The Business Impact Of Social Media Analytics

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THE BUSINESS IMPACT OF SOCIAL MEDIA ANALYTICS

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Abstract

Social media analytics (SMA) is a rapidly emerging capability that provides organisations with the ability to analyse and interpret large amounts of online content to determine the attitudes and behaviours of people. The adoption and impact of SMA by businesses is still largely unexplored. In this paper we develop a framework, based on organisational motivation theory and the resource-based view that explains how SMA can bring benefits to organisations. The framework includes three key concepts: organisational motivations, SMA capabilities and benefits. The framework is developed from a synthesis of relevant literature and an analysis of 40 success stories published by SMA vendors. The framework provides a ranked catalogue of clearly defined motivations, SMA capabilities and benefits. It provides researchers with a theoretically grounded base for understanding how SMA impacts organisations, and provides a useful starting point for future empirical research. For practitioners, the framework provides a systematic means of understanding how SMA might be used to bring benefits.

Keywords: Social Media Analytics, Motivations, Capabilities, Benefits.
1 Introduction

Social media, or web-based technologies that mediate human communication, have emerged in recent years as a rapidly growing phenomenon. Social media may be defined as a “group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user generated content” (Kaplan and Haenlein, 2010, p61). Prominent examples of social media include Facebook, Twitter and YouTube together with many other social media platforms such as blogs and discussion forums. They are widely used and permeate many aspects of social and professional life (Rosemann et al., 2011). The use of social media creates very large amounts of information on a daily basis, including consumer opinions, experiences and sentiments towards brands, products and services that is potentially of great value to business (Kohli and Grover, 2008; Koudas, 2009).

Social media analytics (SMA) involves the use of analytics-based capabilities to analyse and interpret vast amounts of semi-structured and unstructured data from online sources. SMA provides businesses with insights into customer values, opinions, sentiments and perspectives on brands, marketing campaigns and new product and service opportunities (Chamlertwat et al., 2012; IBM, 2011a; Kiron et al., 2012). These insights provide valuable input to decision-makers and can influence decisions on marketing campaigns, customer experience and product and service development. SMA presents a unique opportunity for businesses to treat the market as a ‘conversation’ between companies and customers instead of the traditional B2C approach with one way communication (Larson and Watson 2011). Knowledge reach within organisations is increased through the integration of these new sources of information (Seebach et al., 2012). Although there is much interest about the business impact of SMA with practitioners, there is currently little academic research published.

There are three motivations for our research. First, the adoption and use of SMA by organisations is growing rapidly. Organisations are investing in SMA technologies to better understand their customers and perceptions of their market positions (Kiron et al., 2012). The use of SMA with large online communities enables organisations to better reach their customers with unprecedented scale and lower cost. Second, although many organisations are engaging with SMA, few (12% in a recent survey of 2100 US organisations) describe themselves as effective adopters, with multiple channels, defined metrics and social media embedded marketing operations (HBR, 2010). Third, although previous studies have highlighted some important motivations, technologies and possible benefits for SMA, there is no systematic means of explaining how SMA can bring benefits to organisations. In this study we aim to fill this gap in current research by developing a framework, based on organisational motivation theory and resource-based view (RBV) theory, to provide this explanation.

The paper is organised as follows. We first discuss the background of the study, including social media, business analytics and SMA. Next, we discuss the research approach used in the study. Following that, we present the framework, providing definitions for important concepts and relationships and ground them in organisational motivation and RBV theories. We also explain how our empirical work contributes to the framework. We then discuss implications of the framework for researchers and practitioners and suggest directions for future research. Finally we conclude the paper.

2 Background

In this section we review two relevant areas of the literature, and identify a gap in knowledge. First, we discuss social media and its use by business. Second, we discuss SMA and its impact on business.

2.1 Social Media and its use in Business

Social media enables users to generate content by sharing their knowledge, opinions and experiences on a wide variety of issues. A recent survey indicates that 4 out of 5 internet users actively use various
types of social media (NMincite, 2011). Furthermore, it is estimated that Facebook has a billion active
users and Twitter has 500 million active users in late 2012. Clearly, social media applications generate
vast amounts of data that are potentially of great use to business.

Social media has changed the way customers engage with businesses, brands, products and services.
They have become more skeptical about advertisements and rely more on information on social media
to support their decision-making (Chamlertwat et al., 2012). Experiences, opinions and sentiments
towards products and services may be either positive of negative and may influence attitudes,
perceptions and buying decisions of consumers (Mangold and David, 2009). Social media provides
businesses with many opportunities. It provides a new and powerful marketing channel that is low cost
and can be harnessed to increase customer awareness toward businesses and their associated brands,
products and services, and improve overall business efficiency (IBM, 2011a). It also enables
businesses to improve their customer relationships through better engagement on a real time basis
(Ibid). For example, National Australia Bank’s “Break Up With Your Bank” campaign on Twitter and
Youtube resulted in increases to its Twitter followers and Facebook fans, reflecting more awareness of
its business, and increases in credit card and mortgage applications, mortgage market share and
queries from competitors’ customers (Adams, 2011).

2.2 Social Media Analytics and Business Impact

The use and importance of social media by business is expected to grow in the future, in particular the
use of analytical capabilities to analyse and interpret vast amounts of online information to gain
costumer and business insight (HBR, 2010; IBM, 2011a). SMA has been widely used in e-commerce,
for customer and market intelligence, in supply chain and product development, in e-government and
politics, to achieve influence and improved customer relationships, brand awareness and marketing,
scalability and speed, lower costs and flexibility in operations. However unlike the structured data used in
traditional business analytics systems (Davenport and Harris, 2007; Kohavi et al., 2002), social media
data is characterised by heterogeneous and unstructured formats and comprises human natural
language that is heavily context dependent (Hu and Liu, 2012). Business analytics techniques used in
SMA include information retrieval and text mining, natural language processing, machine learning,
data mining, and social network analysis (Hu and Liu, 2012).

Combining these technologies with associated organisational processes and routines, and people with
relevant skills and knowledge creates to SMA capabilities (Wade and Hulland, 2004). These include
sentiment analysis, involving the analysis and interpretation of data to determine opinions and
sentiments towards products, brands and marketing campaigns, and social network analysis, involving
the analysis of relationships between social media users and communities, and the identification of key
social influencers (Rosemann et al., 2011). A number of companies, including KIA motors and The
Royal Bank of Canada, have achieved benefits from SMA including product innovation, customer
service improvement, and identification of new business opportunities (Kite, 2011).

Despite the interest about SMA and its impact on business with practitioners, there is currently no
systematic and theoretical explanation of how SMA brings benefits to businesses. We address this gap
in current knowledge by asking the research question:

How does social media analytics bring value to organisations?

3 Research Approach

The research question is answered using a research approach comprising two steps: development of an
initial framework followed by an analysis of vendor success stories to refine and enhance the
framework. The initial framework was developed from an extensive analysis of relevant literature.
Relevant papers were identified from key information systems journals and conferences based on the
terms ‘social media’, ‘social networks’, ‘web analytics’, ‘business analytics’ and ‘social media
analytics’. Much of the work in SMA is found in conferences and practitioner white papers as the
phenomenon is so recent. We also grounded the theory in the organisational motivation and RBV literature. The initial framework comprised three components, each with several instances, and two relationships between the components (Dubin, 1978).

The second step was an analysis of vendor success stories to refine and enhance definitions of the three components, and their instances. The stories were sourced from vendor websites and comprised ‘white paper’ type reports of 3-4 pages in length that discussed success stories related to the use of SMA in achieving business benefits. We argue that this approach is appropriate when studying the early adoption of SMA. It enabled us to use a large number of recent and relevant success stories. Seddon et al. (2010) used a similar approach to success story data in their test of an enterprise resource planning systems benefits framework. Although vendor success stories “paint a rose-colored picture of the use of their software” (Seddon et al., 2012, p11), we argue that they are a good source of examples to study the impact of emerging phenomenon such as SMA.

Sixty-four success stories were collected from the major vendors (IBM, SAP and SAS) and social media monitoring companies (i.e. Sentiment Metrics, Alterian, Radian6 and EvoApp). Success stories that discussed the three key components in our framework (‘motivations’, ‘SMA capabilities’ and ‘benefits’) were identified, and other success stories that focused on technology solutions were eliminated. A total of forty success stories were selected for further analysis.

Thematic content analysis was used to analyse the success story data (Braun and Clarke, 2006). Two independent coders analysed data from each success story, identifying instances of these three concepts and scoring the strength of evidence presented. For strong evidence a score of 1 was assigned and if the concept was mentioned but with few details a score of 0.5 was assigned. The sum of these scores was used to determine the strength of evidence for the concept, and expressed as a percentage of the total number of success story, rounded to the nearest 5%. The scores of the two coders were compared and where discrepancies occurred they were discussed and resolved.

Outcomes of the success story data analysis included revised definitions of the three key components and changes to the number of instances of each key concept based on the threshold for inclusion of appearing in 10% or more of the success story. The final framework included 5 instances of the concept ‘Motivation’, with 4 retained and 1 deleted from the initial framework (i.e. ‘data from online initiatives’) and 1 additional instance from the success stories. It included 7 instances of the concept ‘SMA capabilities’, with 7 retained and 2 deleted from the initial framework (i.e. ‘network analysis’, ‘predictive analysis’). It also included 8 instances of the concept ‘Benefits’, with 6 retained and 5 deleted from the initial framework (i.e. ‘better customer data’, ‘business benchmark development’, ‘increased revenue’, ‘better predictive modelling and trend analysis’, ‘surpassed competitors’) and 2 additional instances.

4 Framework

We now present the final framework. We provide detailed definitions of the three key concepts, and ground each of the concepts in organisational motivation theory and RBV theory.

Figure 1. Framework for the Business Impact of Social Media Analytics.
4.1 Organisational Motivations

The notion of ‘motivation’ has been widely discussed in psychology and refers to the specific needs or desires that guide a person to act in a certain way (Rahim et al., 2010). The concept motivation has also been used in organisational contexts. Organisational motivations are defined as the goals that an organisation pursues, and guide the subsequent actions of that organisation (Mohr, 1969). Organisational motivations have a long history in the diffusion of innovations literature: with sufficient motivation, innovations are likely to be effective (Ibid). For example, an organisation may have a goal to develop product leadership within its market niche by the introduction of innovations in the design of existing products, or to strengthen its market position, by the introduction of online marketing innovations to increase customer intimacy (Moore, 2005). In the context of SMA, organisational motivations provide the impetus for the development of SMA capabilities, which in turn enable organisations to complete SMA tasks. A number of motivations for SMA analytics may be identified from the academic literature and vendor success stories. These include the provision of insights into customer’s values and behaviour (Kiron et al., 2012). For example, Crimson Hexagon provided insight into how people were using the Microsoft Bing online service.

“With the goal of targeting specific interest groups, the company needs a clear understanding of each group’s needs and habits.” (Crimson Hexagon 2012, p1)

Another key motivation was to determine the impact of on-line marketing campaigns (Asur and Huberman, 2010), in terms of tracking whether the messages were delivered to intended customer segments and with the return on investment of social media initiatives. For example, Alterion provide social media monitoring metrics services for clients.

“Clients asked for more meaningful and appealing ways of showing them the efficacy of their campaign, rather than just having a list of bloggers who mentioned them.” (Alterion 2009, p1)

A summary of these motivations and their definitions, together with the frequency with which they appear in the success stories is provided below in Table 1.

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Description</th>
<th>Source</th>
<th>Frequency in success stories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide customer insights</td>
<td>The need to have an in-depth understanding of customer values, preferences, behaviours.</td>
<td>IBM, 2011a; Kiron et al., 2012; Lange and Sethi, 2011; Lawrence et al., 2010</td>
<td>45%</td>
</tr>
<tr>
<td>Develop social media strategies and initiatives</td>
<td>The need to conduct feasibility studies for viral marketing campaigns and other online strategies.</td>
<td>Success stories</td>
<td>35%</td>
</tr>
<tr>
<td>Gather ideas about brands, products and services</td>
<td>The need to gather new ideas about brands, products and services, including online feedback.</td>
<td>Cable, 2011; Chamlertwat et al., 2012; Kiron et al., 2012; Zeng et al., 2010</td>
<td>30%</td>
</tr>
<tr>
<td>Determine the impact of online campaigns</td>
<td>The need to measure the return on investment (ROI) and effectiveness of online marketing and outreach initiatives.</td>
<td>Asur and Huberman, 2010; IBM, 2011a; Lange and Sethi, 2011; Sterne, 2010</td>
<td>25%</td>
</tr>
<tr>
<td>Identify social influencers</td>
<td>The need to identify people or communities that have the power and ability to influence the intentions of others.</td>
<td>IBM, 2011a, Koudas, 2009, Sterne, 2010</td>
<td>10%</td>
</tr>
</tbody>
</table>

Table 1. Organisational Motivations
4.2 Social Media Analytics Capabilities

Motivations drive organisations to develop a number of social media analytics capabilities aimed to understand content, context and business impact of online posts and conversations (e.g. sentiment analysis), discover valuable customer information (e.g. insight mining), and monitor relationships between online users and communities (e.g. influence analysis, network analysis). Capabilities are the ability of organisations to utilise resources to perform a coordinated set of tasks (Cosic et al., 2012). Capabilities are a key concept within the Resource-based view (RBV) of the firm, in which organisations are conceptualised as bundles of resources (tangible assets including computer hardware and software, data and people and intangible assets including processes, knowledge and skills and routines) and capabilities (e.g. marketing or management). To be of strategic importance, resources must be valuable, rare, inimitable and non-substitutable (VRIN) (Wade and Hulland, 2004).

Organisational capabilities are a critical determinant of firm performance (Aral and Weill, 2007). They are also considered to be important drivers of customer value (Zubac et al., 2010). An organisation’s ability to perform in the market place is dependent on how well it is able to deliver different benefits to targeted customers. Many organisations are focused on social media and develop Facebook pages, tweet their latest product promotions, and try to find new customers using LinkedIn. These activities are based on capturing the attention of potential customers and creating business value.

In our theoretical framework, SMA capabilities are a mutually reinforcing system of SMA technology assets and organisational SMA competencies. SMA capabilities are the ability of an organisation to utilise SMA related resources to perform SMA tasks. For example, in order to perform a customer insight mining task (involves a deep understanding of a customer’s needs and behaviours, both identified and latent), an organisation should be able to collect resources and assets in relation to data mining techniques and with relevant people skills and competencies. Further to be able to interpret insights gained from that data, an organisation should be able to embed them into its daily business routines and practices to make the best out of it. A number of SMA capabilities may be identified from the literature and success stories. These include the ability of organisations to discover into customer behaviours, intentions, preferences and demographics (Chamlertwat et al., 2012). For example, the Amadori Group, a leading Italian poultry product company, used online marketing and social networks to communicate with younger customers. They used the ‘insight mining’ capability to better understand their customers and also the ‘sentiment analysis’ capability to determine whether customer comments express positive, negative or neutral opinions about company brands and promotion initiatives.

“…[sentiment analysis was used] to assess whether a given text [customer comment on product] expresses a positive, negative or neutral comment.” (IBM 2012, p4)

A summary of SMA capabilities and their definitions, together with the frequency with which they appear in the success stories is provided below in Table 2.

<table>
<thead>
<tr>
<th>Social Media Analytics Capabilities</th>
<th>Description</th>
<th>Source</th>
<th>Frequency in success stories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentiment analysis</td>
<td>Determine the sentiment polarity (positive, negative or neutral) or attitudes to a particular issue.</td>
<td>Asur and Huberman, 2010; Chamlertwat et al., 2012; IBM, 2011a; Kiron et al., 2012; Koudas, 2009; Lawrence et al., 2010</td>
<td>80%</td>
</tr>
<tr>
<td>Insight mining</td>
<td>Discover insight into customer behaviours, intentions, and preferences.</td>
<td>Cable, 2011; Chamlertwat et al., 2012; IBM, 2011</td>
<td>70%</td>
</tr>
<tr>
<td>Emerging issue and trend analysis</td>
<td>Track and monitor issues and how they change over time.</td>
<td>IBM, 2011a; Lawrence et al., 2010; Sterne, 2010</td>
<td>55%</td>
</tr>
</tbody>
</table>
Influence analysis
Identify the key people or communities that have made significant contributions to a particular issue.

Competitive analysis
Track and monitor comments about brands and products of competitors.

Marketing initiative measurement
Track and monitor comments about particular brands and products related to marketing campaigns.

Crisis analysis
Track and monitor comments that contain negative sentiment about brands and products.

<table>
<thead>
<tr>
<th>Influence analysis</th>
<th>Identify the key people or communities that have made significant contributions to a particular issue.</th>
<th>IBM, 2011; Koudas, 2009; Lawrence et al., 2010; Sterne, 2010</th>
<th>40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive analysis</td>
<td>Track and monitor comments about brands and products of competitors.</td>
<td>Koudas, 2009; Lange and Sethi, 2011</td>
<td>40%</td>
</tr>
<tr>
<td>Marketing initiative measurement</td>
<td>Track and monitor comments about particular brands and products related to marketing campaigns.</td>
<td>Asur and Huberman, 2010; Koudas, 2009; Sterne, 2010</td>
<td>35%</td>
</tr>
<tr>
<td>Crisis analysis</td>
<td>Track and monitor comments that contain negative sentiment about brands and products.</td>
<td>Koudas, 2009; Sterne, 2010</td>
<td>35%</td>
</tr>
</tbody>
</table>

Table 2. Social Media Analytics Capabilities

4.3 Benefits

Benefits are the extent to which SMA capabilities contribute to the success of individuals, groups and the organisation (Petter et al., 2008). There are many examples of benefits including improved decision-making, increased sales, decreased costs, market efficiency and improved brand awareness. For net-enabled business innovations (e.g. web-based sales channels, online auctions), Wheeler (2002) defines three types of benefit measures: financial (e.g. revenue, costs), perceptual (e.g. customer satisfaction) and behavioural measures (e.g. use of BA insights). A strong capability for an organisation is to demonstrate proficiencies in valuing SMA-driven initiatives using all three types of measures. However, not all three would appear at the same time and each of these may be useful at different times. For example, financial indicators may not be apparent for some time as it is required to assess value proposition on the market, while some perceptual measures are forward looking indicators. In the context of SMA, benefits provide a means of understanding the value provided by SMA to the organisation. Several SMA benefits may be identified from the literature and success stories. These include the ability to create and refine marketing strategies, initiatives and channels in order to effectively deliver messages to targeted customers (IBM, 2011a). For example, a sentiment analysis conducted by Gayrold Hotels indicated that the first 20 minutes of service has a very strong impact on customer satisfaction. As a result, hotel staff changed the way they engaged with customers.

SMA business benefits include customer-related performance (including customer satisfaction and product and service performance), financial and market value (including revenue, profits, and reduced costs), and overall organisational effectiveness. A strong capability for any organisation is to demonstrate proficiency in valuing SMA-driven initiatives using all three types of measures (perceptual, behavioural and financial). When combined together, they are a strong indicator of an organisation’s sustainable competitive advantage (Wade and Hulland, 2004).

A summary of SMA benefits and their definitions, together with the frequency with which they appear in the success stories is provided below in Table 3.

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Description</th>
<th>Source</th>
<th>Frequency in success stories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing strategy improvement</td>
<td>Create and refine marketing strategies, initiatives and channels in order to effectively deliver messages to targeted customers.</td>
<td>IBM, 2011a; Lange and Sethi, 2011; Lawrence et al., 2010; McKendrick, 2012; Zeng et al., 2010</td>
<td>75%</td>
</tr>
</tbody>
</table>
Table 3. Benefits

5 Relationships between Components

In this paper we focus particularly on developing the three components in the model. However, in this section we provide brief justifications for the two relationships.

The first relationship is Organisation Motivations lead to SMA Capabilities. Organisational motivations define the business goals that an organisation pursues, and therefore determine the capabilities required by the organisation. Motivations are useful in highlighting the areas that are of most importance to the organisation and provide a focus for the development of SMA capabilities (Rahim et al., 2010). Davenport and Harris (2007) argue that the well chosen organisational targets guide decisions about which BA-improvement projects (and relevant resources) should be undertaken in future. Furthermore, RBV has been used in strategy formulation (Grant, 1991). As any organisation may be defined as a set of specific resources and the ability of an organisation’s management in mobilising and reconfiguring those resources enables it to exploit market opportunities, resources are the most fundamental unit of analysis in any organisation process (Ibid). Thus, any SMA initiative should be aligned with an organisation’s marketing and sales strategy in order to get management endorsement and appropriate funding support.

The second relationship is SMA Capabilities lead to Benefits. SMA Capabilities provide the organisation with the ability to perform a coordinated set of tasks that provide value, as defined in the RBV (Wade and Hulland, 2004). SMA capabilities may improve firm performance (Aral and Weill, 2007) and provide customer value (Zubac et al., 2010). When SMA capabilities have VRIN properties, they also provide competitive advantage (Wade and Hulland, 2004). Greater value is realised when SMA capabilities synergistically combine with other organisational capabilities, and lead to emergent properties that provide further value (Nevo and Wade, 2011).

6 Discussion

In this study, we explore the adoption and impact of SMA by businesses, and develop a framework that explains how organisational motivations lead to SMA capabilities and subsequently to benefits.
An analysis of 40 SMA success stories from vendor web sites was used to refine and enhance the framework. The dominant motivation for organisations to adopt and use SMA is to provide customer insights (45%) and the dominant SMA capabilities are sentiment analysis (80%) and insight mining (70%). Although we did not aim to specifically explore the relationships between the components in the framework, there is some evidence in the success stories that particular motivations relate to particular SMA capabilities. For example, businesses that focus on gathering customer insights, typically use sentiment analysis and insight mining (Hu and Liu, 2012). The dominant benefits from SMA are marketing strategy improvement (75%) and better customer engagement (65%). While SMA benefits have been difficult to measure (HBR, 2010), a wide range of benefits is identified in the framework. There is some evidence in the success stories that SMA capabilities are related to particular benefits. For example, businesses that have developed the sentiment analysis capability have achieved market strategy improvement by assessing the effectiveness of marketing campaigns and initiatives, and subsequently refining their marketing strategies (IBM, 2011b).

A number of insights emerged from the study including the importance of organisational motivations, dynamic capabilities and business agility, core capabilities and outsourcing, and further development of the framework as a mid-level theory.

The Importance of Organisational Motivation Organisational motivation is an important concept in the framework, as it explains why SMA capabilities are developed. The combination of organisational motivation theory (Mohr, 1969) with the RBV theory (Wade and Hulland, 2004) makes a unique and important contribution to the IS literature. Organisational motivations provide the impetus and for the development of particular SMA capabilities and may be used to justify particular capability development. Motivations types have been successfully used in inter-organisational systems adoption research where they have been categorised as either techno-economic, where the goals are financial or efficiency-based or socio-political, where the goals are based on market pressures, professional norms, and management fashion (Rahim et al., 2010). Further exploration of different types of motivation within the context of SMA would be useful, and may help organisations to focus on the development of specific SMA capabilities and to better determine measures for benefits achieved.

Dynamic Capabilities and Business Agility SMA provides insights that enable businesses to be agile and rapidly respond to environmental change within turbulent environments (Seebach et al., 2012; Teece, 2007). Insights from SMA are used for ‘sensing’ industry trends, customer perceptions and new business opportunities. ‘Sensing’ is an important sub-capability within dynamic capabilities, which are concerned with ‘resource renewal’, reconfiguring resources to address environmental changes (Shanks and Bekmamedova, 2012; Wheeler 2002). Dynamic capabilities are the means by which businesses identify and implement ‘digital options’, or new ways to compete in the market place (Overby et al., 2006). Examples from SMA include new product design and development based on customer perceptions and feedbacks (Richter et al., 2011).

Dynamic capabilities may be defined as having four sub-capabilities, sensing, prioritising based on business case, implementing and measuring new innovations (Shanks and Bekmamedova, 2012; Wheeler, 2002). In SMA, these sub-capabilities include capturing social media data, analysing the data to generate insight and acting on the insight.

Core Capabilities and Outsourcing SMA capabilities comprise the competencies, organisational processes and routines, and SMA technology. Core SMA capabilities “…are needed to facilitate the exploitation of [SMA], measurable in terms of [SMA] activities supported, and resulting business performance” (Willcocks and Feeny, 2006, p49). Vendor success stories have shown that technical people skills and competencies and SMA technology is typically outsourced to SMA vendors. These capabilities are commodities and do not provide VRIN characteristics. For example, the Hadoop data storage platform, which is designed to manage huge amounts of unstructured data and various SMA data analysis tools, are widely available and can be outsourced. Core SMA capabilities include the people skills and competencies necessary to interpret and act on SMA insights and the organisational...
processes and routines necessary to implement SMA innovations. These core SMA capabilities should be retained within organisations to achieve competitive advantage (Prahalad and Hamel, 1990).

Further development of the framework The framework required further development. In particular, the nature of the relationships needs further exploration.

7 Conclusion

In this paper, we have explored the business impact of SMA. We have developed a framework that explains how organisational motivations lead to SMA capabilities, which in turn lead to benefits. There are a number of implications for research and practice.

For researchers, the framework is soundly based in organisational motivation and RBV theory. There is little doubt that social media is embedding itself within the business and social activities of people. The evolution of Web 2.0 and social media technology has led to creation of vast amounts of information which may be analysed and interpreted to gain customer and business insights. The SMA framework provides researchers with a lens for understanding and explaining the business impact of SMA. For practitioners, the framework provides a systematic means of planning and managing SMA projects. It provides a catalogue of typical motivations, SMA capabilities and benefits, and can guide SMA investment decisions.

Our research is limited by the use of vendor success stories. Although we argue that this is appropriate for the initial development of the framework, further research will require detailed case studies and surveys to further evaluate and refine the framework.

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