

The Current Business Intelligence Practice in Hong Kong

By

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1. Background

Effective, comprehensive and timely business information is extremely crucial in the rapidly changing business environment nowadays. With the capabilities of information technology innovation, Business Intelligence (BI), which refers to the applications and technologies used to gather, archive, and analyze complex corporate information to facilitate planners and decision makers to make timely and effective decisions (Negash and Gray 2008), plays an important role in this context and attracts many interests from both practitioners and researchers. The purpose of this study is to raise the awareness of the potential applications of BI in various business sectors and for the continuous improvement of the BI practices in Hong Kong.

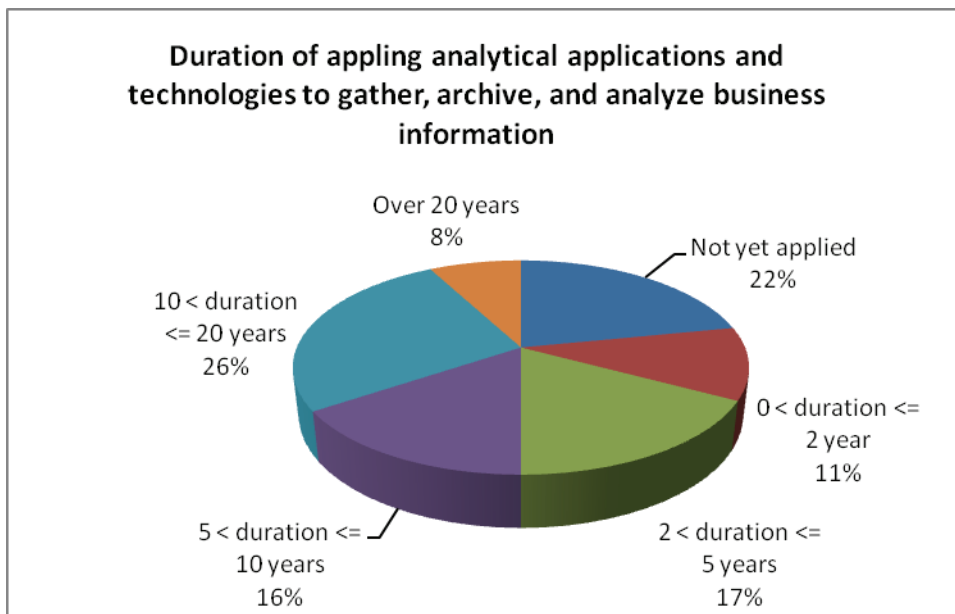
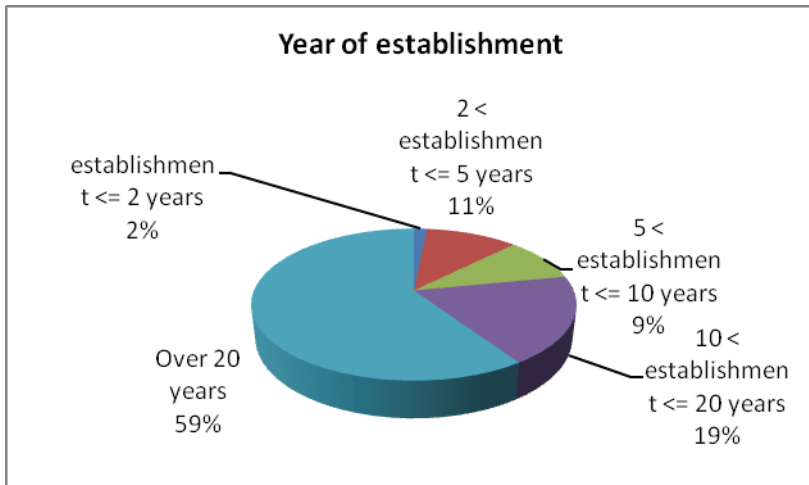
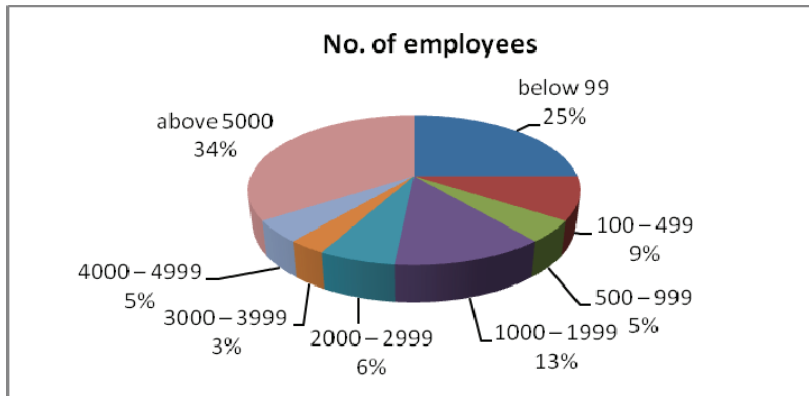
2. Survey Methodology

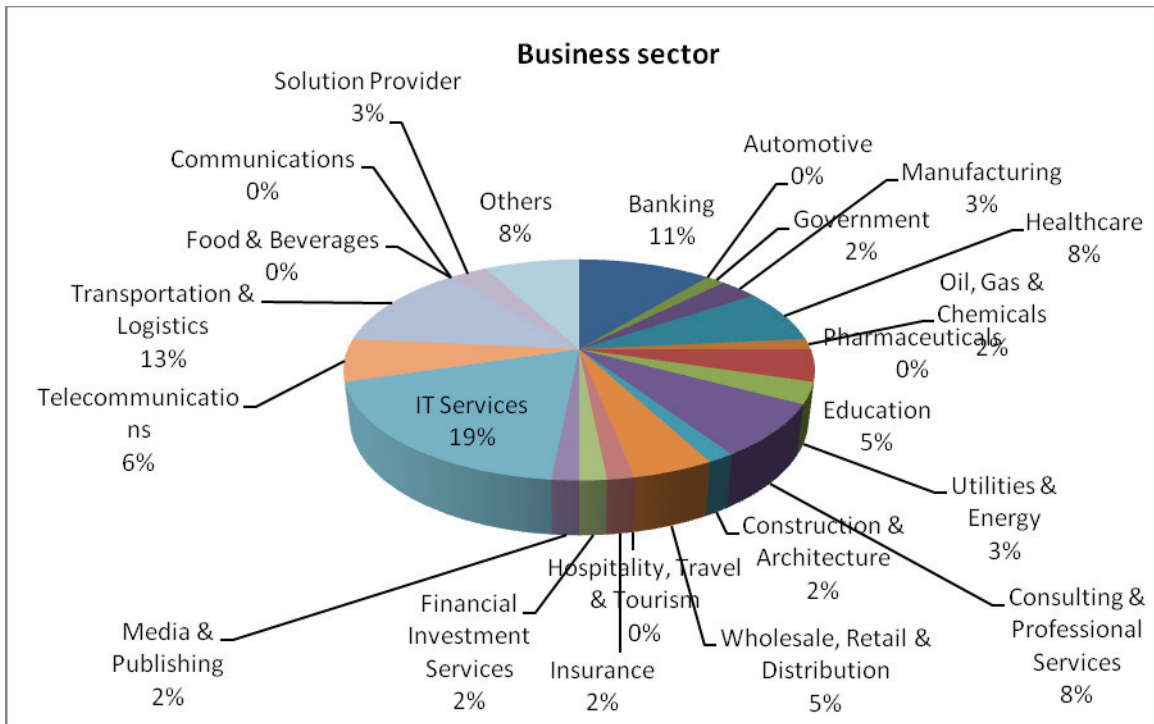
Through the BISID of the Hong Kong Computer Society, representatives of major BI vendors invited their clients to participate in a BI survey which was conducted from 3rd

November 2008 to 31 December 2008. The Hong Kong Computer Society (outside BISID) also invited its members to participate in the BI Survey. Respondents voluntarily participated in the online BI survey. The survey engine was hosted at the Department of Information Systems of City University of Hong Kong, and the post-survey data analysis was performed by a research team at the Department of Information Systems of City University of Hong Kong.

3. Survey Demographics

Out of the 64 respondents, 97% of them replied that they heard about the term “Business Intelligence” before answering the survey. Most respondents (67%) are involved in making decisions regarding the acquisition or the deployment of BI solutions. Given such a general background, respondents should be able to understand the survey questions and provide relevant answers. Most of the respondents’ organizations are established over 20 years (59%) or between 10 to 20 years (19%); 34% of the respondents come from large organizations which employ over 5,000 employees. Among these organizations, 26% of them have applied BI solutions from 10 to 20 years, 17% have applied BI solutions from 2 to 5 years, and 22% of the organizations have not applied any BI solutions yet. The main business sectors of the responding organizations are IT services (19%), transportation and logistics (13%), and banking (11%). It seems that most of the responding organizations are large and well-established companies. However, a large percentage of the respondents seem coming from the IT sector.

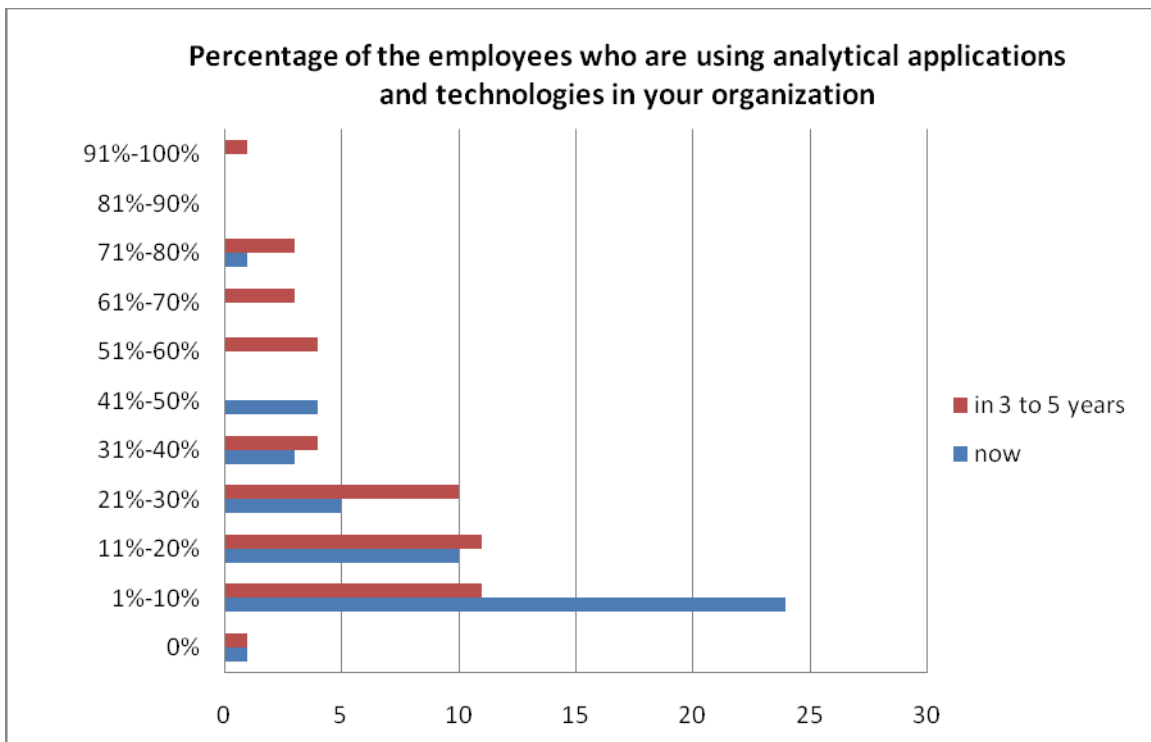
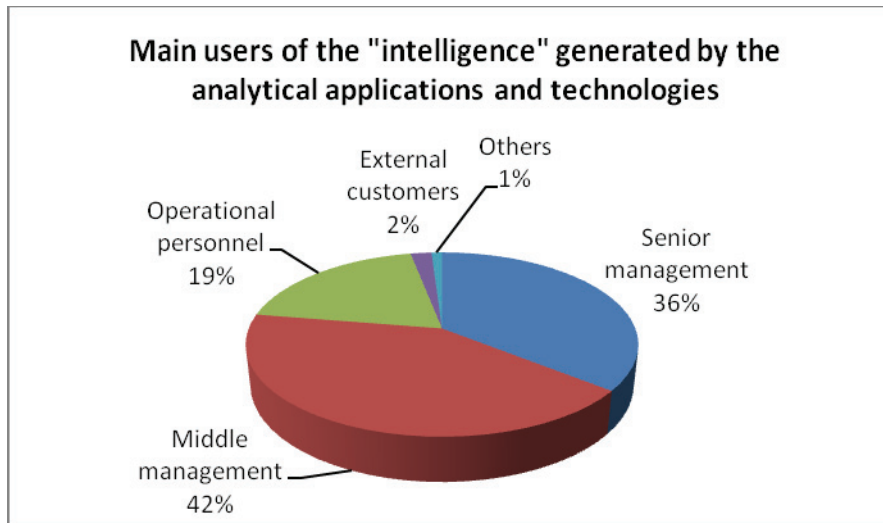




4. Adoption of BI Solutions

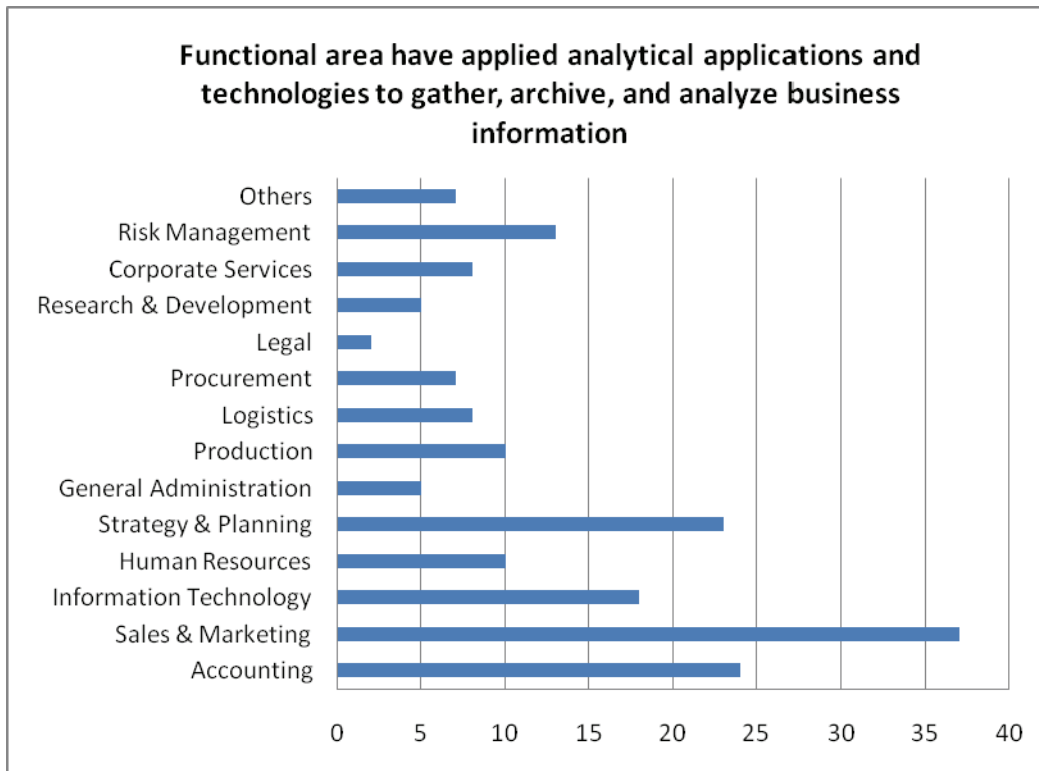
The information delivered by BI solutions is mainly used by the Middle (42%) and Top management (36%). The result reflects that BI Solution is adopted to assist the management for making decisions and planning business operations. The capability of BI solutions in providing analytical information in a timely and user-friendly manner generally meets management people's expectation. In addition, operational personnel (19%) also adopt and apply BI solution to their daily work. Half of the respondents (50%) said that no more than 10% of the employees in their organizations were using BI solutions. However, such a figure is believed to be improved in the next 3 to 5 years, and around 50% of the respondents think that the percentage of employees using BI solutions

will fall in the range from 11% to 40% in the coming 3 to 5 years. In other words, the user population of BI solutions is expected to grow 30% in 3 to 5 years.



To further analyze the situation of BI adoption in Hong Kong, the respondents were asked to indicate which functional area has applies BI solutions most. The findings show

that Sales & Marketing, Strategy & Planning, Accounting are the three major functional areas which have been utilizing BI Solutions in Hong Kong.



5. The Application Areas of BI Solutions

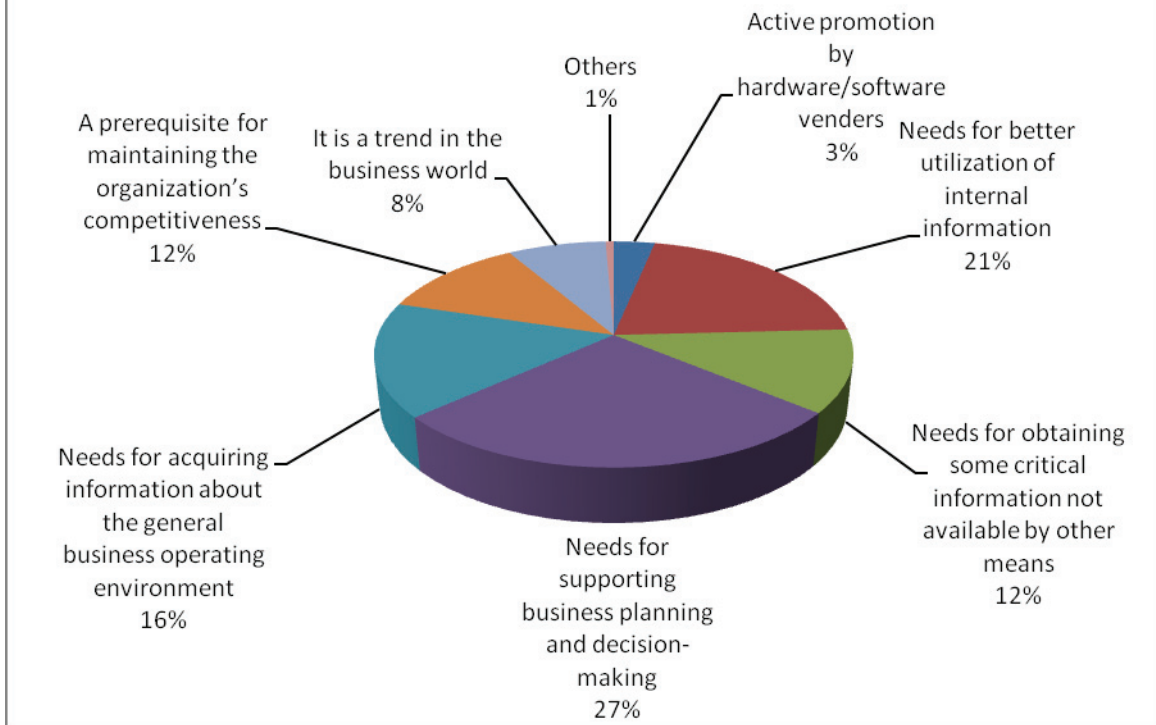
Respondents were asked the application areas of the business intelligence delivered by BI solutions. Most respondents state that the business intelligence is mainly about customers' interests (19%), information of specific business sector that organization is operating (15%), and financial risks (11%). This result is consistent with the finding regarding the functional areas of the deployed BI solutions. For instance, the most popular functional area of deployed BI solutions is Sales & Marketing which mainly deal with the intelligence about customers.



6. Factors Motivating the Use of BI Solutions

The respondents believe that the most important factor which motivates organizations to apply BI solutions is their needs of supporting business planning and decision-making (27%), followed by their needs for better utilization of internal information (21%) and their needs for acquiring information about the general business operating environment (16%).

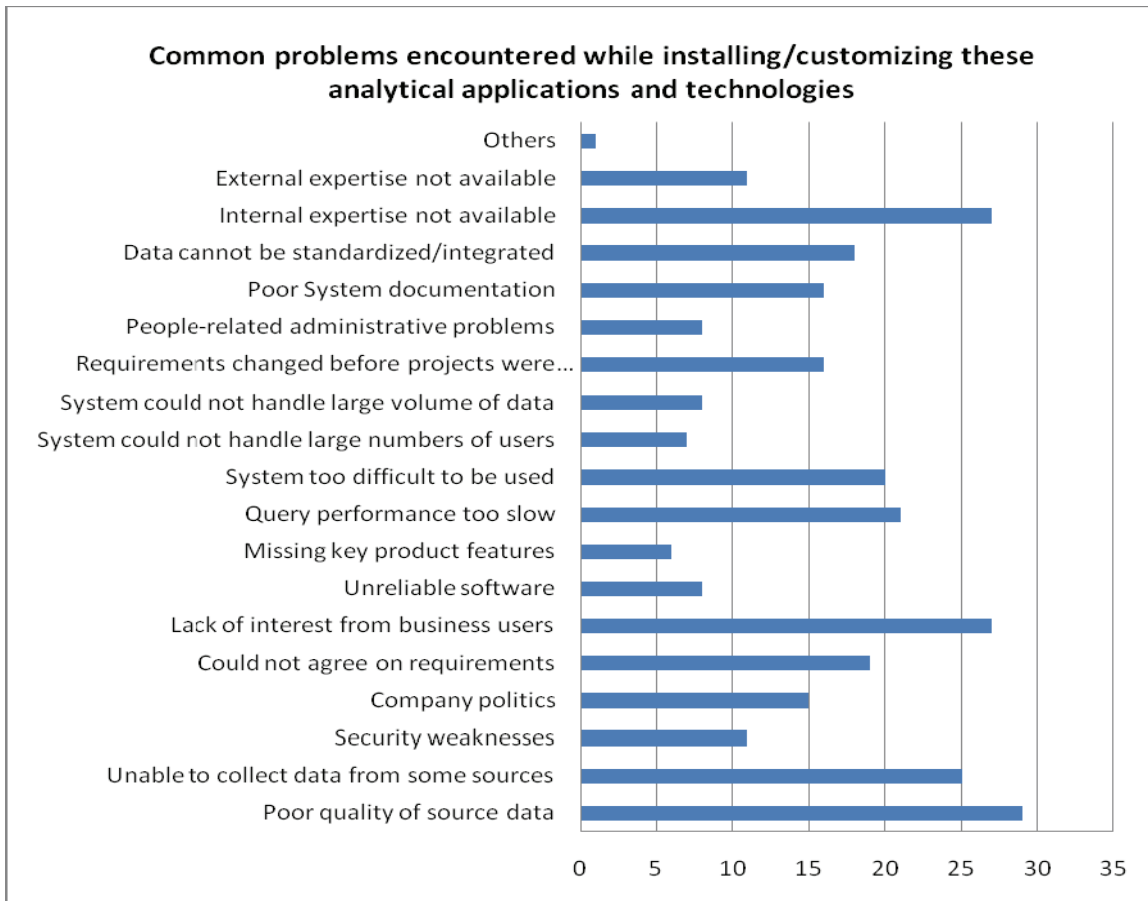
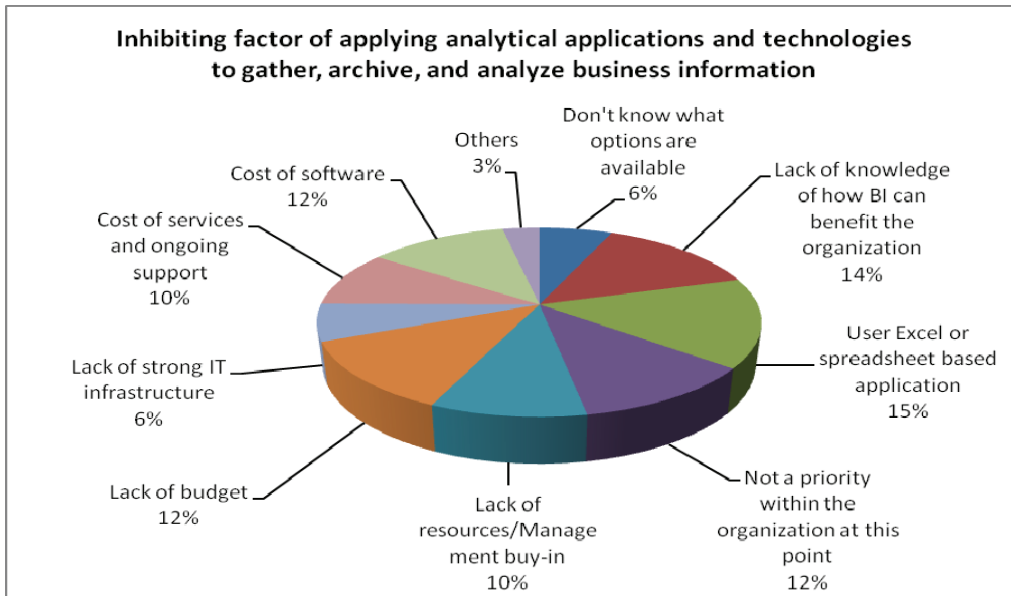
Motivating factor of applying analytical applications and technologies to gather, archive, and analyze business information



7. Factors Inhibiting the Use of BI Solutions

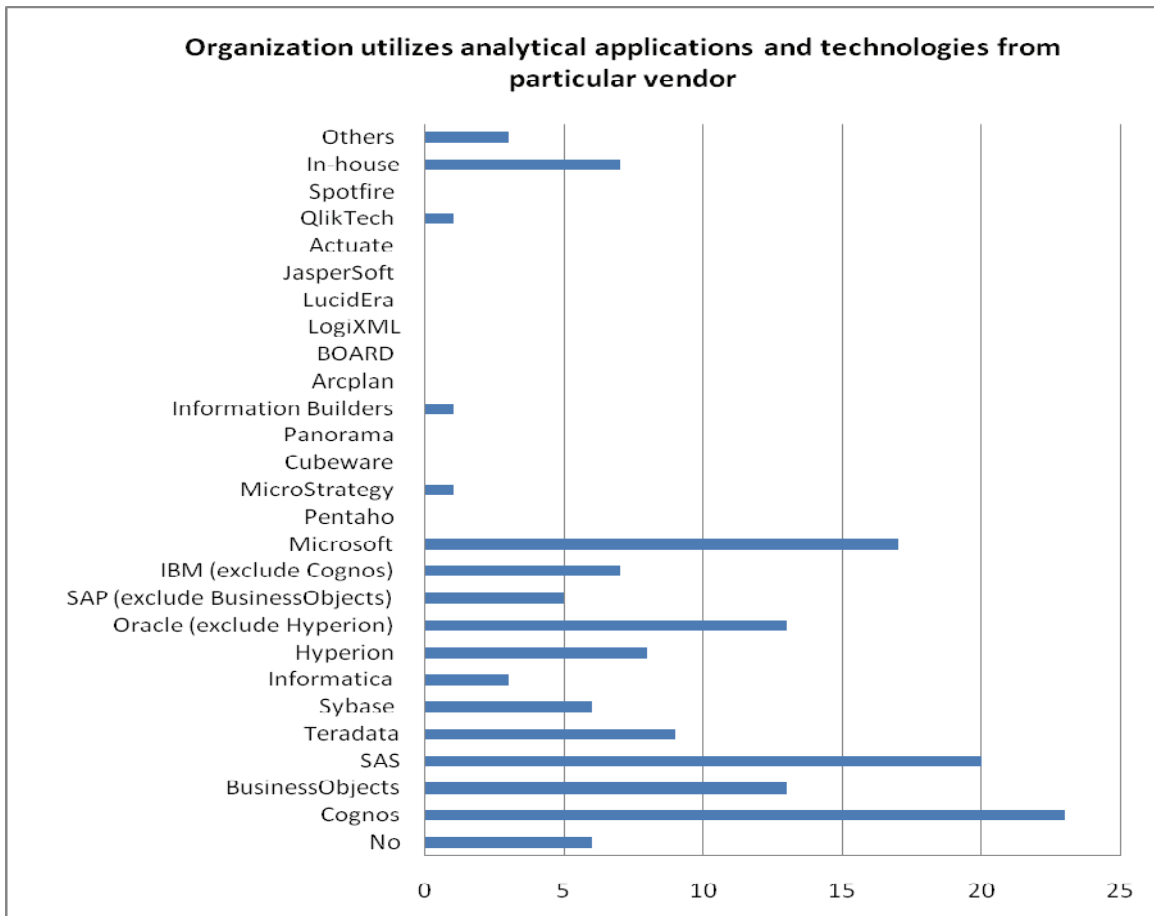
Although BI solutions are desirable, the respondents indicate a number of factors which may inhibit the applications of BI solutions. Most respondents believe that the inhibiting factors include: users got used to excel or spreadsheet based applications (15%), lack of knowledge of how BI can benefit organizations (14%), and not a priority within the organization for the time being (12%). Moreover, the most common problems encountered while deploying BI solutions are poor quality of source data (9.9%), internal expertise not available (9.2%), and lack of interests from business users (9.2%). The implication of this finding is that BI vendors should develop better tools for the users to

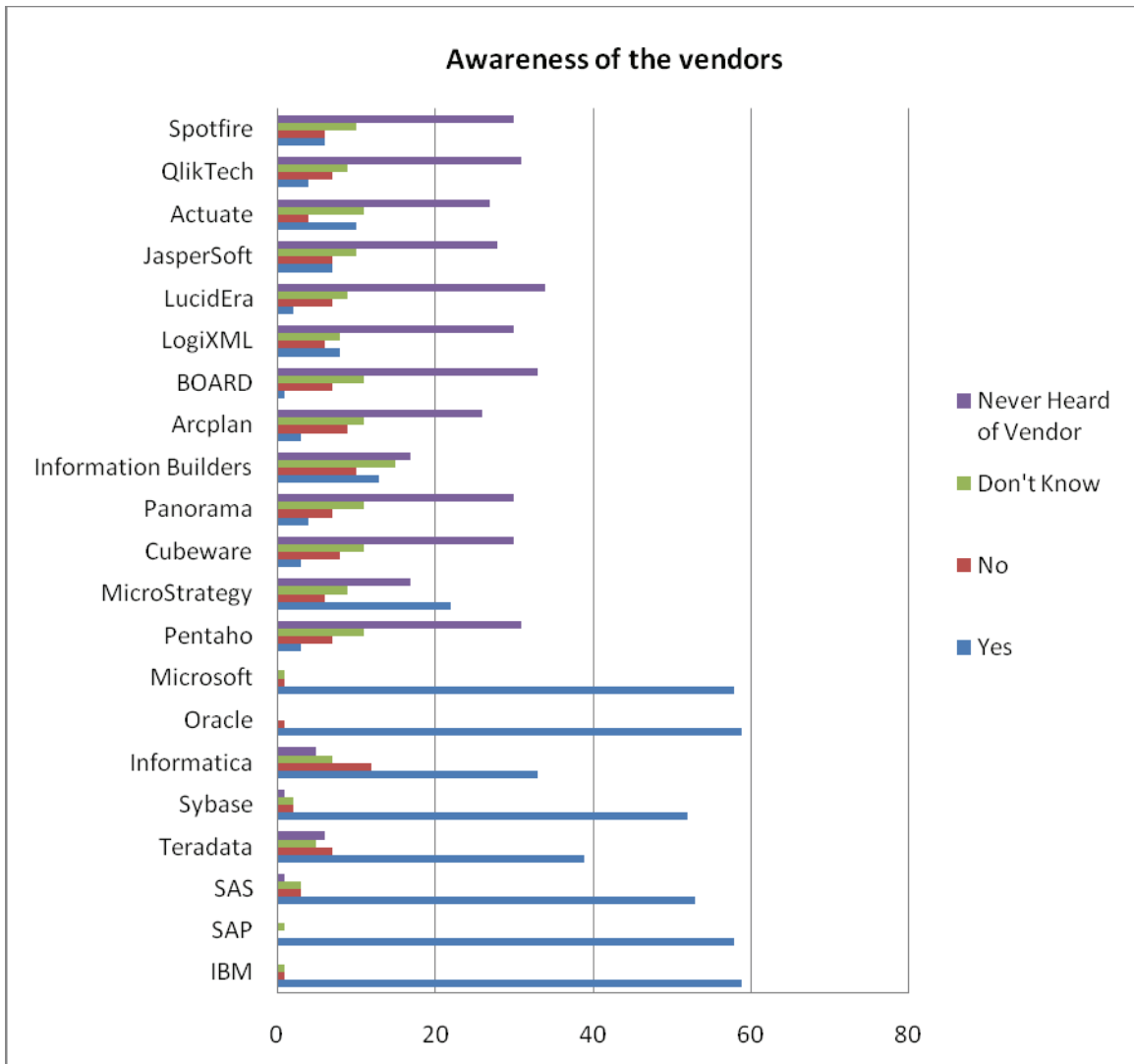
extract and clean up source data. In addition, more training in BI technology should be offered to their clients.



8. Vendors of BI Solutions

As many vendors are offering BI solutions in Hong Kong, it is important to investigate into the awareness of these vendors and the acquisition of BI solutions from these vendors. Among these vendors, most respondents indicate that their organizations have acquired BI solutions from Cognos (16.1%), Oracle (14.7%), SAS (14%), Microsoft (11.9%), and BusinessObjects (9.1%). In terms of vendor awareness, most respondents say that they recognize the following vendors as the primary BI solutions providers: IBM (11.9%), Oracle (11.9%), SAP (11.7%), Microsoft (11.7%), SAS (10.7%), and Sybase (10.5%).

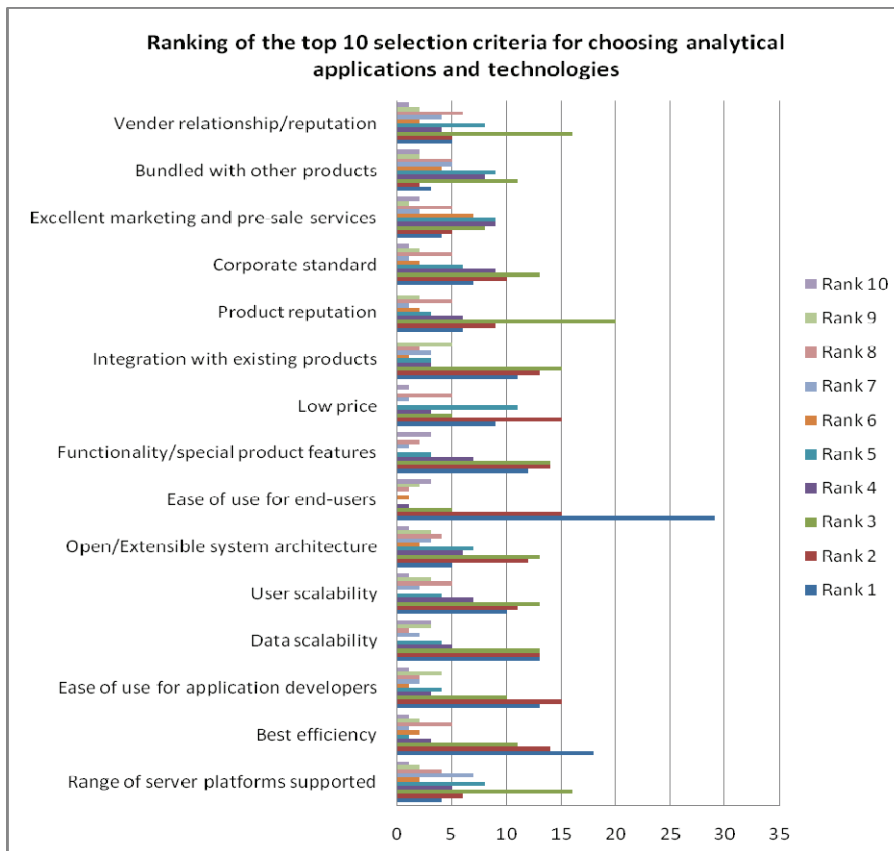




9. The Usage of BI Solutions

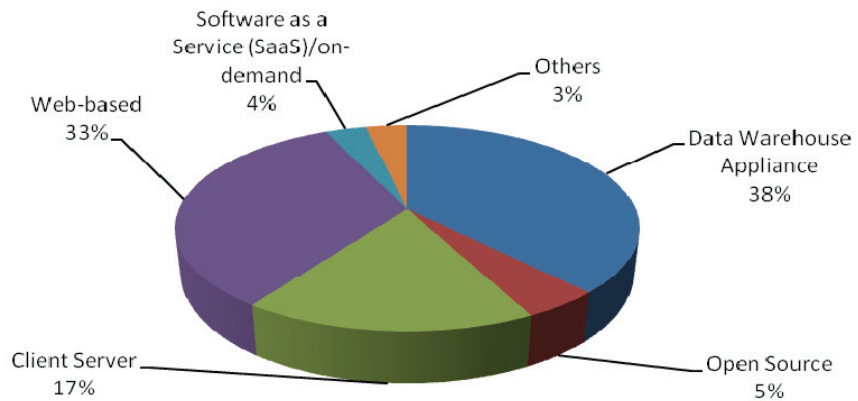
Most respondents perceive that it is extremely important for organizations to achieve the following objectives by deploying BI solutions: increase customer satisfaction (10.1%), increase revenues (9.5%), improve competitive advantage (8.2%), reduce lost sales (7.6%), and increase return on investment (6.3%). On the other hand, respondents say that the top selection criteria for their BI solutions are: ease of use for end-users (19.5%),

best efficiency (12.1%), ease of use for application developers (8.7%), data scalability (8.7%), and special product features (8.1%).

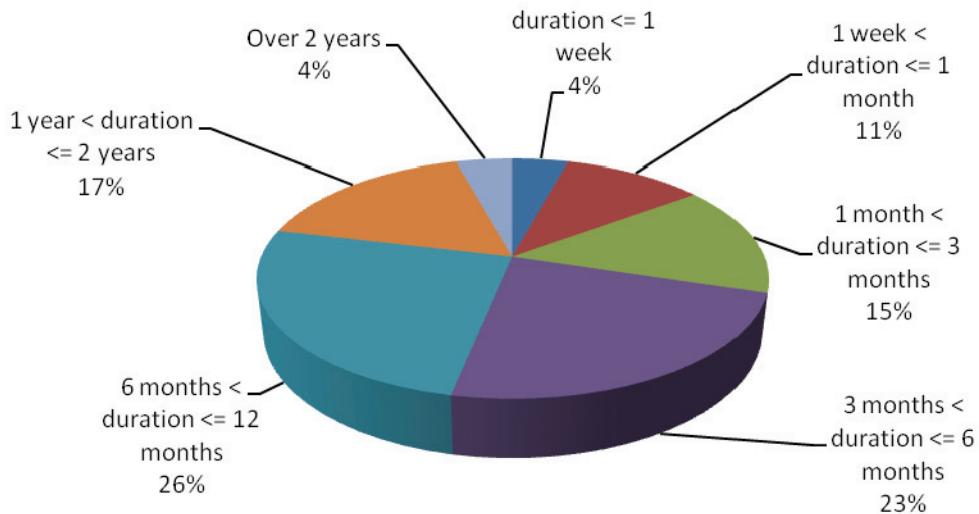


Different kinds of BI solution may require slightly different deployment methods. Most respondents indicate that the most popular BI deployment methods are: data warehouse appliance (37.9%), web-based solutions (33.3%), and client-server based approach (17.2%). The respondents indicate that the average installation and customization time of BI solutions is from half to one year (25.5%), 3 to 6 months (23.4%), and 1 to 2 years (17%).

Type of solutions organization use to deploy analytical applications and technologies



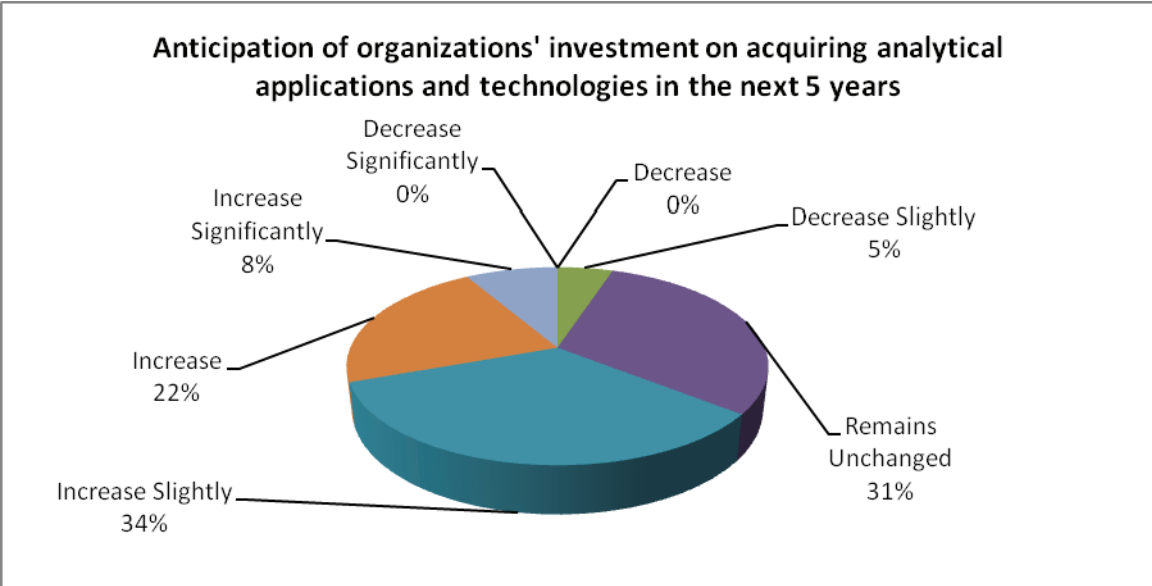
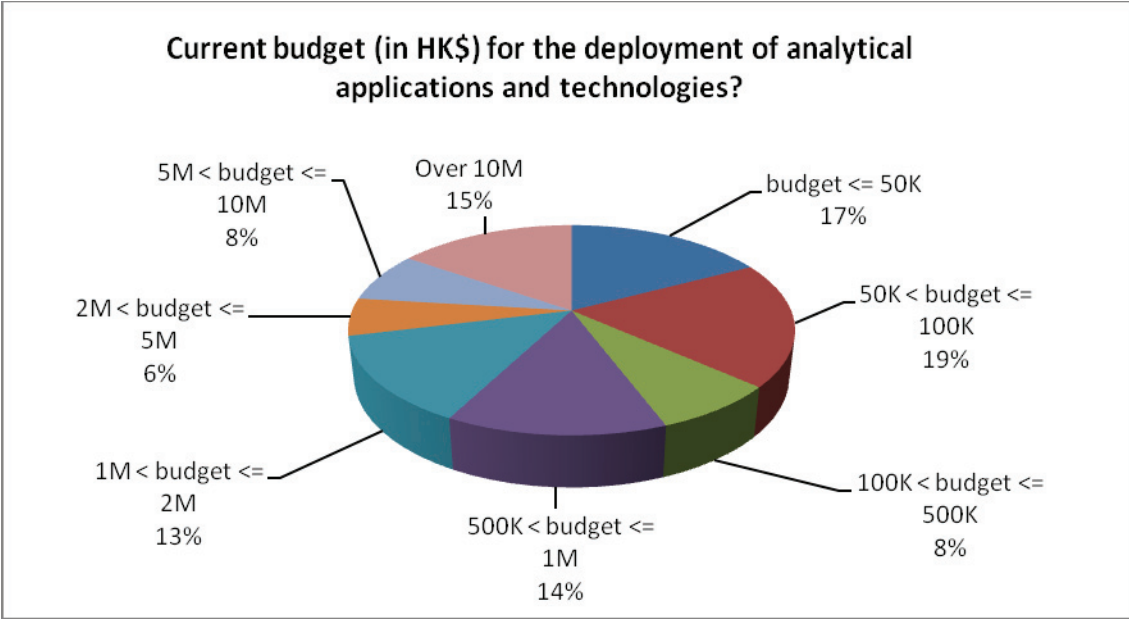
Time to take for installing/customizing these analytical applications and technologies



10. BI Spending and Priority

Among the ICT Applications to be deployed in organizations in Hong Kong, the respondents believe that BI solutions is generally considered to be the top priority in 2009 (21.6%), followed by Enterprise Applications (13.7%), and Legacy Applications Modernization (11.8%). This finding reflects that BI solutions indeed attract many attentions from the ICT industry in Hong Kong these days.

Since BI solutions deployment is regarded as the top priority ICT applications in Hong Kong, it is essential to analyze how many resources the local organizations are prepared to spend on the acquisition of the solutions. The respondents report their organizations' budgets for BI solutions are between HK\$ 50K and 100K (19%), below HK\$ 50K (17%), and 15% over HK\$ 10M (15%). These BI budgets vary since the organizations of the respondents include both large and small enterprises. The respondents expect that their organizations' BI investment in next five years would increase slightly (34%), remain in the current level (31%), and increase (22%).



11. Conclusions/Recommendations

According to the results of this survey, BI solutions have been deployed in various business sectors in Hong Kong. However, BI adoption in local organizations remain at an infant stage as most respondents indicated that no more than 10% of the employees in their organizations were really using BI solutions. It is slightly optimistic regarding the

trend in the increasing BI budget as well as BI usage in the coming few years. At this stage, BI solutions are mostly applied to extract and deliver customers intelligence to support the Sales & Marketing function of the local industry. The most obvious obstacles for the wide spread deployment of BI solutions to organizations in Hong Kong are considered to be the poor quality of source data, lack of internal expertise, and lack of interests from business users. Therefore, it is important for the BI solutions vendors to develop more effective data extraction and conversion tools to alleviate the data quality problem. Moreover, more BI training courses (probably at a low cost) from BI vendors or educational institutes should be offered to the employees (or potential employees) of local organizations to improve the availability of BI experts. Professional bodies such as HKCS and BI vendors could better collaborate to improve the awareness of BI tools and their business values for the management people of local organizations. Finally, since most of the respondents of this survey come from the ICT sector, it is desirable to have a follow-up study which involves more BI users from different business sectors.