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Change of Era in Business Enterprise by an Emphasis of Smac

Management

KEYWORDS: Cloud Computing, Hyper – intelligent software platform etc.

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ABSTRACT

The consumer technology model is now penetrating, and beginning to transform, the corporation in a significant way. This new IT architecture, which we call the "SMAC stack" (for social, mobile, analytics and cloud), is enabling the creation of hyper-intelligent software platforms that address myriad issues, from sales to customer service to the design of new products to the management process. SMAC (social, mobile, analytics and cloud) is the concept that four technologies are responsible for change in enterprise and business innovation. Basic concept is to get closure to customer with its principle of minimal overhead and maximum reach.

INTRODUCTION

In today's era innovation is rapidly driving customer, businesses and technology firms. Rules of Business have changed and independent of past technologies. In all Industries across the business landscape, the SMAC is eroding the century-old blueprint of value changes and innovating new virtualized and highly distributed Business Process Models [5]. Because of its technological power its component have a multiplying changes which is a leading disruptor to the business-enterprise ecosystem over in upcoming few years some of the responsible factors are enlisted below[9].

- Sociality
- Mobility
- Digital Era
- Change in enterprise

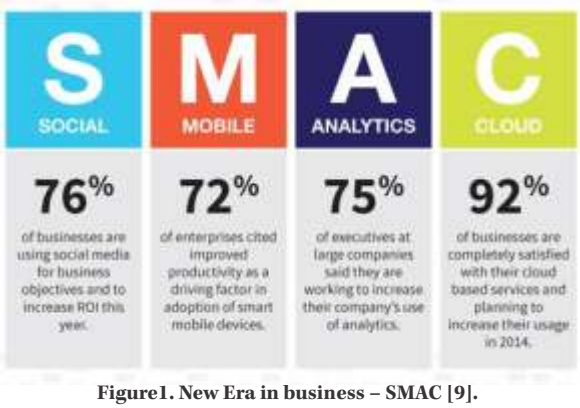

Figure1. New Era in business – SMAC [9].

FOUR PILLARS OF SMAC

1. SOCIAL MEDIA

Social media has provided businesses with new ways to reach and interact with customers, while mobile technologies have changed the way people communicate, shop and work. A social media strategy has become a must for all enterprises, be it banks, retailers or the government. With over one billion individuals logged on to various social networks, people are now using social media for advice on what products to buy, where to shop and even regarding what firms they want to work with.

Facebook, LinkedIn, Twitter – the new way how businesses and individuals are connecting with each other, globally. Enterprises are increasingly leveraging social media for customer engagement and brand building, as more and more individuals are becoming active Internet users and using social media. Businesses are promoted and spread by viral Social Media. Social Media modes differ, so their applications are prioritized from business to business.

In India trend of Social Media is actively increasing which in turn providing opportunities for enterprises to leverage social media strategy. The social media usage is primarily driven by the rising number of active Internet users, who are accessing Internet through host of devices. The mobile Internet users in the country are expected to grow from 4.1 million users in 2009 to 164.8 million in 2015 at a CAGR of 85 percent.

Social data includes information harnessed from the likes of Twitter, Facebook, LinkedIn, Yammer and VK to uncover the "timelines" of a customer base: What they talk about, what they are interested in, what they are looking forward to and what are their basic family demographics, all of which can especially be gleaned with the help of a vendor like DataSift [8].

2. MOBILITY

Mobile devices are the cornerstone of how new business is being built. Mobile devices allow users to constantly update their profile, stay aware of deals and promotions, and track locations and buying habits by virtue of connecting to various wireless signals and near-field communication (NFC) devices. Mobile devices have changed the way people access digital content. Smart phones and tablets have brought rich, digital content to the fingertips of consumers. Shoppers are increasingly using their mobile devices for everything from browsing to comparing to buying products. Governments are also reaching out to their citizens, using mobile devices as an efficient channel. Enterprises must also jump on to the mobility bandwagon, and ensure that their applications are mobile ready. Thanks to smartphones, hundreds of millions of people have the equivalent of a late-1990s supercomputer in their pocket. The power that is inherent in such technology is both obvious and striking. Witness the data Apple Pay allows Apple, credit card companies and merchants to gather: location, time and date, identity, available cards, available balance, type of phone, sequence of purchases, ratio of Apple Pay purchases to regular card-style transactions, wireless carrier of choice, average battery charge (great for considering what impulse buys happen after a long day out) and even more. So many data points, and they are only increasing [8].

3. ANALYTICS

As databases have grown larger and processors and memory have become capable of chewing through hundreds of millions of records in a short time, we have begun to see how analytics can do more than just track clicks. Analytics can establish links between entities and make intelligent predictions about customer behavior based on knowledge a system has about a customer -- knowledge that has been informed by social networking. Every year, companies and individuals generate billions of gigabytes of data. Enterprises need to recognize the prospect analytics represents and should adapt their IT

strategy to capture such opportunities. With all of these increasing data points, analytics solutions are scaling to match. Between machine-learning services, which let computers march through data to learn patterns and insights, and the advent of new types of databases, analytics grows more powerful by the day. In particular, there are now graph databases -- databases that are built, not to relate rows and tables, but to relate entities with one another, such as a customer to a specific book or a movie to a specific subscriber (in the case of Netflix). These graph databases have changed the big data/social data game. Databases themselves are now smarter and lending themselves more to analytics applications. Companies have always kept large amounts of information. While it's true that the amount of data in the world keeps growing, the real change has been in the ways that we access that data and use it to create value. The world is moving from 'Traditional analytics' to 'Predictive analytics' and now increasingly towards 'Prescriptive analytics'. Analytics allow businesses to understand how, when and where people consume certain goods and services [8].

4. CLOUD

Cloud provides a new way to access technology and the data a business needs to quickly respond to changing markets and solve business problems. While each of the four technologies can impact a business individually, their convergence is proving to be a disruptive force that is creating entirely new business models for service providers. The cloud element of SMAC refers to the capability a business has to spin up vast amounts of capacity that are paid for by the minute or hour. Businesses do not need to spend millions of dollars building another data warehouse – they simply rent it from a cloud provider, do their work and turn it off. When the business environment changes, they simply spin up another cluster in the cloud, pay another few hundred dollars and continue building insights [2].

The cloud grows ever stronger. Microsoft has put Hadoop [8] up in the cloud and has made Azure Machine Learning available for data scientists to plow through data and have the service itself suggest comparisons, predictions and key points. Amazon and Google are playing catch-up here in the specialized data services department, but from a raw compute capacity, there has never before been a time when you could acquire fast computing at mere pennies per hour. Any of these services will let you scale up and down your capacity and compute power as necessary, and even the heaviest workloads can benefit from running on someone else's millions of servers. Cloud computing services are provided through public cloud, private cloud, and hybrid cloud environments wherein public cloud services have a larger pie of the total market owing to their easy availability, accessibility, and low cost of adoption. Per Gartner, the public cloud services market is expected to grow 18.5 percent in 2013 to a reach USD 131.0 billion from USD 111.0 billion in 2012. The growth is driven by the emerging segment of Infrastructure-as-a-Service (IaaS), which includes cloud compute, storage and print services. IaaS segment is expected to grow 47.3 percent in 2013 to reach USD 9.0 billion [8].

FRAMEWORK TO BUILD BUSINESS MODELS-through SMAC STRATEGY

Building SMAC strategies for organizations is well summed up by the 3I.

INTEGRATED

Organizations need to draw up an integrated approach for capturing the synergy offered by complementing SMAC technologies.

The integration of the technologies requires clear policies and guidelines as well as management tools that can automate business processes. The media company Netflix is often cited as an example of a business that has successfully harnessed the power of SMAC. For example, when a Netflix member streams a TV show from the Netflix cloud to their iPad, they are given the option of signing into Netflix with Face book's social login. After viewing a show, members are given multiple ways to provide social feedback. They can rate content with stars, write reviews and/or share what they just watched with friends on Facebook or Twitter. Customer data is stored in the cloud and Netflix can break down its analysis to such a granular a level that its recommendation engine can personalize suggestions for individual family members who share the same account, a concept known as 1:1 marketing. The principle of "sum of whole is greater than its parts" holds true here with each function enabling another to maximize its effect as one integrated stack [4]. This multiplier effect facilitates a productive organization that is integrated and collaborative in real time. It is therefore important for organizations to implement well-rounded strategies.

INNOVATIVE

SMAC strategies need to be innovative in nature as innovation brings revolution in era [2]. The innovation of the strategy should ensure their seamless adoption by organizations of all types and sizes, specifically large firms that have complex hierarchies and set organizational procedures. Innovation should also catapult organizations to set them up as organizations of the future.

INSIGHTFUL

SMAC strategies should be deeply understood before building any organizational model. The SMAC strategy should clearly articulate and provide insights into the benefits that accrue to organizations because of SMAC adoption. The strategy should provide insights into competitive advantages that SMAC offers to organizations. Redbus, an online travel portal leverages Google's BigQuery [6] to analyze and derive insights regarding booking and inventory data for capacity planning involving hundreds of bus operators that serve more than 10,000 routes.

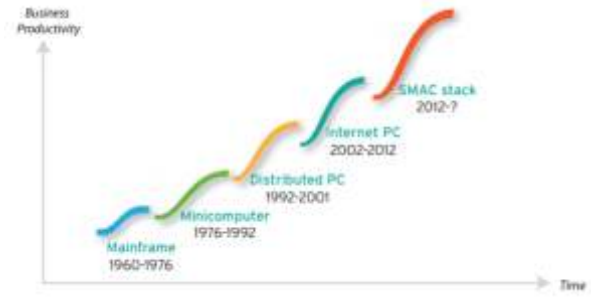

Figure 2: Business Productivity over time. [6]

HOW SMAC TRANSFORMING BUSINESS AND THE RISKS AND CHALLENGES

According to studies, mobile technology is likely to have highest positive impact in businesses in the next 5 years. This will be followed by cloud computing and business analytics. Social media will have 4th highest positive impact in businesses [5].

These technologies when combined together are popularly known in the business world as SMAC. As an acronym, it stands for SMAC – social, mobility, analytics, and cloud. For a consumer, SMAC is something all of us are interacting with everyday. SMAC paints a rosy picture of the future potential in businesses, it is important to keep in mind the risks & challenges associated with it:

1. Although it is a great empowering tool for the companies it can also cause great damage if not utilized efficiently.

2. Although we use technology to simplify solutions, the software and procedures to implement SMAC are fairly complex and hence you need to make sure the results will justify the cost.

3. SMAC can't be a standalone, processes in the company need to be integrated enough to support and harness the power.

4. When dealing with big data analytic, analysis may reflect unexpected results which may be confuse the analyst.

5. It is important to keep in mind that the "one size fits all" approach should not be followed. Different adaptations of the strategy need to be used as per the prevailing situations.

6. Before implementing a new technology it is vital that proper assessment is made keeping in mind the ROI of the suggested plan.

7. Design of the product is as important as the product itself. Hence it is important to make use of SMAC in the best possible way [8].

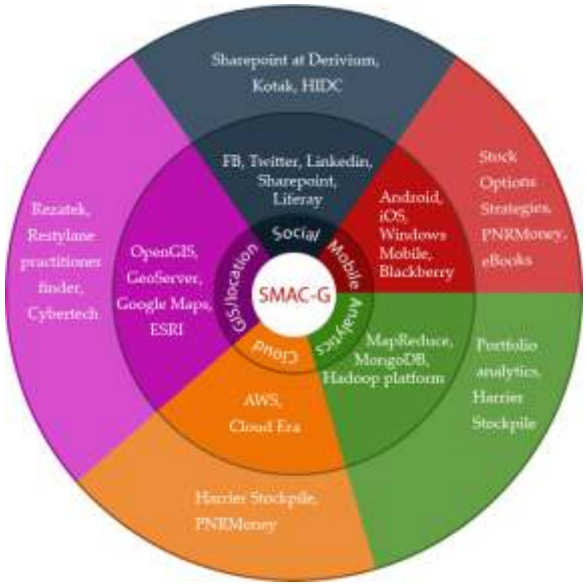

Figure 3: GIS based SMAC [8]

SMAC IS THE NEW FLAVOR OF "IT COMPANIES"

Nasscom's Strategic Review [4] 2014 report says India's software industry experts may grow by 13% driven by analytics and cloud based services. The Indian software industry's exports may grow by about 13% in fiscal year 2014 to $87 billion (around Rs.5.4 trillion today), driven by its ability to offer solutions that integrate new business models such as analytics and cloud-based services, which are part of SMAC (cloud, mobile, analytics, big data and social media services) with traditional ones[8].

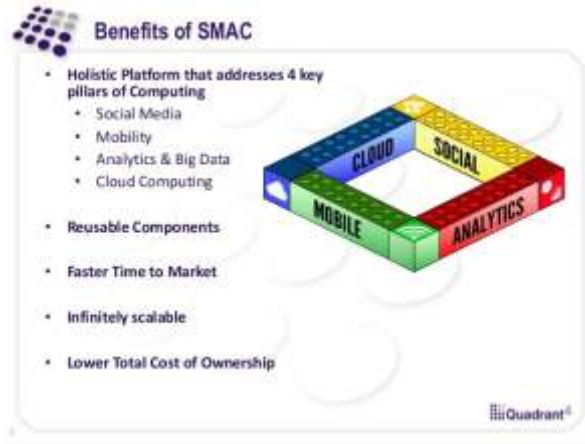

Figure 4: Benefits of SMAC [8]

CONCLUSION

Every application and every human being is, or will be touched by, at-least one technology of SMAC stack. Business leaders need to be cautious of advancement in this stack and should not miss the bandwagon, as this technology stack in coming years will transform the way they run their businesses. So, this stack has high potential to disrupt their IT landscape.

SMAC is growing stronger and smarter every day. Do you have a SMAC strategy? How will you grow yours to deliver real, positive benefits to your business? What is your road map? How will you monitor this trend going forward? The better the initial thinking and clarity on what is expected from SMAC in terms of business impact and results, the better the probability of success. Taking into account the SMAC influencers and dimensions while formulating your SMAC strategies, and defining an enterprise-level architecture that incorporates these technologies as well as an implementable roadmap, will help ensure positive impact from SMAC investments.

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