

# Value co-creation: Conceptualization, theory of nested states, measurement, and implications

## ABSTRACT

Over the last 13 years, value co-creation (VCC) has attracted the attention of researchers and practitioners alike. The heretofore open questions in this domain motivate this thesis to contribute to the theory and practice of VCC. Drawing from an extensive review of the last 13 years of research in co-creation and service-dominant logic (SDL), the first chapter derives a conceptual model of VCC that explicates its nomological network. Using this as a foundation, the second chapter develops a theoretical model of evolution of VCC. Subsequently, in the third chapter I develop, validate, and assess the predictive relevance of a measurement index for the degree of VCC, and in the fourth chapter I empirically investigate the strength and valence of its key antecedents and consequences.

### Conceptual domain of value co-creation

In this study I synthesize the fragmented literature to improve the extant understanding of VCC. I systematically content-analyzed 173 research papers drawn for the period 2000-2013. Information around VCC was retrieved, catalogued, and classified along different constructs, formulated into interrelationships, and reaffirmed in an interpretive manner. The first-level of inter-relationship parse the findings as, (i) antecedents of VCC, (ii) description of VCC, (iii) consequences of VCC, (iv) moderators of the drivers, and (v) moderators of the consequences of VCC.

Further, the antecedents are identified as, actor-based factors (e.g., traits, motivation, orientation, and capabilities); and, system-based factors (e.g., interdependence, communal usage, internalization, and bricolage). The two underlying dimensions, namely, co-production and value in-use, constitute the broad definition of VCC. The outcomes of VCC are conceptualized as, actor level and system level consequences. Key moderators of the antecedent-VCC link and the consequence-VCC link form the contrivance of these relationships. Discussion and suggestions for future research ensue from problematization and extension of these classifications and relationships. I contribute to extant research through provision of a model that summarizes earlier studies in the area; simultaneously informing the underlying mechanism of the SDL in specific.

### The nested states of value co-creation

This chapter underscores that VCC is not a monolithic state, instead a collection of states that can coexist in an economy. Using an amalgamation of value-chain (of a firm) and delivery-of-value (by the firm to the consumer), this chapter offers additional theoretical support and clarity into the two dimensions of VCC. I seek to answer the specific questions of: What are the different states of VCC?

(How) do those states transform? What are the important moderators of these states?

I propose four generic states of VCC, namely, Exchange ( $E_x$ ), Services ( $S_e$ ), Collectives ( $C_o$ ), and 'Cocreation' ( $C_c$ ). The term 'co-creation' here is a notional term that indicates the highest level of cocreation. The four states are theorized along the combination of two levels of the dimension of value in-use (use  $\leftrightarrow$  co-use) and production (produce  $\leftrightarrow$  co-produce). Subsequently, I propose five progressions of VCC along a pair of these states, namely, ( $E_x$ )change  $\rightarrow$  ( $S_e$ )rvice, ( $E_x$ )change  $\rightarrow$  ( $C_o$ )llectives, ( $E_x$ )change  $\rightarrow$  ( $C_c$ ) Co-creation, ( $S_e$ )rvice  $\rightarrow$  ( $C_c$ )Co-creation, ( $C_o$ )llectives  $\rightarrow$  ( $C_c$ )Co-creation. Each of these transitions is further examined for the effect of four moderators, namely, number of actors, governance mechanism, technology, and involvement of the actors in the VCC process. This study provides an alternate ontology to the existing understanding of VCC that considers it as an ultimate state in itself.

### Measurement of value co-creation

Using qualitative and quantitative data, I empirically show that VCC is composed of two dimensions that include co-production and value-in-use. Each dimension is composed of three distinct facets. Using two independent samples, I build and validate a formative measurement index of VCC, and 3 demonstrate its connection with customer satisfaction. I advance the theoretical model of VCC into empirically testable, conceptually driven constructs and items.

The empirical portion of this study includes an exploratory study where I factor, scale, purify and deduplicate measures derived from the theoretical review and conceptual model development. Using a sample composed of 228 MBA students, a hybrid qualitative and quantitative processes, and Partial Least Squares analyses of path coefficients, I establish a 23-measure index for VCC. The dimension of co-production comprises ideas and knowledge sharing (4 measures), equity (4 measures), and interaction (4 measures). The dimension of value-in-use is constituted by experience (3 measures), personalization (4 measures), and relationship (4 measures). I then subject the measurement index to a validation test using a completely new and independent sample, composed of 230 consumers from diverse geographies. Analyses of the responses to the online survey instrument offered validation to the items and constructs in the index, and showed a significant relationship of VCC with a theoretically driven dependent variable of consumer satisfaction. This chapter makes two key contributions to the empirical research related to co-creation. It opens new ground for quantitative studies related to VCC; and, illustrates the predictive validity of the measurement index in an investigation of consumer satisfaction.

### **Empirical test of antecedents and consequences of value co-creation**

I test for the effect of the key antecedents and outcomes of VCC. Hypotheses about the antecedents and outcomes are developed using service-logic and theoretical perspectives from personal and social psychology, and are tested using four experiments. The specific effects of actor level characteristics (extraversion, perspective taking, prosocial orientation, and involvement); and, system characteristic (situational complexity) are examined. Further, the outcome of VCC on actor's satisfaction, sharing of value, and the attribution of outcomes was also examined.

Four studies conducted across different products and services stimulate co-creation through the use of scenarios, role-plays, and actual co-creation exercises. Study 1 uses co-creation scenarios of four products and finds support for the central prediction of a positive relationship between VCC and sharing (goal-oriented sharing of price, and price-promotion demands). Extending this study, Study 2 reaffirms the findings and illustrates the effect of VCC on general tendency-to-share under the mediation of the consumer's willingness-to-participate in co-creation. Study 3, conducted in the services context, enhances the generalizability of the findings and examines the specific outcomes of VCC using stimulus of role-play. Study 4 expands the boundary conditions by evaluating the implications of VCC on sharing under the additional effect of situational complexity. This chapter provides the much called for empirical evidence in support of the service logic. Perspective-taking and prosocial orientation emerge as consistent and strong drivers of VCC; whereas mixed outcomes on extraversion and involvement offer new grounds for further scholarly investigation. I illustrate that VCC instills sharing (rather than appropriation of value).