

# The Value of Big Data: Marketing vs. IT

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**Abstract**— the notion of big data holds a processing and technology background. In an era that has become noteworthy for the widespread availability and addition of larger data sets in exploiting the massive amounts of data comprised therein (LaValle et al. 2013). Its definition has undergone a considerable evolution as evidenced by its shifts away from its original connotations, which revolved around the control of data varieties, velocity, and volume. The term currently incorporates renewed attention, which emanates from open source technology combinations aimed at the storage and manipulation of data. It has come to include an enhanced importance in the contexts of business intelligence, as well as decision-making and value opportunity. While a significant degree of marketing, endeavors are retrospective in nature. The promise provided by the concept of big data lies in its capabilities, to facilitate predictions and decisions upon which it holds a basis (Gantz & Reinsel, 2011). This idea plays a significant role in eliciting excitement for businesses. The analysis of data results in enhancing the possibility of the revelation of trends and the determination of correlations upon which companies can undertake their operations in an efficient manner (Gantz & Reinsel, 2011). Organizations can only realize the significance adopted by big data and its components of interpretation, intelligence and analytics in scenarios where they can employ the relevance and right data perspectives (Gantz & Reinsel, 2011). The realization of these two metrics results in driving and affecting operational priorities. Active organizations highlight an understanding of the value as opposed to technology that requires practitioners, executives, and data analysts operating in varying functions that require the acquisition of a digital mindset. From a marketing and marketing management perspective, the challenge here is significant (Gantz & Reinsel, 2011).

**Keywords** — Big Data, Business, Consumer, Information, Marketing, IT, Service,

## 1 INTRODUCTION

Earlier periods in the evolution of the commercial web platform were noteworthy for the important role that online advertising adopted in driving the growth and development of the internet. During this time, some studies extended to indicate that advertisement-supported internet was sustaining a significant number of jobs in the United States (LaValle et al., 2013). The contributions of the interactive marketing sector were particularly immense, to the extent that they injected billions into the economy. This industry became critical in the establishment and development of significant data. Increasingly accurate and precise data concerning consumer traits, their locations, the nature and type of devices they utilize. And the massive categories of products and services that interested them combined with a broad range of powerful analytics have served to enable the marketing industry to reach more consumers actually (LaValle et al., 2013). Full-page national magazine advertisements and expensive television ad slots began to adopt a crude and outdated nature in comparison to the instantaneously measured and precisely segmented online advertisement marketplace.

More so, the effective facilitation of marketing and other fundamental business activities, big data has often incorporated a nature that has remained largely misunderstood, especially from a business perspective (LaValle et al., 2013). While it has always been largely about the employment of the right information at the appropriate time for the relevant reasons, debates continue concerning the work of specific information by entities within the business community. An adequate analysis of big data and its evolution reveals that it is the outcome of a digital era, which has emerged to stay. It has also adopted the fundamental role of a catalyst in a broad range of areas in both the society and the digital business realm (Davenport et al., 2013).

### 1.1 The Value of Big Data: Marketing vs. Information Technology

There is a widespread consensus, stating that the coming era will be noteworthy for the manner. In which the realm of marketing will overtake information technology in terms of investment and interest in big data (Davenport et al., 2013). This consensus continues to indicate that there is an urgent need for analytics and big data to combine with the realm of marketing in the formulation. And the implementation of mechanisms for driving businesses forward and connecting them with consumers (Davenport et al., 2013). It has become increasingly complicated for

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both individuals and organizations to keep digital marketing within the context of a separate discipline. The realm of marketing has emerged to incorporate a digital nature (Davenport et al., 2013). Within this context, it is increasingly becoming difficult to consider marketing as a channel in isolation as opposed to perceiving it a general way (Davenport et al., 2013).

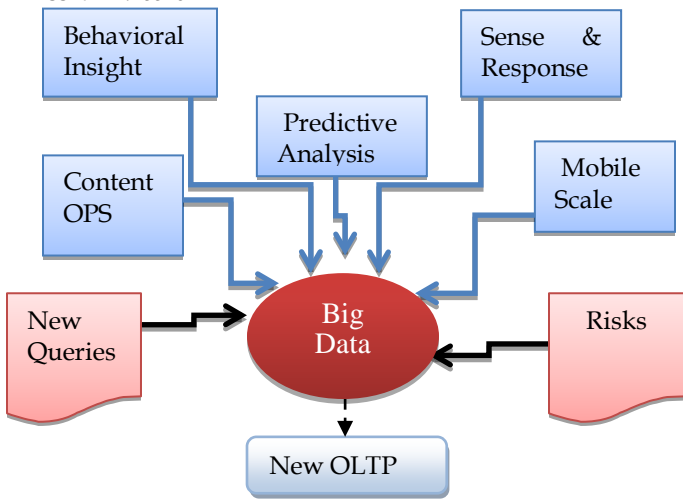
With organizations continually adopting a more consumer-centric nature, big data has managed to penetrate the realm of marketing at a vast and rapid rate in comparison to information technology (Earl, & Feeny, 2012). The resulting effect in this scenario is that there is a significant possibility for marketing departments to invest substantially in big data as much as their information technology counterparts. Efforts aimed at the creation of mergers between information technology and commercialization departments ought to commence with compelling considerations of the manner in which the activities relate to the overall strategy (Earl, & Feeny, 2012). While the indication has always been that this endeavor needs to adopt a top-down approach, a bottom-up approach is also necessary. This effort incorporates a mainly essential nature because delegating this responsibility can be highly detrimental. The basis for this particular scenario is that marketing naturally transcends a broad range of functions within the operations of businesses (Earl, & Feeny, 2012). The danger in this particular scenario might emanate from the collection of information without accurate. Practical knowledge concerning the applicable mechanisms with which to exploit it fully, which can have a detrimental effect on factors. For example, such as the time resources. And the energy that organizations are able or willing to expend on the exploration of big data.

A considerable number of marketing executives and experts currently highlight an enhanced focus on attempts aimed at toe formulation. Of a sufficient understanding concerning the value of big data in justifying expenditure on it as a resource (Gantz & Reinsel, 2011). Significant shifts continue to stand evident from currently debated topics such as the attribution of marketing expenditure. As well as the formulation of an enhanced understanding of all the interactions that consumers have with businesses (Gantz & Reinsel, 2011). Within this particular context, the margin for error incorporates an enhanced nature especially in light of insufficient communication endeavors between marketers and information technology departments. There is a significant danger for organizations to teams of people

servicing the purpose of formulating excellent models and mining insights on consumers and having the success of the process hampered by the absence of communication with marketing departments. Despite the reality of this danger, it is worth noting that this trend will soon change due to the increasing importance of analytics to the realm of marketing (Gantz & Reinsel, 2011). With around seventy percent of organizations, currently undertaking measures for implementing big data, into their ranks within the coming two years. Moreover, there is a substantial opportunity for brands to get the implementation right (Mayer-Schönberger & Cukier, 2013). The fear in this particular scenario is that marketers might attempt to achieve this objective alone and lack the analytics or insight optics, thus tarnishing the value of big data within their organizations. Collaborations between marketing and information technology departments are highly critical within this context (Mayer-Schönberger & Cukier, 2013).

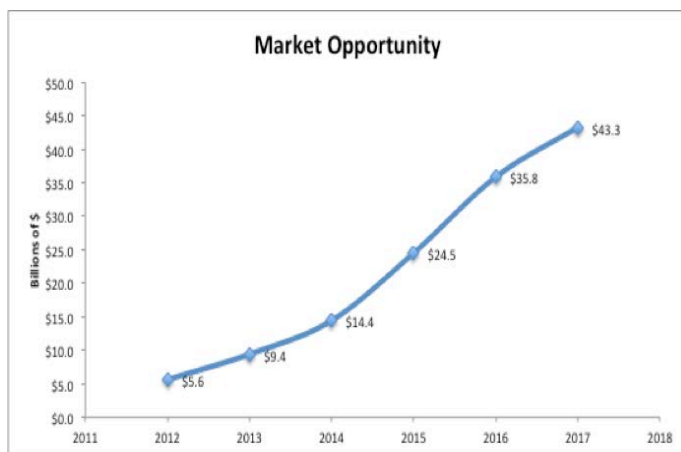
### 1.1.1 Determining Value

Despite the current position of big data within organizations as a useful and popular trend, broad ranges of successful exemplifications are noteworthy for their employment of information. From all available channels in efforts aimed at differentiating between helpful and useless data (Mayer-Schönberger & Cukier, 2013). Data is a critical component in the understanding and the undertaking of attribution. Although it requires the collection of data from every form of interaction as well as all the elements involved in the design and implementation of advertisement impressions (Mayer-Schönberger & Cukier, 2013). It also means the undertaking of pulling everything together and aligning them with analytics. As well, adequate understanding of the manner in which all the elements combine during the course of these interactions (Brown et al., 2011). It is highly critical for organizations to refrain from perceiving big data from the context of new data, social networks, and weblogs. As opposed to adopting this perception, they ought to understand big data for marketing in the framework of all data, which encompasses both traditional and big data (Brown et al., 2011). The summary benefits of big data are as follows in Figure 1:



**Figure 1**

Industries like a retail and financial services, which have been noteworthy for their undertaking of creative and innovative exploits with big data. Have had to achieve this objective while simultaneously navigating considerable levels of uncertain economic scenarios and high degrees of competition. From a financial services point of view, there is a pressing need for the acceptance of more consumer-centric approaches as opposed to redefining. And pushing products, in relation to the manner in which they arbitrate across the diverse and broader business spectrum (Wan et al., 2014). The use of big data has been associated with increased market opportunities while increasing the value of enterprises. It has predicted that market opportunities for the next years as shown below in Figure 2:



Source: marketing555.wordpress.com

**Figure 2**

### 1.1.2 Personalization

One of the most fundamental uses of analytics and

big data from a business perspective stands out as the personalization of content, which finds a broad range of common associations with the retail industry. Within the context of personalization, it is worth noting that brand customization and browsing a more personalized nature to consumers (Larose, 2014). This characteristic holds a significant potential to result in driving sales volumes and encouraging customer loyalty. A practical analysis of companies operating in various industries reveals. That achieving the objective personalization plays a crucial role in the planning of relevant and timely products and services, which translates to value for money (Larose, 2014). Within this context, response rates can skyrocket by up to two hundred percent in a balance that is notable for the tendency of consumers to respond highly to the products and services they perceive as valuable. Firms can also secure customer engagement, which is currently difficult to outsource due to the evident lack of control (Larose, 2014). Through the personalization of user experiences, firms place themselves in a strategic position to gain buying signals even prior to the execution of marketing campaigns. Within this context, data latency enables them to ensure an adequate fragmentation (Larose, 2014). The major factor for firms to consider. Is that the utilization of marketing and big data in alignment with corporate strategy results in, ensuring increased levels of acknowledgment and transparency and granting control to the consumer (Larose, 2014).

Previous times were noteworthy for the lack of control especially customers. During these times, companies placed a broad range of powers to their messages, which rendered them less transparent. Currently, companies hold the responsibility of accounting for transparency and authenticity (Larose, 2014). The most exciting factor concerning the directions that businesses are choosing to adopt will result in enhancing the power of consumers due to the wide availability of information. The success of companies is continually becoming more reliant on data, and the current generation of consumers have predisposition towards the adoption of data into their purchase patterns (Larose, 2014). Data is unable to solve any problems on its own because its utilization and effectiveness are also highly reliant on the capability of both people and businesses to employ it in their endeavors. Companies currently hold the responsibility of establishing and maintaining their focus on the experience and utilize the data to facilitate and improve their skills. The resulting effect in this scenario is that it is going to result in driving both exponential change and value. Firm fail to utilize data

in an efficient manner. Will widely adopt an irrelevant nature to their consumers and eventually have their brands absorbed by others (Zhang & Zhu, 2014). The utilization of big data in alignment with marketing and business strategies will result in enhancing and expanding the retail environment. Although companies will only manage to attain this objective if they utilize it as a tool for driving value and heightening consumer experience (Zhang & Zhu, 2014).

While a considerable majority of companies has managed to attain the objective of effectiveness through the employment of single big data strategies, they can also achieve maximum efficiency by leveraging it around a combination of strategies. An effective exemplification of this aspect finds evidence in the financial services sector. Where firms have managed to leverage social analytics in the form of social and non-transactional data and performance management in driving their customer service strategies and objectives (Zhang & Zhu, 2014). Within this context, performance management employs business intelligence and transactional data. Financial institutions such as banks determine their best consumers basing on metrics like balance and number of accounts, for which top users receive premium service. Within their endeavors, to integrate social metrics into this strategy, they consider active online customers for high-level initiatives. These financial institutions perceive this policy as both balanced and efficient in their efforts to ensure the attainment of excellence in their customer care efforts (Zhang & Zhu, 2014). These institutions are undertaking their best efforts to merge their marketing customer attention and information technology departments. Into a collaborative unit that will come up with ideas that are both practical and useful in ensuring the enhancement of consumer experience through a combination of realistic and efficient ideas (Zhang & Zhu, 2014).

## 2. Hurdles in Implementing Big Data

There is considerable pressure for the marketing endeavors to derive their drive from data. And a consensus that the analytics, which accompany big data, will continue to become a fundamental part of operations for organizations (Zhang & Gong, 2014). Despite the urgency of the need for implementing big data analytics within the operations of organizations. It is also worth noting that the absence of data analytic capabilities and skills, as well as antiquated business procedures, will continue to hamper

these endeavors (Zhang & Gong, 2014). One significant hurdle emanates from the tendency for data-driven marketing to require the untangling of unstructured data. The implication here is that companies objectifying taking their marketing efforts to the next level will require enhanced capabilities. Probably is to ensure efficient collection and analysis of data in massive, complicated, and unstructured amounts (Zhang & Gong, 2014). This factor presents marketers with the requirement of the traditional information that their companies collect with interaction data. And integrate both offline and online sources in the creation of a single and simplified view of their consumers (Zhang & Gong, 2014). Data-driven marketing is continually becoming about formulating an adequate understanding of customers from both offline and online perspectives, and marketers are facing a broad range of challenges in their efforts to stitch those perceptions together.

Another fundamental problem emerges from the manner in which manual business procedures are continuing to adopt the nature of critical obstacles. While a considerable majority of marketing departments have managed to achieve the objective of achieving their goals. Their efforts, to leverage data tends to encounter a number of obstructions during the flow of the process (Zhang & Gong, 2014). These barriers are noteworthy for their tendency to emerge from an enhanced reliance on unrefined procedures and deficiency of data analytic skills as opposed to the adoption of technology. Around forty-two percent of the companies in the United States, cite the shortage of proceedings. For bringing insight into their decision-making endeavors as the most significant barrier to their efforts to employ data in their decision-making processes (Zhang & Gong, 2014). Other research studies conclude that around Forty-eight percent of marketers still utilize data on an ad hoc basis with only around thirty-three percent having embedding data strategically or systematically into their general standard procedures. Firms highlight an urgent need for facilitating infrastructure that allows them the option of adding to their agility in their operations (Zhang & Gong, 2014). While these companies highlight a need for automated procedures. A considerable number of marketers are still reliant on outdated tools such as Excel spreadsheets, which have limitations in terms of optimization (Zhang & Gong, 2014). While this factor is still a shortcoming for a significant number of businesses, companies are continuing to highlight their predisposition towards altering the scenario. Around eighty percent of entities within the



realm of marketing indicate their desire and objective to implement projects. Aimed at the automation of data quality, and the optimization of workflow processes and performance management (Zhang & Gong, 2014).

## Conclusion

A considerable majority of marketers highlight a lack of control over the management of data and strategy. They are also highly reliant on information technology in their efforts to gain pertinent data. It is also increasingly becoming conventional wisdom that with marketing continually highlighting a data-driven nature and becoming highly reliant on information technology processes Marketing experts will become significant customers of information technology departments. Despite the conventional view highlighted by this wisdom, a great number of marketers do not perceive information technology within the context of a strategic partner. A considerable number of data scientists and experts highlight a differing perception. Around thirty-five percent of these professionals, perceive marketers within the context of strategic partners. The stakes, which businesses can attain ought to drive them towards the formulation of endeavors aimed at bridging this gap. The creation of an active partnership between these two parallel albeit strategic partners into a working and productive unit requires companies to define success for them and providing them with resources that they can utilize in attaining it entirely. Within this context, companies can use the success as the foundation upon which these two entities can collaborate towards the attainment of organizational objectives.

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