

**CITY UNIVERSITY OF HONG KONG**  
**香港城市大學**

**Impact of Organizational Capabilities on  
Business Intelligence Maturity and  
Customer Relationship Management  
Performance**

**組織能力對商務智能的成熟度及  
客戶關係管理的績效的影響**

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## Abstract

“**Business Intelligence**” (BI) has been receiving attention from business leaders, information technology practitioners and academic researchers worldwide since the term BI was coined by Howard Dresner over two decades ago. The popularity of BI has no sign of stopping but rather has been receiving ever more attention in recent years. Emerging technologies such as, “Big Data”, “Cloud Computing” and “Internet of Things” will facilitate the growth of BI in the next era. Companies have been investing in BI with aims to enhance their competitive advantages, such as “Customer Relationship Management” (CRM). However, different companies receive different CRM performance even though they may spend the same investment in BI. Many companies are still in the early stage of BI Maturity and cannot find an appropriate way to proceed to a higher level. As indicated in the literature review of this study, researchers and practitioners in the BI field have put more attention on the implementation success of BI in the last two decades. However, little is known about the organizational challenges in BI programs, especially in enterprise-wide BI programs. In addition, these prior studies have been dominated by positivism and deductive approaches.

The purpose of this research is to study how organizational capability influences BI and CRM success in organizations so that these companies can identify, build, nurture and maintain these organizational capabilities for long-term and sustainable success of their BI and CRM systems. This study adopts a qualitative and inductive approach to facilitate and trigger interactions and discussions among the interviewer and interviewees that could not have been possible using a traditional quantitative and deductive approach. The study aims to address four key research questions - *What are the organizational capabilities relevant to BI Maturity? How do the relevant organizational capabilities influence BI Maturity? How do the levels of BI Maturity influence CRM Performance? Are there any moderating*

*variables which could influence the findings in research questions #2 and #3? If so, what are the impacts on these findings?*

The results of this study suggest that senior management, BI teams and general staff need to possess, nurture and sustain a set of organizational capabilities in order to achieve a higher level of BI Maturity. The findings align well with a number of prior studies related to RBV, capability and competitive advantages. The research findings also suggest that a company will likely have a higher CRM Performance when the company is in a higher BI Maturity stage. However, CRM Performance is not necessarily high when BI Maturity is in a moderate to low level. More studies in this direction are needed. There are three moderating variables identified in the research – Organizational Nature, Industry and Drivers for Change - which have a high to moderate level of impact on the relationship between Organization Capability and BI Maturity. Based on the research findings and analysis, a Concepts Map has been constructed. Further studies on the Organizational Capability on BI, CRM and other Information Systems can be built based on this Concepts Map. Practitioners in BI and CRM fields, senior management and business leaders can benefit from the findings of this study by transforming BI Capability into one of the key sources for their competitive advantages in order to better justify the investment on these systems.

***Key Words:*** *Business Intelligence, Business Analytics, Business Intelligence Capability, Business Intelligence Maturity, Business Intelligence Success, Organizational Capability, RBV, Customer Relationship Management, Customer Relationship Management Performance, Customer Relationship Management Success, Information Systems Success*