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Enterprise Social Networks: A Business Model Perspective

Paul Mathiesen, Erwin Fielt
School of Information Systems
Queensland University of Technology
Brisbane, Australia
Email: paul.mathiesen@qut.edu.au, e.fielt@qut.edu.au

Abstract

Enterprise Social Networks continue to be adopted by organisations looking to increase collaboration between employees, customers and industry partners. Offering a varied range of features and functionality, this technology can be distinguished by the underlying business models that providers of this software deploy. This study identifies and describes the different business models through an analysis of leading Enterprise Social Networks: Yammer, Chatter, SharePoint, Connections, Jive, Facebook and Twitter. A key contribution of this research is the identification of consumer and corporate models as extreme approaches. These findings align well with research on the adoption of Enterprise Social Networks that has discussed bottom-up and top-down approaches. Of specific interest are hybrid models that wrap a corporate model within a consumer model and may, therefore, provide synergies on both models. From a broader perspective, this can be seen as the merging of the corporate and consumer markets for IT products and services.

Keywords


INTRODUCTION

An Enterprise Social Network (ESN) is of particular relevance in organisations where there is a strong knowledge transfer component, as an ESN can be utilised to “put emphasis on social relationships, interactive communication and ad-hoc sharing” (Riemer et al. 2012b). It has been predicted that up to 50% of large organisations will have some form of enterprise social network in place by 2016 (Perez 2013). It is also recognised that social network systems have moved beyond the realm of personal applications and are fast becoming fully integrated with organisational communication and collaboration practices (Koch et al. 2012). Benefits of inclusion of this social software range from employee rapport and relationship building (Dimicco et al. 2009) through to the capture of corporate knowledge and practices (Koch et al. 2012). The primary focus of earlier collaboration applications, such as corporate intranets or other digital repositories, was simply the capture and transfer of “explicit knowledge in data and databases” (Riemer et al. 2012b). Now, a key differentiation between these earlier collaboration applications and current ESN is that these “newer approaches focus on the communicative aspects and take a knowledge-in-action perspective” (Riemer et al. 2012b).

While research on ESNs is gaining traction (Leonardi et al. 2013; Richter et al. 2013a; Riemer and Scifleet 2012), these studies mostly focus on the user organization and only pay attention to the technology itself. In this paper we will address the provider side of ESNs and offer a more holistic perspective by addressing the customer-facing elements of the business model to understand how ESN providers create value for their customers. It is the business model that determines whether a technology can deliver value to the customer (Chesbrough and Rosenbloom 2002). Insights into the business models of leading ESNs can advance our understanding of ESNs beyond the range of features and functionality and may also contribute to explaining the success and failure of the adoption this technology. The business models of ESNs have received little attention so far in academic literature. There has been some attention to the business models of social media in general. As far as business models are discussed in relation to ESNs the focus has been on the impact on the business model of the user organization (e.g., the social enterprise), not on the business model of the ESN provider.

This paper is structured as follows. Firstly, it presents a brief overview of existing ESN literature and describes the business model concept in more detail. Then the research design is presented describing the overarching approach to this study. Then, seven leading ESN providers are presented as mini-cases. This is followed by an identification and discussion of different, archetypical ESN business models. The paper ends with concluding remarks presenting the overall findings and addressing some of the limitations and possibilities for future research.
LITERATURE REVIEW

In this section we will briefly review the current literature on ESNs and business models.

Enterprise Social Networks

Almost a decade ago, organisational grade social media, labelled by McAfee (2006) as Enterprise 2.0, pertained to those corporate level digital platforms used for collaboration between knowledge workers. In this early work, McAfee (2006) presents six core features of Enterprise 2.0 as keyword search; web page links; authorship; content tagging; page preference extensions; and content update signalling. Also discussed was the concept of a network effect whereby “as more people engage in authoring, linking and tagging, the emergent structure becomes increasingly fine-grained” (McAfee 2006, p26). In more recent years there has been considerable research into the use of social software in the corporate context. Studies have been conducted into various aspects of Enterprise 2.0 such as user blogging, content tagging and wiki development and microblogs (Jackson et al. 2007; Kim et al. 2008; Millen et al. 2006; Riemer et al. 2012a; Thom-Santelli et al. 2008; Zhang et al. 2010). Riemer et al. (2012b) have posited that a second wave of social technology has brought us enterprise social networks which present a truly interactive, collaborative digital space which puts “emphasis on social relationships, communication, conversation and ad-hoc sharing” (Riemer and Scifleet 2012, p3). Therefore, simply defined, an enterprise social network is “the phenomenon of social networking in an enterprise context” (Richter et al. 2011, p 91).

Current research into the organisational use of ESN addresses a broad range of topics. For example, Brzozowski (2009) discusses how an ESN can address organisational issues which arise when seeking expertise from a collective knowledge base. That is, how social media may be associated with an internal professional directory to encourage participation and the searchability of corporate information. A focus on the performance impacts and associated benefits of organisational use of social media is presented by Jussila et al. (2011) where they view the increased opportunities for business-to-business innovation. Skopik et al. (2011) discuss the notion that collaboration via social networks in an organisational context support dynamic participant grouping with the result of enhanced information flow amongst these groups. They discuss the notion of ‘cross-enterprise collaboration’ scenarios and a way of seamlessly supporting this relationship across organisations. In addition to the above perspectives, the domain of ESN is becoming well understood with a broad range of research across areas such as participation mode (Buhse and Stamer 2008), and culture (Grace 2009). As evidence of the maturing research in this domain, (Riemer and Richter 2012) present a cross-case comparison of ESN case studies, deriving a catalogue of eleven enterprise social network use cases and group them in six benefit categories: socialising, organising, crowd-sourcing, information sharing, awareness creation, and learning & linkages. Richter et al. (2013a) discuss seven actions for social software usage: search, edit, rate, label, clarify, notify, and share.

Business Models

Every organization has a business model, whether that model is explicitly articulated or not (Chesbrough 2006; Teece 2010). A business model describes the value logic of an organization in terms of how it creates and captures customer value (e.g., Johnson 2010; Osterwalder and Pigneur 2010). Most recent definitions of business models are formulated around the value logic of the organization (and the business network) in terms of creating, delivering and capturing customer value (Chesbrough 2006; Johnson 2010; Osterwalder and Pigneur 2010; Teece 2010). Examples of business models often discussed are Apple’s seamless music experience with the iPod and iTunes, Skype’s freemium model for phone calls, and Google’s keyword advertising for search. When new technology is introduced in the market, a viable business model is needed to ensure that the innovation delivers value to the customer (Chesbrough and Rosenbloom 2002). New products and services based on information technology, such as social networks, have always been in search of viable business models and are also a strong driver of business model innovation (Bouwman and Fielt 2008). One of factors driving the increased attention for business models is the growth of the Internet and e-commerce (Teece 2010). A business model describes the value logic of an organization in terms of how it creates and...

Business model frameworks describe the compositional elements that a business model is made-off. The elements are also referred to as, for example, building blocks (e.g., Osterwalder and Pigneur 2010), components (e.g., Pateli and Giaglis 2004), (key) questions (e.g., Morris et al. 2005), or functions (e.g., Chesbrough and Rosenbloom 2002). We describe the Business Model Canvas (Osterwalder and Pigneur 2010) in more detail, as this has become one of the most applied frameworks by both academics and practitioners. The Business Model Canvas (Osterwalder and Pigneur 2010) presents six core features of Business Model Canvas as: (1) customer segments, (2) value propositions, (3) channels, (4) customer relationships, (5) revenue streams, and (6) cost structure. These elements are connected in the canvas to show the relationships and dependencies between them. The Business Model Canvas helps to visualize and communicate the business model in a clear and structured way, allowing stakeholders to easily understand and discuss the value逻辑 of the organization (and the business network) in terms of how it creates and captures customer value.
Canvas consists of nine ‘building blocks:’ (1) an organization serves one or several Customer Segments, (2) it seeks to solve customer problems and satisfy customer needs with Value Propositions, (3) Value Propositions are delivered to customers through communication, distribution, and sales Channels, (4) Customer Relationships are established and maintained with each Customer Segment, (5) Revenue Streams result from Value Propositions successfully offered to Customer Segments, (6) Key Resources are the assets required to offer and deliver the previously described elements, (7) …by performing a number of Key Activities, (8) some activities are outsourced and some resources are acquired outside the enterprise via Key Partnerships, and (9) the business model elements result in the Cost Structure.

RESEARCH DESIGN

As the topic of ESN business models has received limited attention so far, this study opted for an explorative, qualitative approach. To explore the business models of ESN providers, a multiple case study method (Yin 2009) was conducted. More specifically, a multiple mini-case study strategy was executed where the depth and richness within one case is limited, but where the number of different cases is relatively large (George and Bennett 2005). This helps establish a board view across different ESN providers. Moreover, as high-level information on the customer-facing elements of the business model should be mostly publically available and gaining access to ESN providers is difficult, data collection focussed on primary information available on the ESN providers’ websites complemented with secondary information when required. This information was summarized and compared using the customer-facing elements of the Business model Canvas: (1) Customer Segments, (2) Value Propositions, (3) Channels, (4) Customer Relationships, and (5) Revenue Streams (Osterwalder and Pigneur 2010).

The ESN providers were selected based on data from industry research on the ESN market and data on the use of ESNs in the corporate environment. According to the Altimeter Group (2012), an ESN can evolve from three differing scenarios. Firstly, the ESN can be deployed as a standalone solution (Yammer, Chatter, Google+) that can operate independently of other applications but typically can also be integrated via API’s. Secondly, ESN is a feature of an existing collaboration platform which can be enabled (Jive, Telligent, Drupal). Thirdly, ESN functionality may be provisioned as an add-on to existing enterprise applications to provide a social layer (Lotus Notes and IBM Connections or SalesForce and Chatter). Gartner’s Magic Quadrant for Social Software in the Workplace (Gartner 2012a), position the top five leading ESN applications to be Microsoft SharePoint, Jive, IBM Connections, Yammer, and SalesForce Chatter. In addition to these applications, Facebook and Twitter were also included due to the high penetration and value of this software within organisations (Archambault and Grudin 2012; Skeels and Grudin 2009; Zhang et al. 2010). Though it is recognised that Yammer is now a Microsoft product, it is still presented separately due to historically differing “management and product development styles” (Gartner 2012a, p20). Gartner’s analysis of the domain presents applications that support internal interactions between employees and working teams, as well as external relationships and communities.

ENTERPRISE SOCIAL NETWORK PROVIDERS

Below the seven leading platforms that have been identified for discussion in this study are described in more detail and their customer facing business model elements are presented in Table 1.

1. Microsoft Yammer (http://www.yammer.com/)

The popular micro-blog platform Yammer was launched as an ESN in 2008 with rapid organisational uptake due in part to the offer of a free-to-use, basic version of the software, with limited functionality. Sometimes Yammer is referred to as ‘the Facebook for Business.’ The technology was acquired by Microsoft in 2012 at a reported cost of $1.2 billion dollars, to bolster the enterprise social networking capability of SharePoint and the Office 365 cloud based product range (Bell 2012; Gartner 2012b). To gain a level of administrative control over the domain however, an organisation must sign up to be a paying customer. This option to upgrade, at a minimal cost per user, brings with it additional security and administrative functions suitable for most corporate IT blueprints. Designed for corporate collaboration, each member of a private Yammer network must sign in by their company email address.


Originally launched in 2001, SharePoint was initially just another document management system. Now as it is more closely integrated with other Microsoft Office products, such as the new Office 360, the collaboration platform provides true ESN capabilities. Microsoft SharePoint offers a varied licensing agreement with the option of paying for system capabilities, the deployment protocol and the system hosting location (online/on-
Presenting both a free version and premium (paid) option, SharePoint supports the choice of on-premise or cloud-based service offering. That is, licensing depends upon “what capabilities are used, how SharePoint is deployed, and where the system is hosted” (Microsoft 2013). According to Pogrebivsky (2013), Microsoft relies upon “partners and other third party application developers to build applications” to enhance the SharePoint collaboration platform. In addition, in the latest version (SharePoint 2013), has introduced a new opt-in approach to licensing by using the cloud distribution model to add-to or extend upon core functionality (Pogrebivsky 2013). Microsoft manages this process via the Management Shared Services application to assign or delegate the license.


The social software platform IBM Connections offers three different deployment options, on-premises; cloud-based; or a hybrid instance. Each of these instantiations operates on a on a pay-for-service basis. IBM Connections is an “integrated social software platform for business, with profiles, blogs, Wikis, discussion forums, communities, ideation, rich media, micro-blogging, a wall-type feature” (Kiron 2012). The expected full integration of this software with Microsoft Outlook, Office and Microsoft SharePoint will provide a true end-to-end social business solution.

4. Jive (http://www.jivesoftware.com/)

In contrast to the popular freemium approach to product distribution, in 2012 Jive software CEO Tony Zingale strongly opposed this business model and likened it to “handing out drugs in a schoolyard” (Carr 2012). Zingale believes that the freemium model for the enterprise is dead and that the metrics that matter are not user adoption rates but attributable revenue gains and cost reduction (Rosoff 2013). Another point of uniqueness is that Jive not only promotes business focused end-user functionality but also places emphasis on the IT concerns of product hosting, system integration and security features (O’Flaherty 2012). According to Digiredo, Jive has two business models. The first model (Clearspace), pertains to the internal organisational use of Jive, the second (ClearSpace Communities) is focused on the external use of this social media. Both follow ‘pay for feature’ business models, with Clearspace charging on a per user/year basis and Community based on CPU usage. Jive has also recently offered a 30 day trial ‘try before you buy’ model (Chui et al. 2012). Recent developments in the Jive product suite include the integration of its popular StreamOnce product with larger software-as-a-service vendors such as Microsoft, Salesforce, SAP and Google (King 2013).

5. Salesforce Chatter (http://www.salesforce.com/chatter/)

The Salesforce Chatter product suite offers a growing range of functionality from activity streams and file sharing across devices, to new features such as ‘topic’ identification and workflow approvals (Chatter 2013). The product is offered in both a free version (with the purchase of 1 paid CRM licence) and a ‘pay for extra functionality’ version (Chatter Plus), with an enhanced level of privacy and data security. Available as part of the paid Salesforce application licences, Chatter can be deployed company-wide manually or on an invitation only basis.

6. Facebook (http://www.facebook.com/)

Though Facebook makes the claim that there is no business model in-place and they are “building the plane in flight” (Hall 2013), their original business model still applies, that being paid-for display advertisements (Research and Markets 2013). Facebook believes that key to its future survival is the mobile advertisement space which has contributed “30% of Facebook’s total ad revenue” in the first quarter of 2013 (Pepitone 2013). The challenge for Facebook now is to identify a business model which generates significantly greater revenue stream, and perhaps use of Facebook Connect (social graph) will provide this (Dixon 2012).

7. Twitter (http://www.twitter.com/)

Due to the rapid take-up & widespread success of Twitter, organisations also consider the use of microblogs for “group communication and information sharing” (Riemer et al. 2012a, p3). Twitter is primarily a standalone micro-blog (140 characters or less) but can also be integrated with other social media applications through the use of appropriate #hash-tags. The application is free to use and can be accessed across a wide range of devices.

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include the latest mobile technologies. Twitter supports an open community approach to social networking where users are free to follow others within the network with minimal barriers to access.

We have described the characteristic of each ESN provider in terms of the customer-facing business model elements (Table 1). Some applications (Yammer; Chatter) are based on a micro-blog paradigm yet allow for integration with more traditional corporate IT applications. Other ESNs (Chatter; SharePoint) offer a basic free service with the ability to upgrade to a more feature rich instance on a paid basis. Some ESNs are relatively open for anyone to join (unless users choose to close their social network themselves), while others are more private requiring some level of authentication or authorisation (e.g., Yammer requires the use of a corporate email address).

Table 1: ESN providers described by customer-facing business model elements.

<table>
<thead>
<tr>
<th>VENDOR</th>
<th>VALUE PROPOSITION</th>
<th>CUSTOMER</th>
<th>REVENUE MODEL</th>
<th>CHANNEL</th>
<th>RELATIONSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Yammer</td>
<td>Microblog/Activity Stream</td>
<td>Standalone or Integrated with Office 360</td>
<td>Employees</td>
<td>Free &amp; Paid</td>
<td>Standalone or Integrated with Office 360 (Cloud based); Mobile</td>
</tr>
<tr>
<td>Salesforce Chatter</td>
<td>Microblog/Activity Stream</td>
<td>Standalone or Integrated with Salesforce.com</td>
<td>Employees; Community members</td>
<td>Free (with 1 paid CRM licence) &amp; Paid</td>
<td>Onsite; Cloud; Mobile; Hybrid</td>
</tr>
<tr>
<td>Microsoft SharePoint</td>
<td>Document collaboratio n platform</td>
<td>Can be integrated with Office 360 &amp; NewsGator</td>
<td>Employees</td>
<td>Free &amp; Paid</td>
<td>Onsite; Cloud; Mobile; Hybrid</td>
</tr>
<tr>
<td>IBM Connections</td>
<td>Community-based Social network</td>
<td>Can be integrated with Lotus Notes</td>
<td>Employees; Community members</td>
<td>Paid</td>
<td>Onsite; Cloud; Mobile; Hybrid</td>
</tr>
<tr>
<td>Jive</td>
<td>Collaboratio n platform</td>
<td>ESN can be enabled in Jive</td>
<td>Employees; Community members</td>
<td>Paid</td>
<td>Onsite &amp; Cloud</td>
</tr>
<tr>
<td>FaceBook</td>
<td>Community-based Social network</td>
<td>Can be integrated with other external applications</td>
<td>Community</td>
<td>Free</td>
<td>Cross platform</td>
</tr>
<tr>
<td>Twitter</td>
<td>Microblog</td>
<td>Can be integrated with other external applications</td>
<td>Community</td>
<td>Free</td>
<td>Cross platform</td>
</tr>
</tbody>
</table>

THE BUSINESS MODELS OF ESN PROVIDERS

From the case descriptions and their customer-facing business model elements, it can be observed that there is an overarching differentiation between the business models of the leading software Vendors, allowing the above ESN to be grouped into three distinct archetypes (Table 2). Firstly, a purely consumer model (Facebook; Twitter) is typically free, (consumer) community driven, and provides access to either open or private networks. It is also integrated to a wider set of consumer application, for example, via using your account to sign in into other websites or having buttons on other websites linked to your account.

The second overarching approach to ESN business models is the corporate model, which can be considered as the more traditional, top-down, organisationally supported instance, strategically endorsed by senior management and IT departments. This second group of ESN typically includes applications such as IBM Connections and Microsoft SharePoint, as these applications are more tightly integrated with existing corporate technologies and organisational practices. The corporate business model ESN is primarily focused on the employee and is funded by a pay for service licensing model.
There is also a third hybrid model (Yammer, Jive), that being an ESN applying a corporately focused business model but wrapped in the packaging of a consumer model. This emerging category blends some of the immediate, community driven benefits of a bottom-up approach with a transition to a more robust, corporately appealing ESN instance. The development of the ESN market may lead to the evolution of this third paradigm as organisations continue to grapple with the opportunities and challenges that social software brings.

Table 2: ESN Business Model Archetypes

<table>
<thead>
<tr>
<th>BUSINESS MODEL PATTERN</th>
<th>VALUE PROPOSITION</th>
<th>CUSTOMER</th>
<th>REVENUE MODEL</th>
<th>CHANNEL</th>
<th>RELATIONSHIP</th>
<th>ESN EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer model</td>
<td>ESN</td>
<td>External integration</td>
<td>Community</td>
<td>Free</td>
<td>Cross Platform</td>
<td>Open or private</td>
</tr>
<tr>
<td>Corporate model</td>
<td>ESN</td>
<td>Internal integration</td>
<td>Employees</td>
<td>Licensing</td>
<td>Onsite; Cloud; Mobile; Hybrid</td>
<td>Private</td>
</tr>
<tr>
<td>Hybrid model</td>
<td>ESN</td>
<td>Internal integration</td>
<td>Community/employees</td>
<td>Freemium</td>
<td>Standalone or Integrated</td>
<td>Private</td>
</tr>
</tbody>
</table>

From the above (Table 2) several ESN applications can be categorised as following a consumer based approach (consumer model and hybrid model) which are targeted at individuals in the broader community and whereby ESN adoption is more likely to occur at the individual employee level of the organisation. It could be viewed that the organisational adoption of ESN applications is sometimes driven more by opportunity or requirement than by an imposed management policy or corporately endorsed strategic directive. This is supported by the recognised transformation of these applications from personal use only to transformative enterprise-wide technology (Mergel et al. 2012). A distinction that can be made is the apparent ease of adoption of the consumer (bottom-up) type applications such as Yammer and the more corporate style products such as Microsoft SharePoint. The consumer applications, freemium or low-cost, are typically selected and deployed quickly, typically without the due diligence that may be necessary if the application becomes Enterprise-wide. Conversely, truly corporate ESN products often require the services of an Account Manager to support the integration of this software.

Riemer et al. (2012a) discuss the bottom-up emergence of an ESN (Yammer), reviewing the phases of the initial uptake of the software, and leading to the development of the Social Network Emergence Process (SNEP) model. Through their case study analysis of social software adoption, Richter et al. (2013b) contribute to the ongoing debate between the merits of top-down and bottom-up deployment of organisational social software, and the impact of this choice on the success of this implementation. Linked to this is the concept raised by Riemer et al. (2012a), that is the notion of emergence whereby a “community of users adopts a social media platform that is freely available on the Internet and incorporates it into their work practices”. This factor of emergence is important to this study as the bottom-up adoption and deployment of social media is often not part of corporate IT strategy (McAfee 2009) and may become ingrained before official endorsement (Riemer et al. 2012a). The bottom-up approach to software implementation also brings with it a paradigm shift for organisational communication (Richter 2012).

The bottom-up approach to social software adoption may bring with it issues of misalignment to strategic goals, lack of financial support and stakeholder buy-in, lending support to the argument for corporate deployment of ESN (Richter et al. 2013b). Moreover, other challenges for social software such as social engineering (Warren and Leitch 2006); employee productivity concerns (Ariyur 2008; Sharkey 2008) information quality (Ariyur 2008); and other legal, security and privacy risks (Hoover 2007; Steinhart 2009) cannot be ignored. On balance, through a strategic and managed approach to the right choice of ESN, an organisation may introduce significant benefits while maintaining confidence in corporate IT infrastructure. It is here were a corporate based approach (corporate model and hybrid model) may be preferred by organizations. So overall, the hybrid approach that wraps the corporate model in a consumer model seems a very promising approach for ESNs.

The benefits of the organisational implementation of ESN are well known (Brzozowski 2009; DiMicco et al. 2008; Muller et al. 2009; Turban et al. 2011), but an often overlooked factor when choosing between the various ESN on offer is to clearly establish what the Vendor’s business model is and its integration with the existing enterprise architecture. By establishing this understanding an organisation can make a fully informed decision and one which supports the ultimate IT strategy and objectives of the firm.
Looking at the bigger picture, we can position the differentiation between the consumer and corporate model for ESNs into the broader discussion of the ‘consumerization of IT.’ The consumerization of IT refers to the adoption of consumer devices and applications in the workforce (Harris et al. 2012). This causes not only challenges for the organizations using IT, but also for the IT providers where traditionally there often has been a clear separation between the corporate providers (enterprise solutions) and consumer providers (packaged mass-market software) (Hoch 2000). This raises the question whether the traditional corporate providers can make the transformation towards more consumer based approaches and if consumer providers are willing and able to also serve the corporate market.

CONCLUDING REMARKS

The selection of an appropriate enterprise social network remains an organisational challenge as new offerings are released to market and existing products frequently alter their business models. The question remains whether an organisation should promote a truly consumer driven, employee lead initiative or endorse a program of directed, top down deployment. This question is closely related to the business model of the ESN providers. This research suggests that there are three types of business models: a consumer model, a corporate model and a hybrid model that wraps a corporate model in a consumer model. We suggest that adopting a hybrid approach will provide the benefits of both models whereby choice of application is made initially on user value but transition can be made to a more corporate system.

There are several limitations to this study. Because of the explorative nature of the research and the use of mini-cases, the current results should be seen as preliminary findings that require further research. In addition, looking retrospectively at business models may not always be the best way to derive future strategies. Moreover, due to the quickly evolving nature of this domain it is difficult to conclusively determine the future of the ESN business models. This also requires on ongoing study of the field till developments more or less stabilise. Other areas for future research are full business model studies that look beyond the customer-facing elements that were focussed upon. Also research into the possible combination of different applications and their business models may show opportunities to benefit from both the consumer model and the corporate model.

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