

Survey Report



Use of Big Data Technology in Pakistani Organizations

By Research and Publications Directorate, ICMA Pakistan

Survey Objective

In recent times, global organizations are using 'Big data analytics' to analyze and harness data in order to make informed business decisions; identify new opportunities; efficient operations; cost reductions; higher profits and satisfied customers. With changed nature of businesses and rapid growth of technology, the role of finance professionals, including management accountants, have also evolved significantly. It has now become imperative for finance professionals to keep them updated with new technological advancements that are impacting the profession. Big data Analytics is one of such technologies which need to be acquired as a 'must-have skill' by those who intend to pursue a career in finance. Keeping up with the need of this technology, the Research and Publications

Committee decided to bring out the Nov-Dec 2018 issue of Management Accountant on the theme of 'Big Data Analytics and the Finance Professionals'. This survey has been designed to assess the awareness, use and readiness of our members on big data use and technology.

Survey Methodology

The feedback survey questionnaire was uploaded on Institute's website on 1st December 2018 with connecting link to Google Drive to provide an opportunity to participants to submit responses online. The members were also sent emails and SMS with short link of survey to provide their input online from their mobile devices. The deadline for filling-up the online survey was 15th December 2018.

Summary

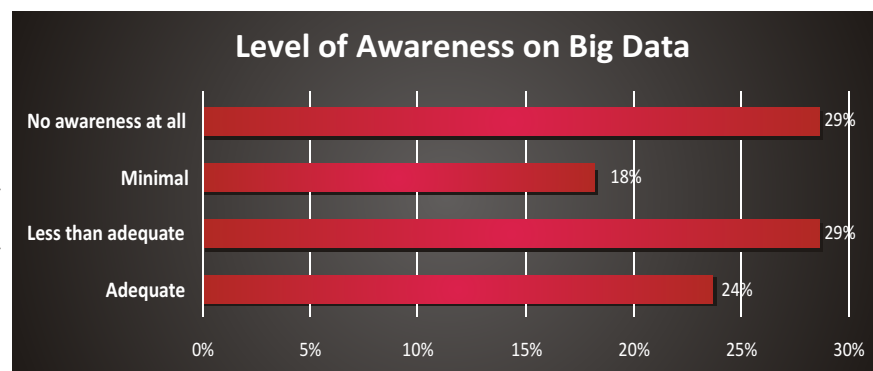
The survey results indicate that there is extremely limited know-how about the use of business analytics and big data technology in business organizations in Pakistan. Further, there is also lack of understanding and expertise in Pakistani firms on how to prepare themselves in adopting the big data system in order to meet the demands of this emerging technology which would be making many functions of business organization obsolete. The more positive outcome of this survey is a greater realization in the management accountants to acquire the big data technology as an 'additional skill' and for this purpose they have evinced interest in participating in any training program on this subject to be organized by ICMA Pakistan.

Survey Results

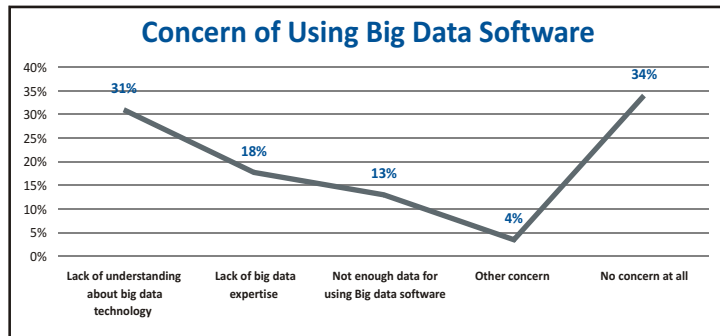
Limited awareness on Big Data in Pakistani organizations

In today's global business scenario, the adoption of business analytics and Big Data is not confined to IT and technology related firms, rather it has become a necessity for every organization that hopes to maintain a competitive advantage in market and build fool-proof security system. The first question was intended to know about the level of awareness in Pakistani organizations on Big Data technology.

The Survey reveals that there is limited awareness on use of Big Data technology in Pakistani organizations. Only 24% respondents say that they have 'adequate' awareness, whereas the remaining 76% have either less than adequate; minimal or no awareness at all about Big Data technology.

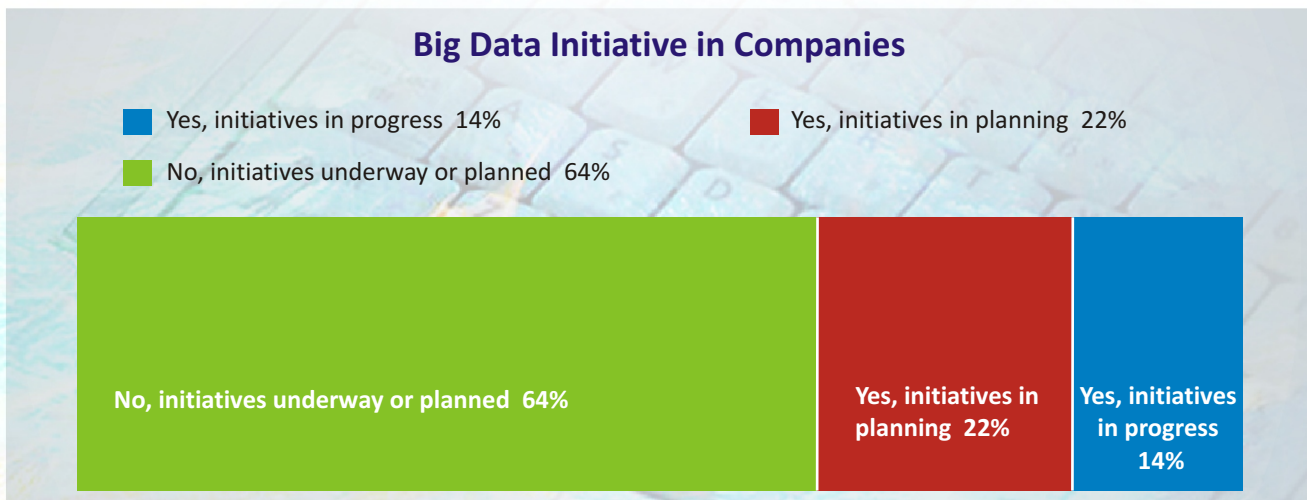


The survey participants were also asked as to what is the primary concern of their organizations that hinders them to use big data software and, in this context, various options were provided for selection. The response received is mixed 34% saying that they have no concern at all; 31% indicating 'Lack of Understanding and 18% pointing to 'Lack of big data expertise' as their primary concern. Around 13% have stated that since their organization do not have enough data so they are not in need for big data software.



Low Level of Preparedness of Pakistani firms in adopting Big Data

The survey further reveals that there is very low preparedness level of Pakistani firms in adopting the latest Big Data technology including Business Analytics. Around 64% survey respondents say that there are no initiatives under way or planned in their organizations towards acquiring big data technology. Almost 14% of respondents have stated that initiatives have been taken and in progress whereas 22% say they have it in their planning.



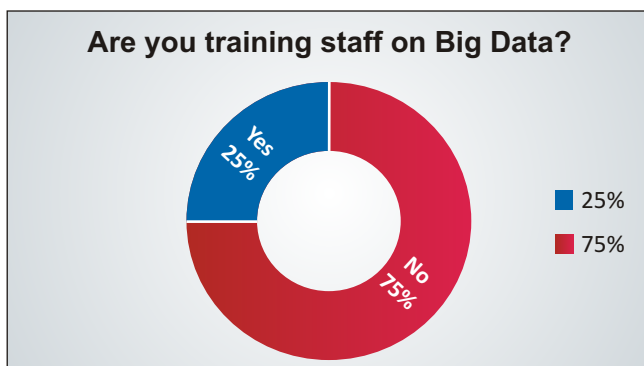
Majority firms neither training staff on Big Data nor hiring Data Scientists

With the limited awareness on Big Data coupled with low preparedness to acquire this technology, the outcome of the next two questions as follows were quite expected.

Q.1. Are you actively training existing staff on Big Data Analytics?

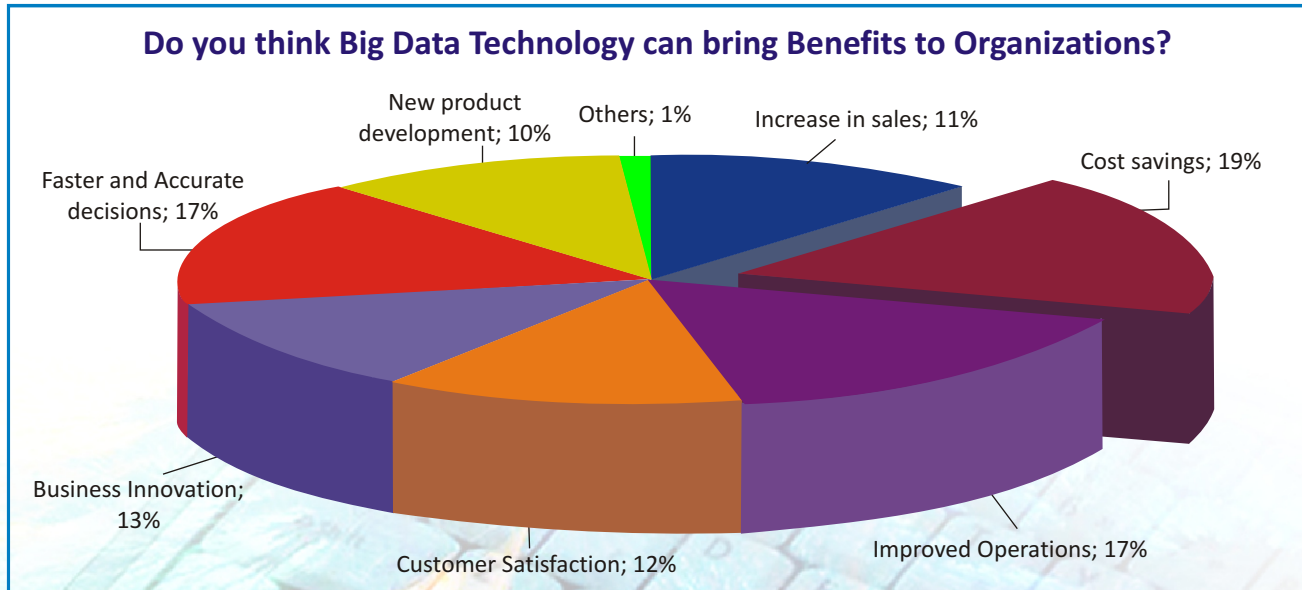
Q.2. Are you actively hiring Data Scientists for your organization?

According to the survey results, around 75% respondents that their organizations are not imparting training to staff on Big Data topics, whereas around 87% stated that they are not hiring any specialist or Data Scientist to help them in adopting the Business Analytics and Big Data technology. In fact, the terminology of the position of 'Data Scientist' is still new in the existing corporate environment and similar work is being performed by the IT Departments or Statistical officers looking after the data network in organizations.



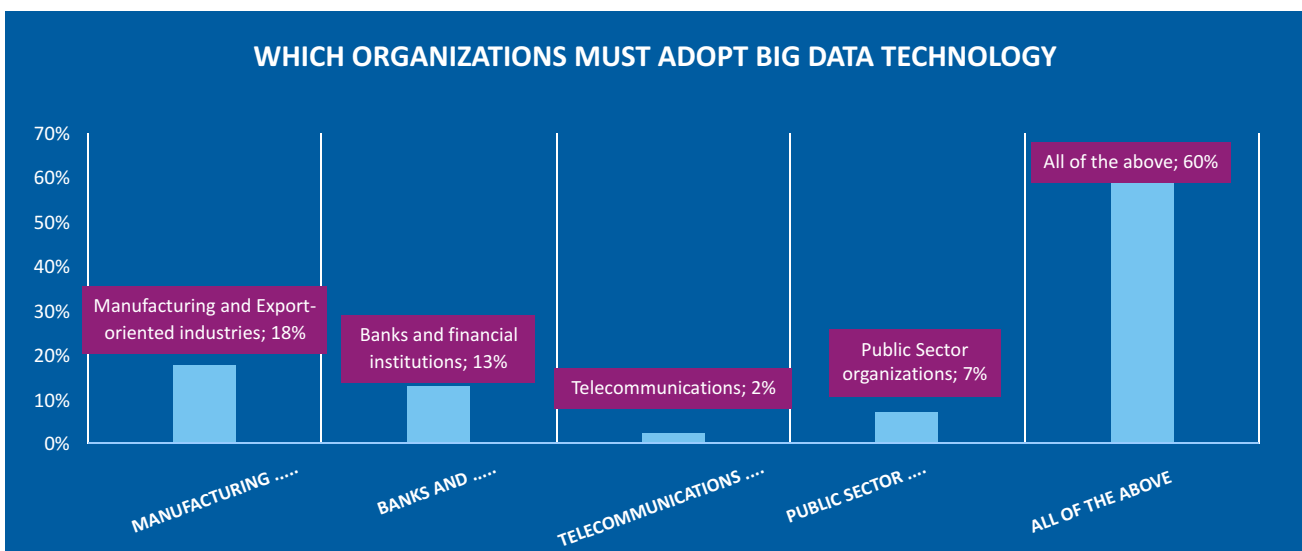
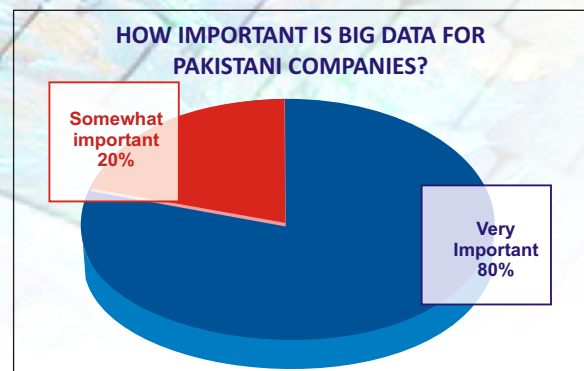
Survey identifies multiple benefits of Big Data on business operations

The respondents were asked in what areas they think big data technology can bring benefits to organizations. A mixed response has come out from participants' feedback which is depicted in the graph. The multiple benefits pointed out are cost savings (19%); Improved operations and timely, accurate decisions (17% each); business innovations (13%); customer satisfaction (12%); increase in sales (11%) and new product development (10%).



80% agrees 'big data' assuming importance for Pakistani companies

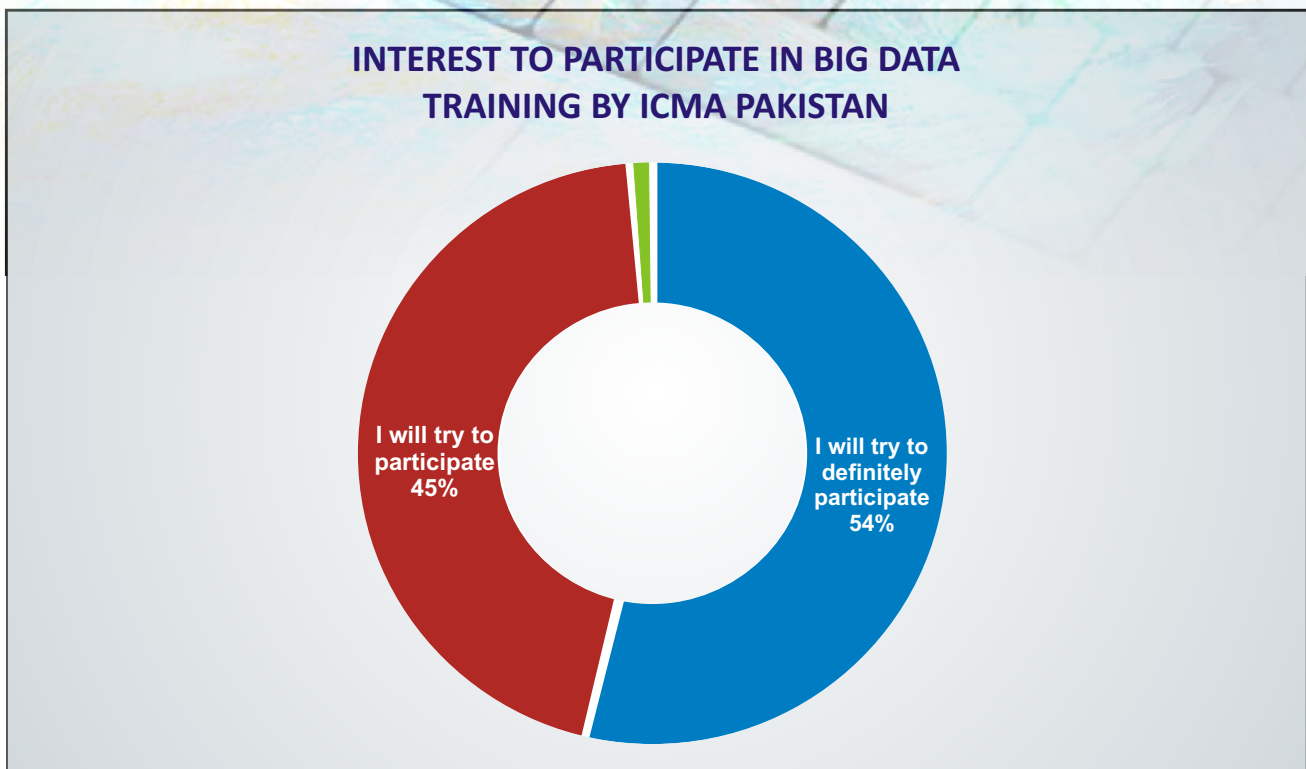
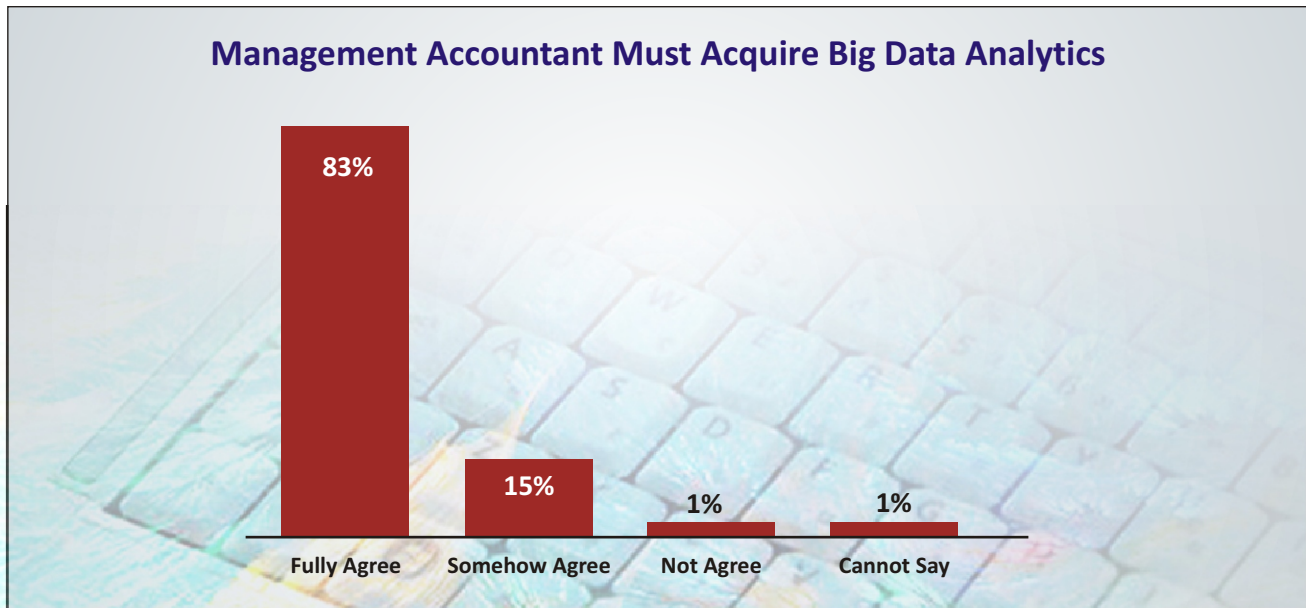
Over 80 percent of the survey participants have responded in affirmative to a survey question which asked them to share their experience as to how important is big data for the Pakistani companies. They agree that big data is gradually assuming significance for Pakistani companies in this age of technology. To another similar question, the survey participants identified that almost all Pakistani organization, irrespective of whether these are in the public or private sector, must take urgent initiatives to adopt business analytics and big data technology. The survey revealed that big data should be implemented in banks and financial institutions; manufacturing and export-oriented industries; telecommunications and public sector organizations.



83% CMAs admits they need to acquire 'Big Data tech' as additional skill

A pre-dominant section of the management accountants who participated in the survey, have admitted the business analytics and big data would soon be influencing the organizational structure and operations and to cope up with this emerging reality they need to acquire this technology as an 'additional skill'. This mindset of CMAs reflects their growing concern that they must proactively acquire the skills necessary for dealing with data now rather than wait for their employer to decide that these skills are a core competency of job. Around 15 percent respondents have agreed partially to this viewpoint expressed by the majority of CMAs.

In the above context, responding to a question posed to participants, almost 99% of CMAs have evinced interest of participation in training programs to be organized by ICMA Pakistan on the topic of "Big Data Analytics".



DISCLAIMER: The views expressed by the survey participants do not necessarily reflect the official viewpoint of the Institute of Cost and Management Accountants of Pakistan (ICMA Pakistan)