

South African decision-makers adopt mobile business intelligence

By <u>Visvanathan Naicker</u> 1 Dec 2015

In today's competitive corporate environment, managerial decision-making processes require a wealth of information that can be enhanced and transformed with immediacy into effective action. Mobility in business is increasingly exercising an influence on core organisational business processes. The advances in wireless technology, coupled with the rapid growth of mobile devices, have spawned a new era in business computing: Mobile Business Intelligence (mobile BI).



Increasingly, managers spend great portions of their day out of the office; travelling, attending meetings and visiting different company- or client sites. At the same time these managers are required to execute critical decisions under complicated and unpredictable conditions. Mobile BI - with its real-time characteristics - has evolved into a powerful decision-support system that can assist, accelerate and enhance the managerial decision-making processes, while on the go.

As a rigorous process for transforming data into information, mobile BI allows for flexibility, device independence, and cross-platform integration to consume and make the most of business intelligence (BI) capabilities. Its importance as an enabler of value and performance in organisations should not be underestimated.

And yet, despite its importance in business today, there is very little empirical evidence available to demonstrate this. By its nature, the concept of mobile BI is hard to define unilaterally, in that it consolidates two distinctive concepts: business intelligence and mobility. It is, in fact, a relatively new research field for real-time and integrated BI systems that combine wireless communication technologies and Internet standards to facilitate the consumption of business intelligence on mobile devices, including tablets and smartphones.

In an effort to prove the importance of mobile BI for business with statistical findings, a recent South African study (using a sample of Cape Town-based SMMEs and large organisations) sought to scrutinise managers' perceptions and usage of mobile BI. The study considered what factors would influence the usage of mobile BI for managerial decision-making, what impact mobile BI would have on the manager's behaviour in relation to decision-making in an organisation, and how using mobile BI might affect an organisation's performance. The results of these questions were then extrapolated into an information-systems theory that was able to accurately represent how users came to accept and use mobile BI.

In terms of the research study, findings indicated that the main predictors of using mobile BI for organisational decision-making were based on the decision-maker's attitudes towards use, and the behavioural intention to use.

Attitudes toward an innovation are a significant and dominant construct for the manager when making the decision to adopt a new innovation. In fact, attitude towards a particular information technology is a key aspect of the manager's evaluation criteria when considering using a particular technology. In the context of this study, attitudes to the use of mobile BI subsequently influenced the manager's behavioural intention to use mobile BI.

Intention to use plays an important role in predicting usage behaviour, and most powerfully when the decision-maker has prior experience of a technology. In this research study, the decision-makers' attitudes to mobile BI positively led them to an intention to use the technology to assist with decision-making.

Interestingly, the quality of information that could be accessed via mobile BI, was not found to have much bearing on its usage for organisational decision-making.

This is perhaps surprising because, while mobile BI cannot exist without information, the quality of information should have some sort of bearing on how the system is used. This could be explained, in the context of this study, by the predominance of attitude towards use, which was a compelling driver for actual mobile BI usage. The study found no correlation between the quality of information and attitude to use. However, further investigation of the connection between quality of information and attitudes would be beneficial.

The study was able to confirm that the underlying purpose of using mobile BI by managers for decision-making was to enhance and improve managerial decision-making abilities. The data analysis demonstrated that a positive attitude towards mobile BI leads to its actual use.

Going forward, it is anticipated that the perceived benefits of mobile BI technologies will likely mature over time as there is more innovation in both the mobile and BI-related technologies.

Due to the lack of studies conducted in the area of mobile BI with respect to managerial-decision making, the local study was able to make an important contribution to global theory and practice. It was able to statistically affirm that decision-makers are coming to rely more heavily on mobile BI for managerial decision-making, and that this is largely driven by their attitudes to, and familiarity with, mobile technologies.

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