A value proposition oriented typology of electronic marketplaces for B2B SaaS applications

Full Paper

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Introduction

With the increasing dissemination and acceptance of Cloud Computing and Software-as-a-Service (SaaS) a variety of opportunities as well as challenges and threats arise (Marston et al. 2011). In particular, in order to increase market transparency specific aggregation and brokerage functionalities need to be addressed (Marston et al. 2011; Ried 2011). In practice, several companies have begun to tackle these challenges by developing electronic marketplaces (EMs) as successfully seen in several other industries. Prominent examples of such marketplaces for B2B SaaS services are driven and operated by companies like Deutsche Telekom, Oracle or Salesforce. Besides the potential of defragmenting the SaaS market and reaching SME companies, EMs may offer further beneficial capabilities such as process integration or collaboration among others (Soh et al. 2006; Standing et al. 2010; Weill and Vitale 2001). Furthermore, in the context of development platforms (PaaS) researchers believe that EMs will become an essential selling channel (Giessmann and Stanoevska-Slabeva 2012). Anecdotal evidence suggests that such offerings for B2B SaaS applications already exist on the market. In the context of this study, we distinguish between an EM and a platform ecosystem as two separable concepts. Though, the EM can either be a standalone marketplace or in some instances can be considered the selling channel as a part of the platform ecosystem. The concept of development platforms and sales marketplaces are quite popular in the mobile applications segment for consumers, e.g. Apples App Store (see e.g. Basole and Karla 2011). We would like to complement this perspective by focusing on business applications (B2B).

To prevent a dramatic emergence of EMs and later radical consolidation similar to the dotcom boom and the resulting waste of valuable resources, the business model and respective design choices need to be understood, especially for the still premature SaaS market. The specifics of the overall business model 'electronic marketplace' may vary substantially or capture value of the accumulated value chain and are influenced by a number of factors (such as ownership), see e.g. (Standing et al. 2006). Kambil et al. framed the notion of all-in-one markets hypothesizing that EMs need to offer both, aggregation and collaboration functionalities (Kambil et al. 1999). Particularly, the value proposition and its influencing factors of a B2B SaaS EM need to be well understood from a research and practice perspective.

To date, many researchers have explored benefits, functionalities and value propositions of EMs and partially platforms in general. To the best of our knowledge, these concepts have not been applied within the B2B SaaS industry segment. With our research, we aim to set a basis for analyzing the competitive landscape of these EMs. We set the focus on value propositions as we would expect this to be a key differentiator. For this field of interest we formulate the following research questions:

Which types of electronic marketplaces for B2B SaaS application exist and how can they be described?

We first review related literature in the area of electronic marketplaces as well as software and platform ecosystems with a special focus on business models and value propositions. Second, we explain our research approach, which builds on explorative case study research using publically available data to build a typology as a result of the cross-case analysis. Third, we present the results in terms of a market summary and suggest a 5-step-typology to distinguish B2B SaaS EMs. Subsequently the findings are interpreted and discussed in terms of future research potential and practical implications. Finally, we conclude by summarizing our contribution, outlining limitations and pointing to further research possibilities.

Related Literature

Related Work

The topic of electronic marketplaces (e-marketplaces or EMs) has been studied extensively within the last decades underlining its importance in research and practice (Alt and Klein 2011). An EM can be defined as an inter-organizational information system which enables buyers and sellers in a certain market to exchange information about prices and product offerings, also supporting the identification of potential trading partners and execution of transactions (Standing et al. 2010). With regards to EMs in general, classification frameworks or taxonomies have been developed (see e.g. Cho 2001; Grieger 2003; Kaplan and Sawhney 2000; Matook and Vessey 2008; Wang and Archer 2007; Weill and Vitale 2001). Various impact factors have been studied and used as differentiating factors, such as transaction mode (Chang et al. 2003), ownership (Wang and Archer 2007) or value proposition (Le 2002, 2005). Value propositions have been studied as roles or functions (Bakos 1997, 1998; Giaglis et al. 2002; Malone et al. 1987; Petersen et al. 2007). Scholars have also tried to describe and analyze these in the light of strategy theory (see e.g. Brunn et al. 2002; Soh and Markus 2002). Le (2002) builds on various value elements from these sources, aggregates them into two dimensions and proposes success mechanisms for marketplaces differentiating between ownership structures. Le (2005) extends these thoughts by adding further aspects (such as transaction content, structure and governance) and dimensions of a business model (e.g. revenue streams). Lenz et al. (2002) studied 49 EMs regarding partnering with specialized service providers to offer these services. Recent practical developments point towards further partnership aspirations, in particular value chain integration in a platform based business model.

The idea of platforms in the IT business has been highlighted with the advent of Cloud Computing and SaaS by Cusumano (2010a, 2010b). Since then, scholars have done research in various areas whereas the majority has dealt with platform governance and control (e.g. Ghazawneh and Henfridsson 2013; Wareham et al. 2014). By definition a platform also consists of an ecosystem with contributing complementors (i.e. software developers) which use the platform to develop innovative solutions (Tiwana et al. 2010). Scholars also shed light on the incentives and outcomes of complementors that join ecosystems (Ceccagnoli et al. 2012; Giessmann and Stanoevska 2012; Rickmann et al. 2014). In a recent study by Giessmann & Stanoevska-Slabeva (2012), a 3-step typology for differentiating business models of PaaS solutions was developed. Furthermore they predict that development focused PaaS solutions will complement with marketplace functionality. Other scholars did research on the marketplace aspects of the platforms (Burkard et al. 2011, 2012; Menychtas and Gomez 2012) testing the concepts of ecosystem health or characterizing them through supported transaction phases. From our perspective, an EM can either be a standalone marketplace or in some instances can be considered the selling channel as a part of the platform ecosystem. Hence, the EM would be part of the platform and serves the purpose of connecting buyers and sellers as well as potentially supporting resulting transactions. Thereby, the EM extends the scope of the platform but would also likely impact governance considerations. Therefore, we argue that one cannot analyze one without the other.

The term value proposition stems from the area of business model research (see e.g. Al-Debei and Avison 2010; Osterwalder et al. 2005). In a generic view, a business model is an abstract pattern of a business, but researchers still argue about concrete interpretations (Zott et al. 2011). Summarizing, a business model describes how to create, deliver and capture value (Osterwalder et al. 2005; Wirtz et al. 2010). The value proposition is often considered as one component of a business model. Al-Debei & Avison (2010) define the value proposition as "The ways in which an organization along with its stakeholders create

value for each party involved.". This implies a description of the products/services offerings including related information (Osterwalder et al. 2005).

We would like to extend the body of knowledge by applying the existing factors for business model typologies in a new industry segment (B2B SaaS applications). Further, we would like to study the phenomenon of EMs and possible effects in conjunction with P platforms, which only have been studied separately before. In the context of our study, a seller is typically the owner of the SaaS application who tries to sell or lease the application via the marketplace whereas adopting organizations represent the buyer segment. In the specific case that an EM is part of a development platform ecosystems, complementors (developers) usually also become sellers via the EM.

Research Design

Research Method & Data Collection

In this paper we employ an explorative multiple case study approach in the spirit of Yin (Yin 1981). In particular, we review available primary and secondary documentations of EMs in order to gather facts within a particular case. The assessed data comes from a variety of sources which are all publicly available and includes operator websites, press articles, product specifications, developer guidelines and by testing the marketplaces itself when possible. The multiple case study approach is used for two reasons: (1) to increase validity of our findings and (2) use differences between cases to identify different types of EMs. We selected our cases based on the following characteristics. First, the marketplace has to trade SaaS services which are not exclusively provided by itself. Second, the marketplace has to provide its offering in English and thereby enable global operations. Third, it is an operating marketplace as opposed to e.g. providing only marketplace software via SaaS.

We identified potential case studies via web search (keywords: 'cloud marketplace' and 'saas marketplace'), web directories (www.emarketservices.com), research papers and market research reports (e.g. Gartner, Forrester) ending up with a list of 24 candidates. By applying the exclusion criteria described above, we eliminated 7 candidates and came up with 17 final cases which are summarized in Table 1. The actual data collection took place from June till November 2014.

Company Name	Marketplace Name		Company Name (continued)	Marketplace Name (continued)
Oracle	Cloud Marketplace		SAP	HANA Marketplace
Amazon	AWS Marketplace		Rackspace	Marketplace
Deutsche Telekom	Business Marketplace		IBM	Cloud Marketplace
Comcast	Upware marketplace		Google	Apps Marketplace
Staples	App Center		Netsuite	SuiteApp
Logata	Logistics Mall		Microsoft	Windows Azure Marketplace
Swisscom	Marketplace		Salesforce.com	Appexchange
Zoho	Creator Marketplace		Cisco	Marketplace Solutions
Microsoft	Pinpoint			

Table 1. Overview of analyzed cases

Data Analysis

In order to derive further findings and develop the aspired typology we will focus on the cross-case analysis. In both analyses (within case and cross-case) it is important to reduce narrative writing in favor of a structured conceptual framework (Yin 1981). Thus, we took multiple concepts from the literature

streams to overcome these potential structural shortcomings in case study research. Table 2 summarizes the concepts that were employed in the qualitative content analysis.

Concept	Description
Platform Ecosystem	We took the definition from a the literature review of Manikas and Hansen (2013) "as the interaction of a set of actors on top of a common technological platform that results in a number of software solutions or services". Therefore a software ecosystem "provides possibilities for the actors to benefit from their participation" (Manikas and Hansen 2013).
Seller/ Partner Access	This concept was derived from the fact that in platform ecosystems, the role of complementors needs to be managed (see e.g. Rickmann et al. 2014). Thus, we captured if the marketplace implemented a rather restricted partner management where complementors need to formally apply and are approved after evaluation.
Industry Scope	This concept was taken from the literature review of Wang and Archer (2007) and expresses which industries an EM serves. Horizontal markets focus on indirect products that could be used by all industries whereas vertical serve the needs of a particular industry (Wang and Archer 2007).
Ownership	Again, this concept was taken from the literature review of Wang and Archer (2007) as well as Le (2002) both highlighting the influence of ownership on the development of the EM. It is commonly differentiated between independent (third party), consortia-based (possibly industry sponsored) and private marketplaces.
Ownership Bias	The importance of pre-marketplace industry structures on the sustainability of EMs was found by Zhao et al. (2009). Further, power asymmetries were also considered as important by Wang and Archer (2007). Therefore we analyzed the role of the ownership in the IT applications and SaaS value chain. If the owner is or has competed, we coded it as 'Seller-Biased'.
Value Proposition Focus	Based on a comparison of value proposition frameworks for EMs we chose the analytical framework of Le (2002) as it seemed as the most comprehensive in the context of our study. Furthermore, it already offers an argumentatively sound categorization of value propositions and sub elements. The framework considers two dimensions: the value of aggregation and value of collaboration. Aggregation focuses on overcoming fragmentation by leveraging technology in terms of wider market access, increased product choices and price transparency. In the same manner, collaboration can be characterized by transaction automation and process integration.
Buyer/ Seller Focus	Ownership bias and resulting power asymmetries were introduced in a previous concept. Here, we wanted to know whether there is a tendency of offered functionalities for one customer segment (buyer or seller)and therefore adapted this concept (Wang and Archer 2007).
Transaction Phase Support	In line with previous studies (see e.g. Menychtas and Gomez 2012) we captured the market transaction phases the EM supports. We extend the work of Menychtas and Gomez (2012) with phases borrowed from Petersen et al. (2007) to better reflect the offerings introduced by the platform ecosystem concept. In essence, we differentiated the following phases: (1) product development, (2) information phase, (2) negotiation phase, (3) contracting phase, (4) transaction phase (incl. payment), (5) after sales phase, (6) support and value add.

Table 2. Analytical structure for case analysis

For each of these concepts we reviewed the available material, websites as well as the marketplace itself if access was possible. We either looked for keywords and respective descriptions of features or the features themselves. For example, if we found a "How to become partner" website stating which steps are required to become a partner, we assessed this as "Partner Network Restriction". For 'value proposition', 'buyer/ seller focus' and 'transaction phase support' we captured the functionalities of each marketplace and assigned this to the respective value proposition (on the lowest level) and transaction phase using binary values ('0' - 'no', '1' – 'yes'). Then, values were normalized (between '0' and '1'), aggregated (mean value if

necessary) and interpreted. For both, we defined the following intervals 'None'(0), 'Low' (1/3>x>0), 'Medium' (2/3>x>1/3) and 'High' (1>x>2/3).

Based on the literature and gathered data we looked for similarities and differences to identify types. We started with the factors that clearly separated the data set and inductively tested for further similarities by drilling down.

Results and Discussion

Presentation of the Results

General Results and Market Overview

By analyzing the obtained data, we are able to present to following results which represent the current market situation. Table 3 shows a summary of each category and the resulting allocations. First, we can see that the majority of marketplaces are part of a (larger) platform ecosystem (71%). Surprisingly, even more EMs have a restricted access for sellers implemented as a partner network (76%) and all except one follow a horizontal market strategy. We found no other ownership form than independently (third party) owned EMs. Interestingly, we found that 14 of these EMs are owned by companies that already compete in the SaaS value chain and were thus ranked as seller biased. We observed 12 EMs with a value proposition focused on aggregation and two on collaboration features leaving three with a balanced value proposition. By looking at the targeted customer segment we were able to distinguish between buyer focus (18%), seller focus (35%) and neutral (47%). Further, we found that five marketplaces support all phases, seven do not support transaction and payment, four do not support development and only one does not support development nor transaction and payment.

Platform Ecosystem	With Platform Ecosystem (12)	Without Platform Ecosystem (5)		
Seller/ Partner Access	Partner Network (13)	Register-Only (4)		
Industry Scope	Horizontal (16)	Vertical (1)		
Ownership	Independent/ Third Party (17)			
Ownership Bias/ Power Asymmetries	Seller-biased (14)	Neutral (3)		
Value Proposition Focus	Aggregation (12)	Balanced (3)	Collaboration (2)	
Buyer/ Seller Focus	Buyer (3)	Neutral (8)	Seller (6)	
Transaction Phase Support	All (5)	No Transaction and/or payment (7)	No development, transaction or payment (1)	No development (4)

Table 3. General Results

Typology

By comparing the similarities and differences for each individual case we suggest a typology consisting of 5 types. Table 4 summarizes characteristics for each type. In the following we will shortly describe the

types and distinct characteristics. The first type is called *'Catalogue Listing'* which can be described as a horizontal marketplace without a platform ecosystem that rather focuses on potential buyers. It does neither support any development capabilities nor transaction execution or payment handling. Therefore it can be considered as a listing without any deeper functionality. Next, we introduce the *"Transaction-oriented Catalogue"* which is a horizontal marketplace without a platform ecosystem focusing on the buyer side without any development support as well. Contrary to the 'Catalogue Listing' it supports transaction execution and payment handling functionalities. We propose the next type as '*All-in-One Marketplace*' as it supports functionalities across all phases including development and transaction execution. This type of horizontal EM is part of a platform ecosystem and its focus of value proposition is rather targeted towards the seller side. Next, we propose the '*Development Platform Marketing Channel*' which is also a horizontal EM with a seller focus built within a platform ecosystem. In contrast to the 'All-in-One Marketplace' it does not support transaction execution or payment handling. Therefore we concluded that the marketplace is used as a marketing instrument for the offered platform solutions. The last suggested type is called '*Industry Collaboration Development Platform*'. The characteristics are similar to the 'All-in-One Marketplace' except the vertical market focus and a value proposition focus on collaboration.

Discussion

General Market Discussion

In general, we can see that there is tendency towards EMs built around platform ecosystems - at least to date (71%) (cf. Table 3). A possible explanation would be that often platform solutions (incl. core products) already existed and were complemented as a marketing and sales instrument. This would be in line with the hypothesis of Giessmann and Stanoevska-Slabeva (2012) that an increasing number of PaaS will enrich their offerings with EMs. Further, the fact that even more EMs restrict seller access to a partner network might also be explained by existing offline partner networks of large software vendors that now pursue an online strategy (e.g. (Ceccagnoli et al. 2012)). Especially, due to the lack of trust in SaaS this might also be seen as a mechanism to increase institution-based trust into the EM, through accreditation and perceived cooperative norms (e.g. Pavlou 2002). A buyer would therefore be more likely to trust a seller as he knows that the seller has been evaluated before and is bound to cooperative norms in this network. Almost all EMs have a horizontal industry focus, i.e. they sell IT solutions mostly independent from a specific industry. We think the owners do not want to limit the possible customer segments to a specific industry at first. Especially until it is unsure whether the concept of an EM for SaaS solutions is sustainable. All EMs are owned by independent third party organizations, i.e. we found no consortiums or private marketplaces. We think that the total number of SaaS applications and the volume of money spent for these is still relatively low and therefore it might currently not be effective for buyers to form consortiums. Taking the perspective of sellers, we think we have a very important phenomenon to discuss. Although there a no formal consortia marketplace, we think that with the advent of platform ecosystems and partner networks there is some form of 'quasi-consortia'. The governance of platform ecosystems (decision structures, lock-in effects) is already a topic within the research community (see e.g. Eisenmann 2008; Tiwana et al. 2010). Though, with the interconnectedness of product development within the platform and the (main) selling channel many more issues may arise from various perspectives. The influence of ownership and market competition has already been highlighted by Zhao et al. (2009). The same study might also explain the ownership bias towards sellers, i.e. most of the owners (14) are already competitors in the IT service/ applications value chain. Zhao et al. (2009) argue that if prior e-market structures and linkages exist their savings are greater since they only need to connect with the other group (either buyer or sellers). Further, competitors outside the IT industry they might not have required competencies, knowledge and relationships required to establish a multi-sided market platform.

	Suggested Name for Type	Catalogue Listing	Transaction-oriented Catalogue	All-in-One Marketplace	Development Platform Marketing Channel	Industry Collaboration Development Platform
Differentiating Factors	**Buyer/ Seller Focus**	Buyer - Neutral	Buyer - Neutral	Seller - Neutral	Seller - Neutral	Seller - Neutral
	Platform Ecosystem	no	no	yes	yes	yes
	Transaction Phase Support	No Development & No Transaction or payment	No development	All	No Transaction and/or payment	All
	Industry Scope	Horizontal	Horizontal	Horizontal	Horizontal	Vertical
Non-Differentiating Factors	**Value Proposition Focus**	Aggregation (1)	Aggregation (3) Balanced (1)	Aggregation (2) Balanced (2)	Aggregation (6) Collaboration (1)	Collaboration (1)
	Seller/ Partner Access	Partner-Network (1)	Partner-Network (4)	Register-Only (3)- Partner-Network (1)	Partner-Network (6) – Register-Only (1)	Partner-Network (1)
	Ownership	Independent	Independent	Independent	Independent	Independent
	Ownership Bias/ Power Asymmetries	Seller-Biased	Neutral to Seller-Biased	Seller-Biased	Seller-Biased	Seller-Biased
	No. examples	1	4	4	7	1
	Example Case	Microsoft Pinpoint	Swisscom Marketplace	Salesforce AppExchange	SAP HANA Marketplace	Logata Logistics Mall

Table 4. Summary of the Characteristics for each Type

Discussion of the Typology

By looking at the identified types of EMs, we will try to elaborate in more detail on the characteristics and highlight purpose as well as conspicuous features of each. The 'Catalogue Listing' can be compared to a classical price comparison website. It should enable buyers to find offers and possibly simply compare prices and features of each. But if the buyer wants so buy the offering he has to contact the seller directly as no transaction support is offered by the EM. Besides the aspects we already described in the results section, it is very interesting to note that contrary to our beliefs that such a listing should be open for additional listings, it is rather closed. In our particular case, they restricted seller access to a partner network which can be joined under specific conditions. We would also like to highlight the fact that this EM is owned by a potential seller which might seem discouraging for a buyers. The 'Transaction-oriented Catalogue' represents the typical third party electronic marketplace where goods are offered and traded (such as Amazon). We also think it is noteworthy that all four examples have a restricted seller network which can only be entered after an evaluation of the owner. A possible reasoning behind this has already been discussed in the previous section. The 'Development Platform Marketing Channel' often supports the development or deployment of applications by offering a PaaS solution that supports for example integration APIs, mobility and user management. Therefore new and existing sellers should be encouraged to develop novel applications on the existing infrastructure. We think that the seller focus and the ownership bias towards sellers are predictable. These EMs do not support transaction execution and payment handling and also restrict access to sellers via a partner management. We believe the intention is to not only support sellers in application development but also advise them in business model development and marketing activities. We have also found that the platform ecosystem often not only consists of a PaaS development features but are complemented with core features of existing enterprise applications (such as office suite or CRM application) thereby creating an even larger platform. We think this creates a lock-in effect for sellers (see e.g. Amit and Zott 2001). Quite contrary, the 'All-in-One Marketplace' offers transaction execution and payment handling and does not restrict seller access (only registration necessary). We think that the intention is to get as much sellers as possible to co-innovate around the platform as this increases the value of the marketplace (Dai and Kauffman 2002). In addition, the EM owner often participates in sales via the marketplaces. Likewise, they also extend the platform with core features of existing enterprise applications which can be used to build novel and innovative applications. We think that they create at least the same lock-in effect as the 'Development Platform Marketing Channel'. Interestingly, we observed one case were it was incentivized to use the PaaS solution by enabling only certain features in the marketplace (billing). We think that in this type bundling may play a larger role as a value appropriation mechanism (see e.g. Rai and Tang 2014). Our last suggested type 'Industry Collaboration Development Platform' is a vertical marketplace that is also connected with a platform ecosystem. The one identified case was seller-oriented, supported all transaction phases and focused on a collaborative value proposition. This means, sellers are supported in terms of development but also towards workflows and processes for this specific industry which should enable innovative inter-organizational solutions. We believe that the key distinctive feature is the required domain knowledge for a particular industry to enable bundled solutions.

Detailed Discussion of the Value Proposition

As opposed to our initial expectations, the value proposition did not prove to be a key differentiator – at least not in the way we operationalized the concept. Hence, we would like to provide more details of the gathered value propositions. Table 5 summarizes the total number of functionalities assigned to the detailed value propositions. First, the distribution of the value elements along the dimensions is not even. The concentration of value elements in the 'value-added services & lock-on' category may be due a lack of trust in providers and their solutions where EMs see potential to add value by either ensuring trust themselves (through thorough evaluation processes or enabling user reviews and recommendations) as well as compliance issues. Furthermore, numerous value elements in 'streamlined workflows' focus on facilitation and seamlessly enabling user access across the subscribed SaaS services (e.g. single sign on). Similarly, the concentration of value elements to "value- added services and lock-on" may indicate the need of more specialized sub-categories for SaaS EMs. This is in line with the proposition of Alt and Klein (2011) that technological innovation in standards and services will add value. In addition, Guo (2007) and Wang et al. (2008) identified an increasing trend for B2B EMs to develop integration technologies suggesting that EMs taking over the tasks of inter- organizational integration can create competitive

advantage. Finally, the numerous value elements within the 'wide market reach' and 'price transparency and product-cost savings' point towards the hypothesis that EMs in fragmented markets will focus on aggregation first (Le 2002). Nonetheless, the concentration of these elements might indicate room for improvement.

		# Value Elements			# Value Elements
Value through Aggregation	**Market Liquidity**	**20** *(8%)*	**Value through Collaboration**	**Transaction Automation**	**128** *(52%)*
	Dynamic trading	*6*		Process-cost savings	*36*
	Network externalities	*7*		Streamlined workflows	*24*
	Customer-lock in	*7*		Value-added services & lock-on	*68*
	Search Cost Efficiency	**75** *(31%)*		**Process Integration**	**22** *(9%)*
	Information Richness	*47*		Collaborative Commerce	*10*
	Price Transparency & Product-cost savings	*20*		Supply Chain Visibility	*12*
	Wide Market Reach	*8*			
	TOTAL – Value of Aggregation	**95** *(39%)*		**TOTAL – Value of Collaboration**	**150** *(61%)*
TOTAL - Value Elements					**245** *(100%)*

Table 5. Detailed value proposition assignment into Le´s (2002) framework

As described in the previous chapter, we used binary values to indicate for each marketplace if sub-elements of these value propositions are offered and aggregated these values to compare aggregation and collaboration value. We found that the majority currently follows a 'value of aggregation' or balanced strategy. While this could be biased by the data collection itself which is a snapshot of the current value offerings, we would also link this to preconditions (fragmentation) of the SaaS market. It is said that market transparency needs to drastically increase to gain back trust of the customers. Therefore it may be a strategy of these marketplaces to stress aggregation features at first which is supported by Le (2002). Furthermore, Figure 1 shows the data points of our cases and the pathways to leadership constructed by Le (2002) differentiating between ownership forms (third party, consortia-based and private). In contrast, we can´t identify clear pathways of third party marketplaces towards aggregation or collaboration. We would also like to highlight the ownership and platform ecosystem aspect again. Although ownership plays a big role in the Le´s (2002) pathway hypothesis, we could not find support in this case (for ecosystem vs. third party ownership). One reason might also be the uneven distribution of the detailed value propositions (cf. Table 4). Hence it can be summarized that in our case this particular value proposition operationalization did not help to distinguish the types in our typology sufficiently.

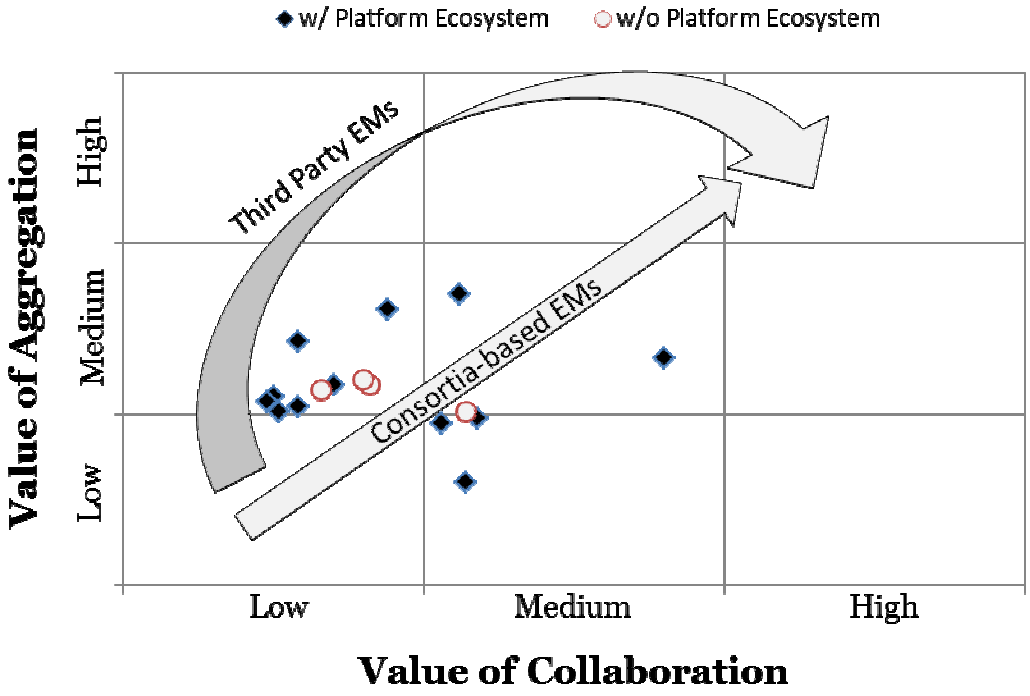

Figure 1. Value Proposition results compared with Le´s (2002) pathways

Implications for Research and Practice

We suggest several implications for practice. First, our general market overview may help managers of (potential) buyers, sellers and marketplaces to identify trends and gaps in the existing market. For example, the prevailing existence of EMs with restricted partner networks which are owned and operated by competitors in the value chain might offer market potential for new entrants. Second, our typology might assist potential buyers and sellers to better select the EMs that fits their needs and best support their requirements. Likewise, EM operators might re-evaluate or rethink their strategy and future development. In particular, the 'Catalogue Listing' type would likely benefit from an EM that is rather owned by neutral third party or even a buyer. Further, the partner-network restriction limits growth on the seller side and therefore contradicts desired network effects and the perceived value by buyers.

We identify the following implications for research. First, we have found that platform ecosystem can be a key differentiator. From our perspective it would make sense to study this phenomenon in more detail. We suggest two central issues that bear potential: (1) governance and ownership structures and (2) value propositions. We think that decision structures and design rules could be altered if a marketplace is used as a sales instrument in conjunction with a platform compared to one concept alone. Consequences and effects of decisions on one part might affect the other part. For example, if an EM decides to increase revenue share percentages for each transaction, potential sellers might stop using the platform. In terms of value proposition, we think that because platform and marketplace are (often) used in conjunction it needs to be evaluated together. Specific value proposition concepts for EMs are not sufficient from our perspective. Therefore it would make sense to use broader concepts to improve the results in further studies.

Conclusions and Outlook

To summarize, our contribution is two-fold. First, we were able to analyze and discuss the general market situation of electronic marketplaces for B2B SaaS applications. Thereby, we could confirm the anecdotal

evidence and hypothesis of an increased co-existence of EMs and platforms within one business model. Additionally, we pointed towards existing market potential. We further found that currently most existing EMs pursue a rather aggregation oriented value proposition following Le´s framework (Le 2002). In a more detailed look, we found a tendency of these marketplaces in certain value elements. His pathway for leadership of third party EMs could therefore not be affirmed. Second, we developed a typology using the impact factors from the literature, such as platform ecosystem binding and partner management, ownership bias, value proposition as well as transaction phase support. Five different types could be distinguished, in particular: (1) Catalogue Listing, (2) Transaction-oriented Catalogue, (3) All-in-One Marketplace, (4) Development Platform Marketing Channel and (5) Industry Collaboration Development Platform. Similarities and differences were explained as well as potential reasoning from the perspective of the EM owner. Here again, the ecosystem seems to be an important factor in terms of value proposition as well as having an influence on the governance since it alters the decision and incentive structure of traditional third party marketplaces. Based on the typology, we draw implications for practitioners and pointed towards further research potential. We contributed to the body of knowledge in several ways. First, we applied platform theory lens to study business models of PaaS and EMs. Second, we conceptualized EMs and PaaS in conjunction showing that this might be useful. Third, we studied a practical phenomenon which has not been studied extensively before – B2B SaaS EMs and platforms – from a business perspective thereby complementing rather technical literature.

There are several limitations in this study to consider. Due to the nature of the case study approach we only gained contextualized insights for single organizations. The number of case studies is still relatively low for the number of types we suggest. For 2 types, we could only assign 1 case each. Therefore we cannot claim exhaustiveness or completeness. Furthermore, we used only publicly available information which means that data bears potential for misinterpretation or misinformation.

We will continue our research in this area in several ways. First, we redo parts of the data analysis in favor of a more general approach towards value proposition (e.g. Amit and Zott 2001; or Tiwana et al. 2010). We think this helps to better reflect the value potential of the co-offering of platform and marketplace. Furthermore, we would like to pursue a contingency oriented approach to identify the factors that influence the value proposition (such as ownership and governance structure etc.). Finally, we would like to increase data validity by using interviews with owners and complementors of such EMs thereby supporting triangulation. Thereby this research would contribute to the field of EMs as well as IT-enabled business models.

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