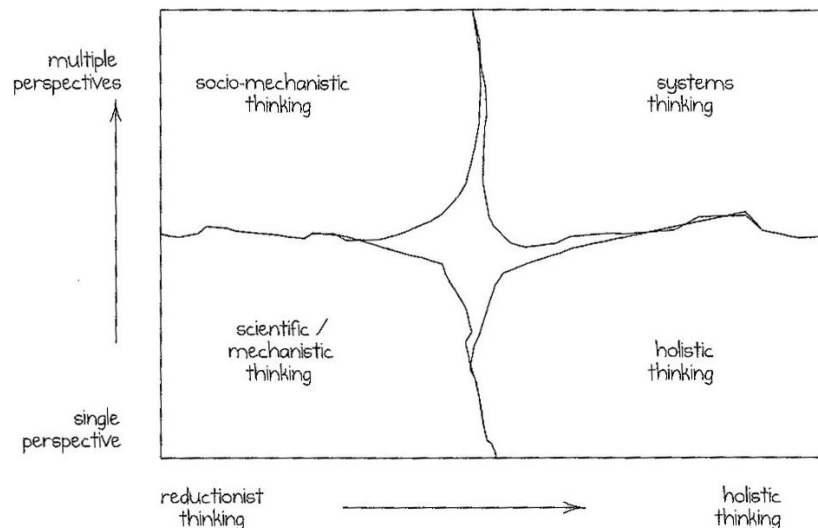
**KEYWORDS:** systems thinking, cross-channel ecosystems, blended space, information architecture

## Introduction

In 2004, describing the changes from the linear sequencing of the industrial age to the interwoven nature of the network age, William J. Mitchell wrote that “Once there was a time and a place for everything; today, things are increasingly smeared across multiple sites and moments in complex and often indeterminate ways” (Mitchell, 2004, p. 14).

A decade later, affordable, mobile, consumer-grade computing has become mainstream: smartphones, tablets, sensors, ambient appliances, and wearables allow human-information interaction everywhere, all the time, turning products into services or parts of services (Resmini & Rosati, 2009). Digitization and constant read/write access to information have blurred the distinction between products and services: as Norman argues, “the point of a product is to offer great experiences to its owner, which means that it offers a service” (Norman, 2009).

As services are experienced across a multitude of channels and contexts, the importance of acknowledging complexity in the service design (SD) process has grown significantly: this notwithstanding, the myth that the service designer can design a perfectly bounded artifact and simply drop it in place within a dynamic environment still holds at least in the practice. While there are obvious benefits in focusing on the specific touchpoints of a service and in transforming what amounts to a complex experience into a much more linear journey, control being one, there are also risky trade-offs, mainly those of abrupt simplification and reductionism.



**Figure 1 Systemic vs holistic thinking (Armson, 2011)**

This paper aims to initiate an interdisciplinary conversation to move out of this conceptual impasse by introducing an approach based on the theoretical lens of systems thinking and by suggesting a perspective shift in the SD practice from a holistic approach to a systemic approach. Where the former adopts one single perspective, the latter considers multiple perspectives at once, acknowledging that the design process does not center around the choice of a single optimal point of view but rather around conscious movement between different perspectives in order to attain a better and more complete understanding of what is being considered (Armson, 2011), which in our case is not a “service”, but rather a cross-channel ecosystem in blended space.

## Cross-channel ecosystems in blended space

Cross-channel initially identified a modality of service delivery where “a single campaign” was conducted “with a consistent message (...) coordinated across channels” (Dietrich, 2009). It was then introduced to information architecture (IA) (Resmini & Rosati, 2011) to describe the changes occurring in the design practice in connection with the mass penetration of portable devices, the general availability of mobile broadband, and the expansion of a read/write culture of actors constantly co-creating information.

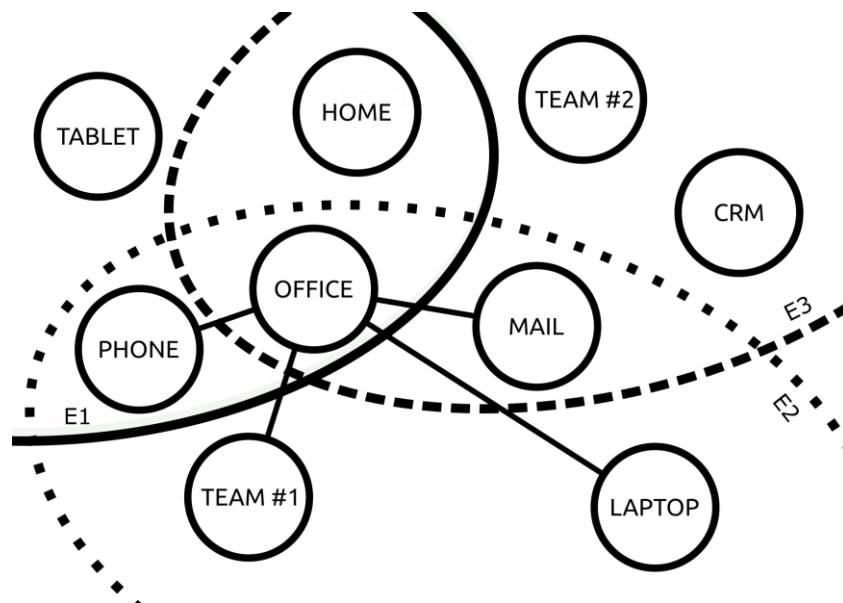
At the heart of this approach to design is a systemic view that ties together actors, activities, and individual goals into ecosystems. More formally, a cross-channel ecosystem is the result of actor-driven choice, use, and coupling of channels, either belonging to the same or to

different systems, within the context of the tasks, goals, and desired future state actors intend to achieve, explicitly or implicitly. Cross-channel ecosystems are semantic constructs that straddle digital and physical spaces, instantiated by individual actors moving freely and at will between locations, devices, and contexts.

Cross-channel design is systemic in nature and pragmatic in scope. The design process shifts its focus away from the precise attention usually accorded to a single artifact, product or service, and concerns itself instead with the global structure and dynamics of the ecosystem. It identifies a blended space of opportunity for the designer to intervene in, more than a finite artifact that can be fully or wholly designed.

This is a radical change, reflected in the practice as “build-what-you-can” methodologies that stress how an understanding of the ecosystem does not lead to the redesign of it, but rather to a pragmatic intervention to maximize social or business opportunities and minimize individual or organizational pain through a recast of one or more specific channels or touchpoints (Benyon & Resmini, 2015).

Interventions within an ecosystem broker between the different instances presented by the ecosystem itself, the actors, and the designers’ own vision. The blended space that is the result of the actors’ activities and their joining of individual channels for a specific goal creates an emergent structure and introduces a loss of control on the side of the designer and the organization that goes beyond the traditional participatory or user-centered perspectives. This presents a major challenge to the design process that the current practice of SD does not fully address.



**Figure 2 Cross-channel ecosystems (Benyon & Resmini, 2015)**

A cross-channel approach has been successfully adopted for the design of such diverse systems as the environment of a national art gallery (Resmini, 2013) and the customer experience for outdoor recreation gear and sporting goods retailers (Tate, 2011). Figure 1 illustrates prototypical channels and touchpoints belonging to three different overlapping ecosystems, E1, E2, and E3, the result of individual instantiation in the context of workplace activities. An actor accomplishing tasks from the office in collaboration with team #1 using a laptop, mail, and phone communication would be concerned with the E2 ecosystem only.

The idea of blended spaces originates with Imaz and Benyon (2007), who initially applied Fauconnier and Turner's conceptual blending (2002) to the study of human-computer interaction and software engineering. Benyon formalized blended space in 2014 as a space "where a physical space is deliberately integrated in a close-knit way with a digital space" (2014, p. 79), creating a new type of space with its own emergent structure and its own novel user experience predicated on a different sense of presence. The idea of blended spaces has been applied to the domain of digital tourism (Benyon et al, 2013) and to the design of meeting rooms (Benyon & Mival, 2012).

Together, the two formulations offer a comprehensive framework to approach the design of complex experiences from a systemic, non-reductionist perspective (Benyon & Resmini, 2015). Cross-channel design identifies primarily a designerly response to socio-technical change and can be read as a superset of Benyon's conceptualization of blended spaces: as actors interact across multiple channels and locations, a blended space spanning contexts, devices, and locations is articulated through an ecosystem of channels where constant read/write access to a continuous personal stream of correlated information blends individual physical and digital artifacts into complex ecosystems that affect all sorts of everyday activities, from education to healthcare, from traveling to shopping.

These ecosystems also transcend the traditional limit encountered by SD practice: as much as this latter considers primarily organization-bound and organization-controlled systems, the former fully embraces unbounded experiences and the computer-derived textuality of haphazardness, evanescence, and anonymous, multiple and social authorship of today's digimodernist allure (Kirby, 2009, p. 59-60).

Cross-channel ecosystems are service supersets, unbound, actor-constructed, and transient. While the traditional object of an SD investigation could be the Netflix service ecosystem and its multiple touchpoints in order to provide users with the smoothest experience possible within the Netflix walled garden, in a cross-channel investigation the Netflix service could be a piece of a larger "watch movies" activity that also involves supporting services such as IMDB, competing services such as a local cinema, and ancillary services such as broadband internet access or a home pizza delivery service. Attention is devoted to the interdependencies of significant existing, available, or unused elements in the actor-constructed ecosystems, regardless of whatever company-owned service they belong to.

## Service, service system, and service ecosystem

Services as single entities are usually described from two different perspectives: in terms of what they do, that is if they enable other service interactions or if they enhance a service experience (Grönroos, 2007; Vargo & Lusch, 2008); or by reflecting on the different pieces that said services consists of, that is to say the specific touchpoints, actors, or servicescapes (Blomkvist, 2014).

However, focusing on what something is intended to do or on what something consists of, even if attention is given to the dynamic interplay of the constituent parts, entails in the end a reductionistic way of framing the problem at hand. Although SD as a field and as a practice has certainly matured, we argue that its approach fails short and its usefulness is greatly diminished when it comes to capture both the complexity and emergent nature of most of day-to-day activities, and the actor-driven unfinished onwardness of much of the information ecosystems we deal with today.

A service, or parts of it, can always be repurposed by actors as part of larger ecosystems: for example, healthcare and all of its ancillary services constitute a major superset whose boundaries are, as for all systems, arbitrary and depending on actor needs and objectives. Within the superset, parallel services might be competing directly or indirectly, as is the case for YouTube, cable TV, Amazon Video, and Netflix if we consider again a “watching movies” activity.

In this example, these services constitute what service marketing literature calls a service ecosystem, consisting of the combined resources of several service systems through the combined actions of its actors (Vargo & Lusch, 2011). The boundaries of the ecosystem are determined by the combined view of the interconnected service systems and the socio-historical context that guides the interactions and value determinants within the specific context (Akaka & Lusch, 2013). In this case, what we as collective of individuals consider to be entertainment, watching movies.

## Implications for research and practice

The conversation revolving around services and the design thereof has mostly concerned itself with what they are in terms of their parts, or with how and how much they differ from products. As a result, unquestionable progress has been made in the design of services as a collection of related and relatively static artifacts, the touchpoints. However, we regard this approach as eminently postmodern and unavoidably reductionist in nature: a way of framing services which is inward-focused, artificially organization-bound, generally neglecting the real-world usage patterns employed by actors to reach a desired state, and falling short of accounting for the resulting complexity. This is the myth that is service, one of change and distance: under the illusion of completeness, services are designed within the same constraints and under the same assumptions that products are.

We argue that for a service to be successfully implemented a systemic approach needs to be in place. As Armson writes, “Systems thinking does not (or should not) claim superiority to other thinking styles but acknowledges the power and limitations of each” (Armson, 2011, p. 51). The systemic designer intentionally moves between different thinking modes in order to obtain new insights and carefully examines the channels and touchpoints at the periphery of an ecosystem, those which might play a conflictual role or which are by and large ignored.

## Conclusions

Even though SD has fundamentally changed the way many companies frame their offerings relative to their overall organizational goals, there is room for growth within the field and in the way services are conceptualized and designed. A shift in perspective is also necessary to account for the increased level of control that has passed in the hand of individual actors.

This paper suggests that a way to move the conversation forward is through a systems thinking approach and the conceptualization of cross-channel ecosystems as formalized in IA. By altering the way the problem space is framed, SD practice can gain a significantly larger strategic impact and provide value to both individual actors and organizations. Instead of focusing on the touchpoints used in a specific sequence by a generic consumer, a cross-channel approach suggests that the aggregated number of journeys and their interplay should

be considered, shifting away from reductionistic solutions targeting the service journey only, to consider both organizational concerns of service providers and the autonomy of actors that choose channels and engage with services within a larger, complex ecosystem.

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