

## **Disentangling Value-in-Use for e-services – a regulatory mode theory perspective**

### **Abstract**

This research identifies a gap in literature on understanding the dynamic nature of value-in-use in an e-service context. It also offers a novel framework to bridge this gap building on regulatory mode theory and an explorative study with 13 participants.

**Key words:** e-services, value-in-use emergence, regulatory mode theory

## **Introduction**

As the service economy has continued to grow and digitalization expanded its reach, new electronic services (e-services) are increasingly determining market offerings for consumers. Typically, they can be accessed via a smartphone and include different categories of apps, such as streaming services, community platforms, mobility services and many others. As a distinctive feature, these e-services allow and require a user's continuous active involvement stretching over a series of use episodes. This feature puts value-in-use emergence – in contrast to value-in-exchange - to the centre of attention for better understanding users' commitment and loyalty to a supplier of e-services. Value-in-use must be understood as a dynamic and temporal construct and conceptualized accordingly. Despite a broad consent on this need, extant research, so far, could not provide such a perspective conclusively. The purpose of this paper, therefore, is to shed light on this black spot and provide a comprehensive framework for better understanding the dynamic emergence of value-in-us in the context of modern e-services. To do so, we will provide a brief overview of the current state of value related theory and the role of dynamics. We will then introduce regulatory mode theory as an extension of this body of knowledge bearing the potential to overcome the existing gaps in understanding. Based on that, we present an empirical study aiming at providing the missing conceptual framework on dynamic value-in-use emergence.

## **Theoretical background**

Research on value in a marketing context looks back at a long tradition (Hartwig & Jacob, 2018; Ng & Smith, 2012). Three conceptualizations prevail: benefit/sacrifice, means-end, and phenomenological. The first takes a transactional perspective and, therefore, follows a value-in-exchange notion (Zeithaml, Berry, & Parasuraman, 1988). Others extended this perspective by drawing on means-end theory and conceptualizing value as customer goal-oriented and multidimensional (Holbrook, 1996; Woodruff, 1997). In the context of the so-called service-dominant logic of marketing, Vargo and Lusch (2004) finally coined the term value-in-use (ViU) by stating that “there is no value until an offering is used” (Vargo & Lusch, 2006, p. 44). In contrast to the previous approaches, they view value as entirely phenomenological in that sense that it only results from customer experiences, evolves over time, is co-created by the customer and context dependent. Macdonald, Kleinaltenkamp, and Wilson (2016, p. 97) fully embrace this perspective and define ViU as “all customer perceived consequences arising from a solution that facilitates or hinders achievement of the customers goals”. In their own study, they identified solution quality (supplier offering) as the core explanation behind ViU. Within their scope, the perception of the degree of goal achievement determines ViU emergence and, thus, represents the customer's individual assessment of value as a process. The latter makes this phenomenological perspective of ViU particularly suitable for studies on e-service (Bruns & Jacob, 2014, 2016; Hartwig & Jacob, 2018).

Against this backdrop, it surprises that most existing studies in the e-service context still either treat ViU as a static concept (e.g. Hartwig & Jacob, 2018) or presume a simplified understanding of time (Pura & Heinonen, 2009). So far, no conceptualization of ViU has emerged that enables a modelling of its dynamic components and shows how ViU assessments change over time and which contextual factors play a role in its course. Hence, we identify a gap in literature that we intend to fill.

An interesting direction was taken by Becker, Jaakkola, and Halinen (2020) who point to self-regulation research as a promising avenue for capturing the dynamic nature of value emergence. Routed in social psychology, self-regulation research strives to understand the role of goals for how individuals control their thinking, feeling, and behaving. Within self-regulation research, different streams exist, with regulatory mode theory (RMT) putting special emphasis on the dynamic nature of goal-related self-regulation (Kruglanski et al., 2000). RMT puts emphasis on two distinct dimensions: assessment and locomotion. The prior encompasses an evaluation of an individual's current state and a desired end state. This form of self-regulation reflects the base principle behind ViU as presumed by Macdonald et al. (2016). A difference, however, consists in ViU research applying assessment more narrowly to a solution (supplier offering) and RMT taking a broader perspective including several and separate evaluations pertaining to different entities beyond merely solutions. Despite this difference, ViU theory provides hints on several classes of assessment objects. While goals in a first place provide the reference for ViU, they may also change over time and, thus, become the object of assessment. As Macdonald, Wilson, Martinez, and Toossi (2011, p. 679) put it: "Customers' goals change at different stages of the relationship and affect their evaluations of value." Also, ViU research continuously stresses the role of resources for the emergence of value (Kleinaltenkamp et al., 2012; S. L. Vargo & Lusch, 2004). Hartwig and Jacob (2018), for example, show in a mobile applications context that resource restrictions affect ViU emergence negatively. Hence, customers will make the resources disposable to them the object of assessment during use processes. Finally, overt usage of a service or the usage intensity marks another object of assessment ViU researchers draw on. Ravald (2010, p. 48), for example states, that "value does not emerge only in use and possession as such; rather it emerges in activities rendered possible." Heinonen (2009) applied this logic to the context of e-services and confirmed its validity. Summarizing, goals, resources, and usage intensity come forth as potential objects of assessment in regard of ViU.

The second concept in RMT, locomotion, encompasses all changes in position or "the movement from state to state" (Kruglanski et al., 2000, p. 794). This understanding straightly yields two core dimensions of locomotion, positions or stages on the one hand and movements between those positions on the other.

Because existing ViU research has not gone beyond recognizing ViU emergence, we adopt locomotion as an underlying concepts of self-regulation within individual's pursuit of ViU. Consequently, we put forth the following research questions: (1) Which stages characterize ViU

emergence for e-service users over time and what movements take place between them, and (2) how do e-service users assess goals, resources and usage intensity during use processes?

## **Methodology**

Because developing a ViU emergence process extended by RMT constitutes uncharted territory, we use an exploratory research approach. To comply with the phenomenological nature of ViU, we build on an in-depth investigation of the participants' perspective as proposed by Thompson, Locander, and Pollio (1989) for phenomenological studies. For selecting a suitable research context, we followed preceding ViU studies' choice criteria (Bruns & Jacob, 2014; Hartwig & Jacob, 2018). We needed a service offer with a strong goal orientation and a high level of active user participation to illustrate dynamic ViU emergence in e-services. Our criteria led us to choose language learning applications as a suitable research context. For composing a sample of participants, we deployed a purposive sampling strategy. To this end, we chose respondents who had prior experience with language learning applications, with diverse motivations, goals, and experience. Interviewees were recruited via open invitations. Our total sample size of 13 (11 male and 2 female respondents; aged between 24 and 48) is in line with generally accepted standards considering the point of theoretical saturation. Interviews took place in Germany within a period of three months. For our interviews, we chose a form of narrative interviewing, more precisely episodic interviews, as they allow a primary focus on concrete consumer episodes/experiences. We pretested the interview guide resulting in some minor adjustments. We conducted the interviews either in person or by telephone, and they lasted on average 48 minutes. Every interview was recorded and subsequently transcribed to facilitate further analysis. We carried out the coding procedure in MAXQDA, which entailed coding over 1,000 text passages. Due to the narrative character of the interview, we decided to use a structuralist analysis. This method differentiates between a syntagmatic dimension and a paradigmatic dimension. On the syntagmatic dimension, the researcher lists all components of each participant's narrative in their sequential order. The purpose of the paradigmatic dimension is to aggregate those components according to their specific content into a single or in several category schemes. For the episodes and the movements, this aggregation procedure was open and entirely explorative. For assessment objects, our analysis was theory-driven, and we matched identified content with the categories of goals, resources and usage intensity derived from ViU research.

## **Findings**

The analysis of our data from 13 participants yielded 27 ViU narratives, a total number of 179 single episodes and 159 movements between those episodes. On the paradigmatic dimension we aggregated all episodes into eight distinct stages as typical for language learning applications. Further, we identified 14 reoccurring movements between those stages. And finally, we were able to categorize five more fine grained assessment objects.

For reasons of presentation clarity, we start with our findings about objects of assessment. According to our data, the goals category consists of two sub-dimensions, i.e., prioritization and aspiration. Consumers typically pursue several goals simultaneously. Thus, a prioritization takes place determining how actively a goal is pursued. Goal aspiration encompasses a consumer’s desired level of goal achievement. For the language learning application adaptations of this level can entail reducing, increasing or eliminating language learning aspirations. Any goal adaptation comes along with an adaption of perceived ViU. Assessments regarding resources pertain to resource suitability and resource selection. Study participants, for example, indicated a reassessment of the learning application suitability as hinging on the learning progress also implicating variations in ViU perceptions. Consequently, consumers may also reassess their selection of resources, i.e., they may switch between language learning platforms from different providers during the use process. Our data supports the viability of usage intensity as an object of assessment. As we found, users of language learning applications vary the usage intensity and take this as an explanation for a variance in ViU perception. Our data does not provide any indication for additional sub-dimensions of this category.

Next, we present our findings on stages and movements as components of the use process. Figure 1 graphically illustrates the overall use process of the language learning application by depicting the different stages and the most typical movements between them. In addition, figure 1 also indicates specific assessments as typical for each of the stages.

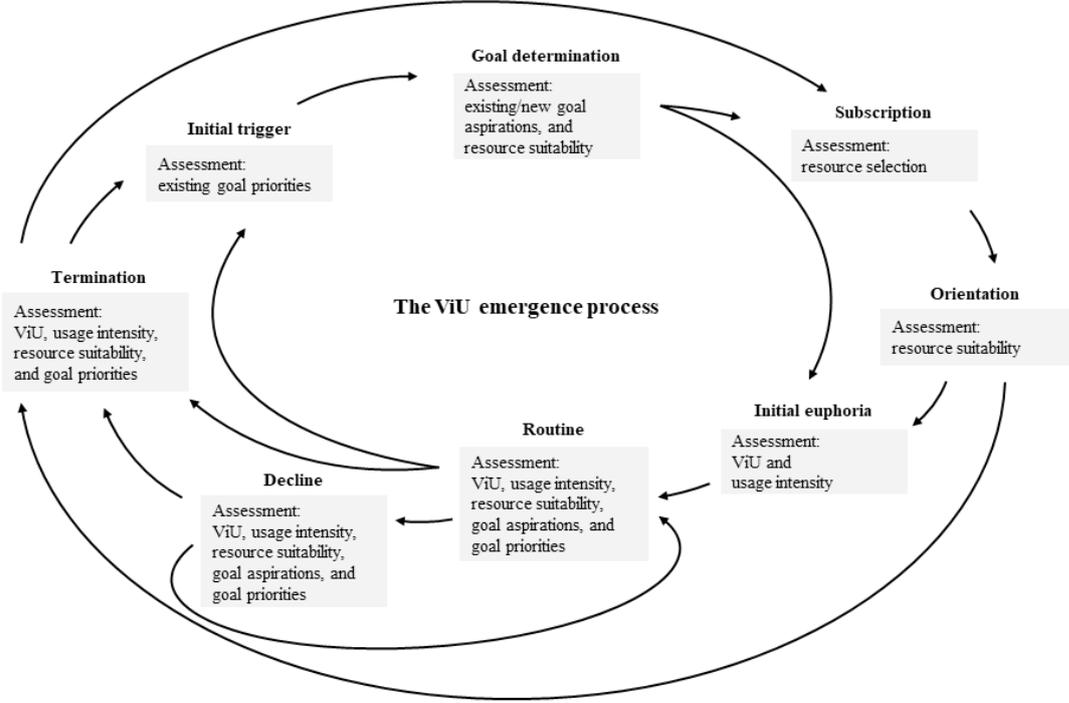


Figure 1: The Value-in-Use emergence process

As Figure 1 illustrates, some movements are deterministic in that sense that a given stage always precedes one specific next stage only, e.g., between initial trigger and goal determination. In those cases, assessments primarily determine the timing for the movement, i.e., when the transition from one stage to a next stage should be undertaken. In contrast to that, other stages are not fully predetermined regarding the movement to another stage. Goal determination, for example, may find a continuation with subscribing to and officially registering for the e-service. This is relevant if such a registration has not taken place before, put differently: if the language learning platform is not yet available to the user as a resource. If this registration, however, had already been made previously e.g., as related to a previous learning project, the user may assess the learning platform as an available and, possibly, a suitable resource. Consequently, assessments at the goal determination stage, assessment is not only critical for timing but also for choosing between two possible and alternative next stages.

### **Contributions and limitations**

With this study, we contribute to the body of literature in several ways. In this sense, we looked at ViU through the lens of self-regulatory theory with its dimensions of locomotion and assessment. Drawing on that, we identified eight distinct stages users of e-services typically walk through. We could also show and depict a system of movements and crossroads through a parkour of use stages. At each stage, users assess goals, resources, and usage to make decisions how they will move on between the stages. All of this offers a more dynamic view on ViU emergence. By doing so, we extend existing ViU research which has so far examined ViU on basis of service quality dimensions (Macdonald et al., 2016). Our study proposes a different origin for e-service ViU, i.e., locomotion and assessment. Further, we identify an emergent component to ViU and, thereby, support a shift in terminology toward the term “ViU emergence” (Heinonen & Strandvik, 2009) and away from “ViU creation” (S. L. Vargo & Lusch, 2004). With this contribution, we also answer the call by Brodie and Löbner (2018) for more midrange theory that bridges ViU research with empirical evidence.

Our findings propose a shift in managerial thinking from consumer experience thinking toward consumer ViU emergence thinking. Instead of focusing on how consumers can be engaged in co-creating activities with the firm, service providers should focus on becoming involved in users’ lives (Heinonen et al., 2010).

Unfortunately, we had to limit ourselves to a single case study. We acknowledge the possibility that generalization may need to be investigated—for instance, on the basis of future research examining other usage processes in various service and product contexts. In addition, our investigation focused on the ViU emergence process from a user perspective. For future studies, it is worth considering how ViU emerges from a provider perspective and how user and provider perspectives can be contrasted.

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