**RECUPERANDO LA CADENA DE VALOR MEDIANTE LA CUSTOMERIZACIÓN Y LA VINCULACIÓN DE SERVICIOS**

|  |
| --- |
| Oscar F. Bustinza-Sánchez1, Glenn Parry2, Ferran Vendrell-Herrero3 y Vasileios Myrthianos4  1Universidad de Granada / Aston Centre for Servitization Research and Practice. Tfno. +34 958 241000. [oscarfb@ugr.es](mailto:oscarfb@ugr.es)  2University of the West of England, Strategy and Operations Management Department, Bristol Business School  3University of Birmingham, Managerial Economics Department, Birmingham Business School  4Universitat Politecnica de Catalunya, [Organització d'Empreses](http://directori.upc.edu/directori/dadesUE.jsp?id=732) |
| Received: 26/feb/2015 - Accepted: 4/jun/2015 - DOI: <http://dx.doi.org/10.6036/MN7570> |

***RECOVERING REVENUE THROUGH CUSTOMERIZATION AND SERVICE CHANNEL LINKING***

|  |  |
| --- | --- |
| ABSTRACT:  This article aims to contribute to understanding on how to recover value chain and firm revenues through innovative service channel linking and value co-creation. The work examines how creative industry firms integrate customers as they add digital services by assessing different methods of purchasing. The results emphasize the importance of managing customers according to their attitudes and confirm the hypothesis that link channels have a mediating role in value co-creation. The findings indicate that strategies which facilitate the dynamic interaction of customers in the link channels are more effective at generating revenue growth than traditional ‘push’ strategies based upon analysis of passive customer demand.  Keywords: Value chain, service dominant logic, customerization, channel linking, performance. | **RESUMEN:**  Este artículo tiene como objetivo analizar la forma de recuperar la cadena de valor mediante servicios innovadores y co-creación de valor. El trabajo examina cómo las empresas de las industrias creativas reconfiguran su cadena de suministro a través del entendimiento de las actitudes de compra de los consumidores finales, confirmando su importancia en la generación de valor conjunto. Los resultados indican que las estrategias que facilitan la interacción dinámica de los clientes en la creación de valor son más eficaces para generar ingresos que las estrategias tradicionales de "empuje" basadas en un análisis de la demanda que considera a sus clientes de forma pasiva.  **Palabras clave**: Cadena de valor, lógica dominante de servicios, customerización, vinculación de canal, rendimiento. |

1.- INTRODUCTION

Changes have occurred downstream in the value chain as value generation has been focussed upon adding services to existing product offerings [1] [2]. In a global survey in 2010, two thirds of senior executives claimed that their companies were redefining or willing to redefine their customer value strategies and one third of them identified the relevance of providing complementary services that support the product during its lifetime [3]. Firms offering product and services have changed the competitive landscape through a process of refocusing specialized resources to support their product in service [4]. This changes the patterns of value realization away from a goods-centric focus where value is realised in exchange, towards a service value orientation [5]. Within this approach the customers both contribute their resources and become an essential resource themselves, integrated in the value creation process, and their role and experience form the basis for value co-creation. Individual interactions enabling customers to co-create value with firms are becoming new sources of competitive advantage [6] [7] [8]. The engagement strategy of value co-creation with customer by dynamic interaction through services is named customerization [9], recognised as essential when integrating customers in novel value propositions [10]. Realizing value through co-creation with customers as partners requires an understanding of the role of link channels, which are the points of interaction between customers and the firms’ front office where co-created value is experienced and most visible [11].

Value is generated through a network of organisations, linked upstream and downstream in activities and processes, to deliver products and services [12]. But customer integration is still in need of understanding as they are becoming a source of operant resources, described as those resources which provide the ability to cause desired change i.e. knowledge and skills, under Service Dominant Logic (SDL) [5]. Through channel linking firms are able to engage them in the process of value generation, being these channels an essential tool to better manage markets where both services and products are part of the firm portfolio [11]. Nevertheless, firms offering product and service are realizing that value is generated in a different way, being scarce the number of traditional product-oriented organizations showing strong service strategies [13]. This is explained because these companies show a misunderstanding of how value is generated in product-service offerings [2]. In the process to become product-service providers, firms can find different traps –physical, psychological, and strategic trap– that have been struggling some of the world's top companies [14].

This paper attempts to shed light about the inclusion of service offerings in traditional product providers in the context of the music industry. By 2010, the inclusion of digital services to the traditional CD products made that this industry was involved in physical [15], psychological [2], and strategic traps [11], suffering severe decreases in performance [16]. Through the analysis of service inclusion in this industry, the current research covers two relevant gaps in the service value chain literature: first, an analysis of the use of a resource orientated strategy to recover value chain performance is undertaken; second, to better understand how value propositions are developed in customer centric models [17] through an analysis of channel linking where customers are willing to take part in value generation [11]. This evidence will enrich the underdeveloped stream of literature focusing upon downstream value chain management and channel linking where consumers are engaged in value co creation.

The novel research presented here has specific relevance for the creative industries as analysis utilises data from the music industry, considered a key sector in the study of the concepts of innovation, servitization and value co-creation [2], and the effect of supply and demand chain management approaches on the value chain [11]. Graham et al. [18] foresaw a decline in the dominance of the major companies in the market as intangible music sold as a download bypasses the industry’s established tangible product supply chain. Numerous firms find themselves losing control over markets where they previously held dominance. Now distanced from the customer base, and some firms even displaced completely from the value chain, the appearance of services or servitization [2] has affected revenues and profits. In this work, quantitative analysis provides explanations and validation for the major music companies’ focus upon music based digital services, which attempt to more deeply engage customers.

The paper is structured as follows. First, a presentation of the theoretical background leads to the statement of hypotheses and a model plot, which establishes customer attitudes, the methods consumers use when discovering new music and the role link channels play. Second, empirical analysis draws upon a sample of 4,227 valid responses from a questionnaire. Results and discussion lead into the conclusions, which provide the main findings, implications, limitations and opportunities for future research.

2.- VALUE CHAIN AND VALUE CREATION THROUGH CHANNEL LINKING

A value chain orientation implies that organizations move beyond competing with short-term propositions and look for upstream-downstream co-operative partnerships that establish long term networks of suppliers and customers [19]. These networks of inter-organizational relationships represent an intermediary or hybrid solution between fully integrated functional organizations and the open market. Whilst this model is primarily in use for materials flows, the construct also applies to the tangible and intangible product/service value network [11]. The underlying business objective is to achieve operational synergy between the different partners. The model focuses attention on the operating core and integration is realized in the materials/services flow. This operating core is a site of co-production and represents a centre of value co-creation [6].

Value chain positioning can be reinforced by two factors: the strategic orientation, and the innovation in channel integration [20]. SDL proposes that innovation in channel linking is required in order to structure value propositions according to customer centric models [17]. Customer centric models involve customers as co-creators of value, an important strategy in obtaining competitive advantage [10]. Firm competence has to be centred on the interaction with customers in order for both parties to realise value in the relationship [6]. In this context, providing the most value for each individual customer through a continuous configuration of the value chain is a source of competitive advantage [11].

Lin et al. [20] establishes the drivers of innovation in channel linking, identifying value co-creation, embedding operant resources, resource integration and value constellations. The conceptualization of value presented is grounded in SDL [5] which proposes that value-in-use (the customers use of the offering in context) instead of value in-exchange (the point at which the customer takes ownership or accesses the offering) is the point of realisation of value and hence value creation. As value is created by the user, with the offer of the provider, value is always co-created [7]. In the context where customer is central to the realisation of value, action-oriented information about the customer is essential in order for managers to better configure the available resources for efficient co-creation of value [21]. Thus, under a SDL, the challenge is to develop competitive value propositions and configure the resource constellation necessary for value co-creation via innovation in the channels which link resources together.

Traditionally value discussion is centred upon the exchanges, where the value of goods or services is realized at the point of exchange, usually for money. In this traditional construct, consumers are viewed as passive and receive something of value. Within the concept of co-creation of value, the customer takes up an active role, as value is realized in use when the consumer integrates the offering into their system [21]. In order to effect a paradigm change from value exchanges to value co-creation the traditional industry view of the passive customer needs to be revisited as co-creation requires open communications between customers and producers [22]. Further, customers become important resources in the provider firms system, as they are active participants in the value co-creation process.

Under previous industry models, the customer was regarded as a passive purchaser [2]; an operand resource to which product was sold through push methods [5]. Service offerings provision was traditionally built on the same goods provision and push manufacturing-based marketing models [23], evolving through the SDL to a new co-creation framework were customer need to be properly engaged [2]. Through channel linking, firms develop key co-creation processes to transform skills and knowledge into unique competitive advantages [10], and service stimulates interactivity and enables value co-creation [23]. Through a change in business perspective [22] as well as exploitation of technological capability, customers become operant resources and value co-creators [5]. Thus, service may be defined as a systemic configuration of the product where the interactions between operant resources are coordinated strategically, generating value co-creation opportunities.

3.- CUSTOMER ENGAGEMENT AND VALUE CO-CREATION

SDL analyse resources as drivers of sustainable competitive advantage through the appropriate management of operant resources [17]. Operant resources are dynamic resources that are grounded in the knowledge and skills that form the foundations for the co-creation of value [5]. Focussing upon innovation in link channels to support co-creation improves the integration of customers, providing differentiation and generating competitive advantage. To integrate and involve customers in the value creation process is essential [10], forming the engagement strategy of value co-creation with customers, which is defined as customerization [9]. As Vargo and Lusch [23] state, customerization is a shift in the quality standards from manufacturing to consumer specifications; that is, to service or perceived quality. Customerization focuses on the firm’s desire to redefine its relationships with customers [8]. Then, the value chain needs to be appropriate managed [21], taking a customer orientation where focus is placed upon understanding the customer’s perception of quality, and requiring maxim provider/customer interaction [24].

From a value chain management perspective, the alignment between firms’ priorities and capabilities and the resources and competencies available in the value chain is a crucial enabler for competitive positioning [19]. The effective allocation of resources is a determinant of competitive advantage [26]. The combination of resources inside the value chain determines the formation of competencies and capabilities in a dynamic process, supporting competitive advantage [27]. This dynamic process can be observed in the co-creation scenario, where value is generated through the mediation of channel linking [6] [11]. A resource orientated strategy and channel linking are able to enhance value chain performance when customers engage in the value generation process, which downstream value chain should be reflected in a firm´s revenues [1]. We therefore postulate the following hypotheses (see Figure 1 for a summary of the research framework):

***H1:*** *Customer attitudes to engagement with an offering are positive and mediated by channel linking*

***H2:*** *Customer engagement is positively linked to value co-creation*

***H3:*** *Value co-creation is positively linked to firm revenues*

**CUSTOMERIZATION**

VALUE

**CO-CREATION**

CUSTOMER

**ATTITUDES**

CUSTOMER ENGAGEMENT

H2

LINK CHANNELS

H1

FIRMS

**REVENUES**

H3

Fig. 1. Proposed model

4.- MUSIC INDUSTRY ANALYSIS

An empirical investigation is undertaken to test the hypotheses for this study. The study population is made up of resident music consumers in the UK. The questionnaire, conducted in 2011, and responses are directly provided by one of the Big 3 global music companies. The reason for selecting this year’s sample is based on the fact that revenues generated by these Big 3 global music companies were considerably decreasing in 2010 [16], being service seen as an opportunity to recover them [28]. Moreover, in 2010 a fair amount of firms involved in transformation processes were struggling with the already mentioned physical, psychological, and strategic traps [14], being the music industry the perfect example. For a number of years the questionnaire had been undergoing iterative development within the company’s consumer insight and market research division. The questionnaire is extensive, it had been already used in international publications [2] [11] [16], and the researchers select a subset of questions directly relating to the attributes and characteristics of customer behaviour and link channels relevant to this study. The subset of questions was subsequently validated by industry experts for coherence, providing a total of 4,227 valid questionnaire responses. Through a four groups Cluster k-means analysis, respondents are categorized under a specific customer group. Groups are also characterized by the use of backward-linkage (BL) and forward-linkage (FL) according to how important the group purchasing is for the music industry (Band Fan, Early Adopter, Explorative Consumer, and Cautious Consumer). Data interpretation for the present analysis requires stricter criteria than were applied in previous explorative research. Validation of the dataset and findings is provided through two review presentations to industry experts via a teleconference and a physical workshop.

The music industry has seen revenues fall over the past decade and the new opportunities afforded by digital services are seen as an opportunity to return to the revenues that were previously enjoyed [28]. Engaging customers in the co-creation of value through services requires an understanding of customer attitudes towards purchasing music, co-creation of value and particularly how consumers perceive and are disposed to integrating with link channels. Previous work using this dataset identifies a positive attitude towards co-creation of value exists within approximately half of all consumers [2]. However, the reasons behind the positive attitude are not understood and this work explores how and if the channel linking may be employed to stimulate a positive attitude towards value co-creation. By studying the role of channel integration and customer attitudes to different methods of purchasing music, analysis shows if those channels act as mediators, driving consumer behaviour to customerization.

5.- RESULTS AND DISCUSSION

5.1.- ANALYSIS OF THE DATA AND RESULTS OBTAINED

This model tests the hypotheses to examine the extent to which link channels are determinants of consumer attitudes to active and passive discovery methods (Table I). To better understand customer engagement, two scales validated by Bustinza et al. [11] are used which divides linking channels into two categories: Traditional and Digital channels. Traditional channels refer to: radio DAB, music TV channels, music live at concerts, music in bars and clubs, in film, TV, video games etc. ‘Digital’ streamed music includes music played straight from the internet (Internet radio/live streaming), videos streamed online (e.g. from YouTube), social networking sites (such as Facebook, MySpace, etc.), and temporary file downloads. This classification is made considering the revenues situation of the music industry during the transition to the digital age [16]. The recording industry was rising over the last three decades of CD traditional product commercialization. A spectacular fall in revenues in the period 2000-2010 was associated to the digital age transition or servitization of offerings [29] [30]. New business models were needed [16], and internet had proved his capacity for engage customers in new digital business models where co-creation experiences can be developed [31].

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Band Fan** | **Early Adopter** | **Explorative Consumer** | **Cautious Consumer** |
| % of market with this attitude | 20 | 21 | 16 | 43 |
| Traditional link channels and Active methods | Total mediation **H1: 0.05**  Previous β=0.37\*\*\* | Total mediation **H1: 0.03**  Previous β=0.18\*\*\* | Total mediation **H1: 0.01**  Previous β=0.38 | No effect H1: -0.09\*\*\* |
| Traditional link channels and Passive methods | Partial/No effect H1: 0.18\*\*\* | Partial/No effect H1: 0.16\*\*\* | No effect H1: 0.23 | Increased H1: 0.23\*\*\* |
| Digital link channels and Active Methods | Total mediation **H1: 0.05**  Previous β=0.37\*\*\* | Total mediation **H1: 0.01**  Previous β=0.18\*\*\* | Inverse **H1: -0.11** | No effect H1: -0.09\*\*\* |
| Digital link channels and Passive Methods | No effect H1: 0.21\*\*\* | No effect H1: 0.21\*\*\* | No effect H1: 0.29 | Increased H1: 0.25\*\*\* |
| All link channels to Active methods | Total mediation **H1: 0.01**  Previous β=0.37\*\*\* | Total mediation **H1: 0.01**  Previous β=0.18\*\*\* | Inverse **H1: -0.20** | No effect H1: -0.09\*\*\* |
| All link channels to Passive methods | Partially supp. H1: 0.16  Previous β=0.35\*\*\* | No effect H1: 0.14\*\*\* | No effect H1: 0.20 | Increased H1: 0.22\*\*\* |
| H2: Customer engagement positively related to value co-creation | | Service value capture from customer willing to be active participants in value co-creation process: **H2: 0.63**\*\*\*  Service value capture from customer not willing to be active participants in value co-creation process: H2: 0.15\*\*\* | | |

Table I . Acceptance/Rejection of Hypotheses

Level of statistical significance: \*\*\* 1%, \*\* 5%, \* 10%

Note: No effect – no mediation effect; Total mediation – attitude determined by mediator; Inverse – attitude inverted by mediator; Increased – attitude reinforced by mediator.

After carrying out a Structural Equations Modelling (SEM) approach that allows to investigate several customer-purchasing method relationships simultaneously, mediation effects are estimated (Table I, mediation effects are marked in bold, with a discussion below). Then, a Multiple Regression Analysis (MRA) using stepwise selection is used to provide predictive validity. Standardized coefficients from the regressions are indicators for the relative contribution of each consumer group’s attitude to the criterion of the analysis of value co-creation (passive or active consumer). The R2 value provides a coefficient for validity of a set of predictors for passive or active music behaviour. Tables II and III present R2 values showing consumer attitudes account for 51% of the variance of passive behaviour and 39% of the variance of behaviour linked to value co-creation. Cautious consumers do not display any desire to engage in value co-creating behaviour, which supports the results from SEM analysis as well as previous work [2].

The high values of R2 which provide the explanatory capacity of the model are necessary but insufficient to demonstrate that the model is robust. Further evidence, as postulated in Hypothesis 3, is required to show that the dependent variables of the model (in this case the active or passive consumers) relate to real value generation, particularly that the construct of enhanced value co-creating behaviour links to actual increases in sales revenues. A test is required to show if consumers who have a positive attitude to value co-creation can also be effective generators of co-created value for firms. We perform split-run tests to understand the predictive validity of value co-creation to firm’s revenues. This technique was suggested by Sharma [32] to better support the stability of parameters obtained, enhancing in such a way their predictive nature.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | Model 1  Parameter β (t-value) | Model 2  Parameter β (St. D.) | Model 3  Parameter β (St. D.) | Model 4  Parameter β (St. D.) |
| Constant | 1.61 \*\*\* (37.44) | 1.00 \*\*\* (22.03) | 0.79 \*\*\* (16.83) | 0.71 \*\*\* (14.65) |
| Band Fan |  | 0.33 \*\*\* (28.71) | 0.26 \*\*\* (21.44) | 0.23 \*\*\* (16.99) |
| Early |  |  |  | 0.10 \*\*\* (6.24) |
| Explorative | 0.63 \*\*\* (58.36) | 0.47 \*\*\*(41.21) | 0.45 \*\*\* (38.92) | 0.41 \*\*\* (32.43) |
| Cautious |  |  | 0.16 \*\*\* (13.41) | 0.13 \*\*\* (10.08) |
| F | 3,405.69 \*\*\* | 2,390.02 \*\*\* | 1,709.20 \*\*\* | 1,301.14 \*\*\* |
| R2 | 0.16 | 0.30 | 0.43 | 0.51 |
| Change on R2 | - | 0.14 \*\*\* | 0.13 \*\*\* | 0.08 \*\*\* |

Table II. Multiple regression analysis of passive music consumer behaviour

Level of statistical significance: \*\*\* 1%, \*\* 5%, \* 10%

The actual behaviour of the consumers gives rise to two binary variables: Pay download music takes a value of 1 if the consumer usually purchases downloaded music legally by accessing an internet based direct sales channel such as Amazon or iTunes; otherwise, it takes a value 0. Pay download music from social networks takes a value of 1 when the consumer usually buys legal music downloads directly from social networks (e.g. MySpace or Facebook) or their decision to purchase music is as a direct result of a social network interaction, which may redirect them to a sales site; otherwise it takes a value 0. The data shows that on average 20.5% of consumers go directly to dedicated sales channels for their download music purchases. Analysis shows 4.2% of the population interacts on social networks before making an informed digital music purchase, clicking to purchase on the site, though the digital sales network may link them through to a dedicated sales channel. These variables intersect as three quarters of consumers using social networks to inform their music purchasing decisions (3.3% of the sample) also make purchases directly from dedicated sales channels. The remaining quarter of consumers (0.9% of the sample) make purchase decisions solely on social networking sites.

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Model 1  Parameter β (t-value) | Model 2  Parameter β (St. D.) | Model 3  Parameter β (St. D.) |
| Constant | 2.64 \*\*\* (57.78) | 2.09 \*\*\* (42.41) | 1.88 \*\*\* (35.84) |
| Explorative | 0.55 \*\*\* (47.33) | 0.41 \*\*\*(32.16) | 0.34 \*\*\* (23.82) |
| Early |  |  | 0.18 \*\*\* (10.76) |
| Band Fan |  | 0.30 \*\*\* (23.90) | 0.22 \*\*\* (14.79) |
| Cautious |  |  |  |
| F | 2.240.32 \*\*\* | 1,531.02 \*\*\* | 1,082.21 \*\*\* |
| R2 | 0.16 | 0.29 | 0.39 |
| Change on R2 | - | 0.13 \*\*\* | 0.10 \*\*\* |

Table III. Multiple regression analysis of active music consumer behaviour

Level of statistical significance: \*\*\* 1%, \*\* 5%, \* 10%

The correlation of the dummy variables with the value co-creation and push methods constructs (see Table IV) is positive and significant in all cases. A logistic regression in which the binary variables are the dependent variables and the constructs value co-creation and push methods are the explanatory variables (Table V) show push methods or passive consumers (0.567, p<0.01) link positively to paying for music downloads with a coefficient similar to co-creators (0.536, p<0.01). However, passive consumers link negatively (-0.290) but not significantly (p>0.10) to buying digital music through social networks. The coefficient for value co-creation is highly positive and significant (2.007, p<0.01). We can therefore accept Hypothesis 3 and state that there is a strong relationship between having a positive attitude towards the co-creation of value and being an effective co-creator of value. These correlations and coefficients strengthen the relevance of the results found in SEM analysis on Hypothesis 1 and 2 and discussed in more detail in next section.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | VARIABLES | **(1)** | **(2)** | **(3)** |
| **(1)** | Co-Creation | 1 |  |  |
| **(2)** | Passive | 0.858\*\*\* | 1 |  |
| **(3)** | Pay download music | 0.459\*\*\* | 0.399\*\*\* | 1 |
| **(4)** | Pay download music through social networks (i.e. MySpace, Facebook) | 0.484\*\*\* | 0.349\*\*\* | 0.304\*\*\* |

Table IV. Correlations dummy variables, co-creation and passive behaviour

Level of statistical significance: \*\*\* 1%, \*\* 5%, \* 10%

|  |  |  |
| --- | --- | --- |
|  | **Pay Download Music** | **Pay Download Music through social networks** |
| Co-Creation | 0.536\*\*\* | 2.007\*\*\* |
| Passive | 0.567\*\*\* | -0.290 |
| Constant | -1,336\*\*\* | -3,462\*\*\* |
| Log Likelihood | -483.731 | -197.561 |
| R2 (Cox & Snell) | 0.198 | 0.201 |

Table V. Correlations dummy variables, co-creation and passive behaviour

Level of statistical significance: \*\*\* 1%, \*\* 5%, \* 10%

5.2.- DISCUSSION OF THE RESULTS

The discussion is structured with an exploration of each consumer type by attitude.

Band Fans represent 20% of the sample market and in Model 1 (Figure 2) the analysis of these consumers shows a mediation role of traditional channels (β=0.05, non-significance, n.s.; previous β=0.37, p<0.01), of digital channels (β=0.05, n.s.), and all link channels (β=0.01, n.s.), supporting H1 and H2. This finding reflects that link channels are responsible for driving this consumer group’s attitude to value co-creation, as these consumers have a positive attitude to the co-creation of value and are keen to be involved as operant resources. Concerning the effect of link channels on push methods, a partial mediation effect is found (β=0.16, n.s.; previous β=0.35, p<0.01). Band Fans place a high value upon the resource, which is their bands music, which explains why they respond to any channel offering the music of the bands they follow.

Early Adopters constitute 21% of sample market. The results from Model 2 (Figure 2) show a total mediation role for traditional and digital link channels with regard to Early Adopters attitudes to the co-creation of value, supporting H1 and H2 (β=0.03, n.s.; previous β=0.18, p<0.01; β=0.01, n.s.; previous β=0.19, p<0.01). These findings show that those displaying the characteristics of Early Adopters have developed their attitudes to the co-creation of value due to the existence of the channel linking. The finding confirms that those who fall within this consumer group can be transformed from operand to operant resources, active consumers in the value chain [17]; co-opted and engaged in the process of value co-creation this group’s attitudes and actions can be shaped using the link channels as a catalyst. About the effect of link channels on push methods, no mediation effect is found. To sum up, for Band Fan and Early Adopter groups of consumers, customerization is feasible [9] [23].

|  |  |
| --- | --- |
| LINK CHANNELS  DISCOVERY METHODS  H1: 0.05  H1: 0.05  H1: 0.01  MODEL 1  H1: 0.16  LINK CHANNELS  DISCOVERY METHODS  H1: 0.03  H1: 0.01  H1: 0.01  MODEL 2 | LINK CHANNELS  DISCOVERY METHODS  H1: 0.01  H1: - 0.11  MODEL 3  LINK CHANNELS  DISCOVERY METHODS  H1: 0.22  MODEL 4 |

Fig. 2. Estimation of standardized coefficients (SEM analysis).

Explorative Consumers, representing 16% of market, in the results from Model 3 (Figure 2) show traditional link channels have total mediation over their attitudes to value co-creation processes, supporting H1 (β=0.01, n.s.; previous β=0.38, p<0.01). However, for digital channels alone the parameter is negative (β=-0.11, p<0.01), which shows that digital link channels invert attitudes to the co-creation of value for this group, effectively changing consumer attitudes from a positive disposition to a negative disposition towards value co-creation. The results suggest that Explorative Consumers actively dislike being inducted into the value co-creation process through digital link channels and reject structured opportunities offered to them. Concerning the effect of link channels on push methods, no mediation effect is found. This implies link channels are not important in shaping the consumers attitude when they are treated as operand [5], as would be found in traditional transactional and push sales methods where customers are treated as passive recipients.

Cautious Consumers represent the largest single grouping, representing 43% of market. The results from Model 4 (Figure 2) show that Cautious Consumers attitudes towards value co-creation do not have a link to the channels, a result that does not support H1 and H2. Cautious Consumers show no interest in co-creating value regardless of the link channel employed. A small increase seen in value related to push methods (β=0.22, p<0.01; previous β=0.18, p<0.01) may be interpreted to mean that marketing to Cautious Consumers increases their awareness and engages them in music purchases, but they remain as passive, operand consumers interested in limited numbers of transactional exchanges.

6. CONCLUSIONS AND MANAGERIAL IMPLICATIONS

Additional firm value is gained through the combined use of internal and external knowledge resources available in the value chain [12]. This extends Grants perspective of knowledge management where reactive knowledge is captured from consumers [26] to the transformation of skills and knowledge into unique competitive advantages through channel management. The active participation of the consumer supports the importance of the co-creation of value as a future determinant of success [7] [8]. Enhancing value co-creation opportunities can contribute towards firm revenues only as long as consumer attitudes are positive to these kinds of processes. The final objective is customerization [9], where channel linking is employed as a tool to facilitate value co-creation and enhance revenue. The attitudinal nature of consumers and the affect this has on engagement and value co-creation provides the main contribution of this paper. Further, firms must understand that, after categorizing consumers according to their attitudes, they have a responsibility for designing offerings, which involve groups of customers appropriately in different value co-creation processes. The results provide empirical evidence in support of customerization analysis, contributing towards an explanation of how firms may increase value captured through maximizing their interaction with consumers [9] [23].

The results are consistent with the underlying SDL and contribute quantitative evidence to explain the dynamic process of value co-creation and the role of resources. With regards strategies that firms can implement, if the linking with consumers in the value co-creation process is achieved effectively the capability to engage consumers becomes a source of competitive advantage [10]. However, not all consumers are amenable to be linked into the value chain and so to understand the role of consumers as a resource for competitive advantage requires first an understanding of the attitudes of consumers in the target market. Gaining an understanding of consumers based upon their attitudes allows a firm to make best use of their resource by targeting those groups who are amenable to greater involvement in value co-creation processes. The knowledge provided by consumers helps firm to coordinate their resources base according to best value fit for them [21]. Following categorization by attitude, firms will be able to signal or offer appropriate environments for their different customers, making more efficient resource assignment and preventing unrealistic expectations concerning the engagement of their diverse customer base [23]. Some consumers are inherently operant and therefore offer this capability in a value co-creation scenario, actively seeking involvement and contributing their resource [7]. Other consumers remain stubbornly operand minded in all environments, desiring engagement only through transactional exchange and limiting any attempts at further resource integration.

With regards implications for practice, a significant proportion of senior executives in multinationals are redefining or willing to redefine their customer value process [3]. The evidence presented in this paper suggests that managers in the creative industries may reconsider their approaches to customer engagement through both traditional and digital link channel. The results show that 57% of the consumers demonstrate a positive attitude towards greater engagement in the value co-creation process managed by firms, Business-to-Consumer B2C context, when they are faced with traditional link channels. This percentage decreases to 41% when the consumer groups are presented with opportunities to interact via digital link channels. Regarding the mediation effects, our analysis shows that consumer attitudes to value co-creation are not attitudes as such, but are instead due to the action of the link channels [11]. This means that value co-creation is driven by link channels and the channels ability affords consumers the opportunity to engage, converting them from operand to operant resource.

The creative industries have a valuable resource (content) which the developing integration oriented service providers can exploit. The results support a strategy where property rights holders provide access to their resources to all wishing to access content via the digital channels. Partnering with all link channels providers to maximize the opportunity for value co-creation assumes that the value of services is sharply related to the problem-solving process to engage customers [6]. That could be an effective way to recover valuable customer contact and revenues. Controlling the content of the link channels redounds on sustainable advantage [26]. A consumer, in becoming an operant resource as part of the value co-creation process, is an important resource for firms to manage [22]. Future research should clarify the role of specific link channel features as determinants of consumer attitude to product or service and further seek to explain if those specific channel features are able to drive consumers towards purchasing service offerings. Additionally, firm´s revenues are proxied through a binary measure of propensity to purchase and future research should seek to include data of real monetary expenditure. Despite the limitations, the study provides strong evidence that latent consumer attitudes provide valuable insight for downstream supply chain design and strategy formulation.

ACKNOWLEDMENT

Oscar F. Bustinza and Ferran Vendrell-Herrero acknowledge financial support from ECO2014-58472-R, and the former also to P11-SEJ-7294.

BIBLIOGRAPHY

[1] Wise R, Baumgartner P. “Go downstream: the new profit imperative in manufacturing”. Harvard Business Review 1999. Vol. 77-5. p. 133–141. DOI: http://dx.doi.org/10.1225/99512.

[2] Parry G, Bustinza O, Vendrell-Herrero F. "Servitisation and value co-production in the UK music industry — An empirical study of consumer attitudes". International Journal of Production Economics 2012. Vol. 135-1. p. 320–332. [DOI: http://dx.doi.org/10.1016/j.ijpe.2011.08.006](DOI:%20http://dx.doi.org/10.1016/j.ijpe.2011.08.006)

[3] Economist Intelligence Unit. "Redefining customer value: Corporate strategies for the social web". Retrieved November 15, 2012, from:

<http://www.managementthinking.eiu.com/sites/default/files/downloads/SAS_CustomerValue_FINAL.pdf>.

[4] Jaria-Chacon N, Arias-Aranda D. “Servitization y creacion de valor — Implementacion en plataformas de dispositivos moviles”. DYNA Ingenieria e Industria 2014. Vol. 89-5. p. 482. DOI: http://dx.doi.org/[10.6036/7090](http://dx.doi.org/10.6036/7090)

[5] Vargo SL, Lusch RF. "Evolving to a new dominant logic for marketing". Journal of Marketing 2004a. Vol. 68-1. p. 1–17. [DOI: http://dx.doi.org/10.1509/jmkg.68.1.1.24036](http://dx.doi.org/10.1509/jmkg.68.1.1.24036)

6] Prahalad CK, Ramaswamy V. “Co-creation experiences — The next practice in value creation”. Journal of Interactive Marketing 2004. Vol. 18-3. p. 5–14. DOI: http://dx.doi.org/10.1002/dir.20015

[7] Vargo SL, Maglio PP, Akaka MA. "On value and value co-creation — A service systems and service logic perspective". European Management Journal 2008. Vol. 26-3. p. 145–152. DOI: http://dx.doi.org/[10.1016/j.emj.2008.04.003](http://dx.doi.org/10.1016/j.emj.2008.04.003)

[8] Azkune-Galparsoro G, Almeida-Escondrillas A, Lopez De Ipiña-Gonzalez De Artaza D, Chen, L. “Human activity modelling”. DYNA New Technologies 2014. Vol. 1-1. DOI: http://dx.doi.org/10.6036/NT7476

[9] Wind J, Rangaswamy A. "Customerization — The next revolution in mass customization". Journal of Interactive Marketing 2001. Vol. 15-1. p. 13–32. DOI: http://dx.doi.org/[10.1002/1520-6653(200124)15:1<13::AID-DIR1001>3.0.CO;2-#](http://dx.doi.org/10.1002/1520-6653%28200124%2915:1%3C13::AID-DIR1001%3E3.0.CO;2-)

[10] Zhang X, Chen R. "Examining the mechanism of the value co-creation with customers". International Journal of Production Economics 2008. Vol. 116-2. p. 242–250. DOI: http://dx.doi.org/[10.1016/j.ijpe.2008.09.004](http://dx.doi.org/10.1016/j.ijpe.2008.09.004)

[11] Bustinza OF, Parry G, Vendrell-Herrero F. "Supply and demand chain management — The effect of adding services to product offerings". Supply Chain Management: An International Journal 2013. Vol. 18-6. p. 618–629. DOI: http://dx.doi.org/[10.1108/SCM-05-2013-0149](http://dx.doi.org/10.1108/SCM-05-2013-0149)

[12] Kaufman A, Wood CH, Theyel G. “Collaboration and technology linkages — A strategic supplier typology”. Strategic Management Journal 2000. Vol. 21-6. p. 649–663. DOI: http://dx.doi.org/10.1002/(SICI)1097-0266(200006)21:6<649::AID-SMJ108>3.0.CO;2-U

[13] Oliva R, Kallenberg R. “Managing the transition from products to services”. International Journal of Service Industry Management 2003. Vol. 14-2. p. 160–172. DOI: http://dx.doi.org/10.1108/09564230310474138

[14] Govindarajan V, Trimble C. “The other side of innovation — Solving the execution challenge”. Cambridge, MA.: Harvard Business School Press. 2010. ISBN: 978-1422166963

[15] Byrne D. “How music works”. Edinburgh: Canongate Books. 2012. ISBN: 978-1938073533

[16] Bustinza OF, Vendrell-Herrero F, Parry G, Myrthianos V. “Music business models and piracy”. Industrial Management & Data Systems 2013. Vol. 113-1. p. 4–22. DOI: http://dx.doi.org/10.1108/02635571311289638

[17] Arnould EJ. "Service-dominant logic and resource theory". Journal of the Academy of Marketing Science 2008. Vol. 36-1. p. 21–24. DOI: http://dx.doi.org/10.1007/s11747-007-0072-y

[18] Graham G, Burnes B, Lewis GJ, et al. "The transformation of the music industry supply chain: A major label perspective". International Journal of Operations & Production Management 2004. Vol. 24-11/12. p. 1087–1199. DOI: http://dx.doi.org/[10.1108/01443570410563241](http://dx.doi.org/10.1108/01443570410563241)

[19] Choi TY, Kim Y. "Structural embeddedness and supplier management: A network perspective". Journal of Supply Chain Management 2008. Vol. 44-4. p. 5–13. DOI: http://dx.doi.org/10.1111/j.1745-493X.2008.00069.x

[20] Lin Y, Wang Y, Yu C. "Investigating the drivers of the innovation in channel integration and supply chain performance — A strategy orientated perspective". International Journal of Production Economics 2010. Vol. 127-2. p. 320–332. DOI: http://dx.doi.org/[10.1016/j.ijpe.2009.08.009](http://dx.doi.org/10.1016/j.ijpe.2009.08.009)

[21] Lusch RF. “Reframing supply chain management: A service-dominant logic”. Journal of Supply chain Management 2011. Vol. 47-1. p. 14–18. DOI: http://dx.doi.org/10.1111/j.1745-493X.2010.03211.x

[22] Prahalad CK. "Co-opting customer competence". Harvard Business Review 2000. Vol. 78-1. p. 79–90.

[23] Vargo SL, Lusch RF. "The four service marketing myths remnants of a goods-based, manufacturing model" Journal of Service Research 2004b. Vol. 6-4. p. 324–335. DOI: http://dx.doi.org/10.1177/1094670503262946

[24] Ulwick AW, Bettencourt LA. "Giving customers a fair hearing". MIT Sloan Management Review 2008. Vol. 49-3. p. 62–76. DOI: 10.1225/SMR280

[25] Pine, Joseph B. “Mass customization — The new frontier in business competition". Cambridge, MA.: Harvard Business School Press. ISBN: 9780875849461

[26] Grant RM. "Prospering in dynamically-competitive environments — Organizational capability as knowledge integration". Organization Science 1996. Vol. 7-4. p. 375–387. DOI: http://dx.doi.org/[10.1287/orsc.7.4.375](http://dx.doi.org/10.1287/orsc.7.4.375)

[27] Barrales-Molina V, Bustinza OF, Gutierrez-Gutierrez L. "[Explaining the causes and effects of dynamic capabilities generation — A multiple indicator multiple cause modelling approach](http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8551.2012.00829.x/full)". British Journal of Management 2013. Vol. 24-4. p. 571–591. DOI: http://dx.doi.org/10.1111/j.1467-8551.2012.00829.x

[28] BPI. "BPI Statistical Handbook 2010". London: BPI. 2010. ISBN: 9780906154311

[29] Knopper S. “Appetite for self-destruction —The spectacular crash of the record industry in the digital age. London: Simon and Schuster. 2009. ISBN: 9781847371362

[29] Myrthianos V, Vendrell-Herrero F, Parry G, Bustinza OF. Firm profitability during the servitization process in the music industry. Strategic Change 2014. Vol. 23-5-6. p. 317–328. DOI: http://dx.doi.org/10.1002/jsc.1979

[30] Wirtz BW, Schilke O, Ullrich S. “Strategic development of business models: implications of the Web 2.0 for creating value on the internet”. Long Range Planning 2010. Vol. 43-2. p. 272–290. DOI: http://dx.doi.org/10.1007/s12525-015-0186-x

[31] Sharma S. “Applied multivariate techniques”. New York: John Wiley. 1996. ISBN: 9780471310648