What will the downturn mean for IT in Asia

There is probably one thing on the mind of most readers of this magazine right now. As the economic news seems to get gloomier by the day people are likely to be wondering when this downturn will ever end. Moreover, they are liable to be reflecting on what its implications will be for them, especially whether they will have a job at the end of it. Currently, our newspapers and televisions are full of one economic expert after another trying to provide insights into all these economic developments. Yet, it is somewhat ironic that we seem to be turning for advice to the very same experts who failed to predict the economic meltdown in the first place.

However, those of us in ICT in Asia may well be better placed thanks to the foresight of Fairfax Business Media, the publishers of this magazine. It recognised that it was important to get some hard evidence about how the downturn would affect IT in Asia. As a result, it allocated key questions in its annual IT Nation survey to the impact the downturn was having on local businesses. The aim was to gather insights into how local ICT executives envisaged their organisations would respond to these challenges in their deployment of IT. Furthermore, the research was carried out right at the end of 2008 and in the first week of 2009 and attracted 322 responses from IT executives across the region. As such, the results provide an up-to-date snapshot of answers to these questions from a comprehensive sample of local users of ICT.

In analysing their responses the first impression is one of foreboding from respondents rather than panic. True 48.4% see a shrinking budget as their highest concern for the year ahead and this is in line with the 47.5% of respondents who report elsewhere that they expect their overall current IT expenditure to decrease in 2009. However, as figure 1 reveals, nearly 38% expect no change to their IT outlays while a bullish 14.6% even thought their IT expenditure would increase over the next twelve months. In other words more respondents were positive or neutral about the outlook for their IT budget rather than negative. In a similar vein, when asked to describe the impact of the current economic difficulties on their organisations Asian ICT executives preferred the options moderate (59.9%) or marginal (11.2%) rather than serious (28.3%).

The survey then asked how ICT executives believed they would respond to the current economic downturn. As shown in figure 2, the predominant responses were to do with delaying or deferring or even negotiating harder rather than sweeping across the board cost cuts. Nevertheless, IT vendors reading this should be under no illusions. The most favoured reply (60.8%) was that ICT executives planned to negotiate much more aggressively with their suppliers while 35.7% aimed to restructure existing IT service agreements. However, 24.2% planned to make no changes. In addition, a sizeable number of others saw attack as the best form of defence with intentions to implement new projects (15.5%), outsource more IT functions (13.3%) and even to hire more staff (2.8%) on their agenda.

In analysing these responses by different market niches, see figure 3, the most noticeable finding was that small to medium enterprises or SMEs (i.e businesses with between 100 and 500 staff) and medium sized organisations (i.e. those with between 500 and 1000 staff) were more upbeat about the year ahead than small businesses (under 100 staff) or large enterprises (over 1000 staff). A majority of respondents in the latter two categories envisaged decreasing their ICT expenditure in the year ahead while only around 40% of ICT executives in the former two categories were so negative. This probably indicates that middle sized organisations are less likely to be held captive to the trials and tribulations of the share market while they probably have some reserves of resources that will offer them some capability to ride through the downturn, at least for 2009.

The IT Nation study then asked ICT executives how they apportioned their IT budget in the past year and how they expected to do so in the year ahead. This question was also asked in the 2008 survey. Fortuitously, the 2008 survey was undertaken just as the first signs of turbulence in the share market were evident. As such, comparing these responses allows us to see what has changed in the investment priorities for local ICT executives as a result of the escalating economic turmoil. The results are shown in figure 4. Interestingly, in terms of the major area of focus, not much has changed. In all three time periods the component of the IT budget where there was the most investment was in application development and implementation. Despite the current economic turmoil this only dropped slightly from a 2007 actual of 39.1% to an envisaged 37.3% for this year. However, elsewhere there has been a significant change of focus. In particular, the areas of IT governance and compliance, staff development and security and risk management are seen as much more important priorities for ICT investment today than they were in 2007. Conversely, the importance of hardware and network infrastructure as well as IT services and outsourcing seem to have slipped down the CIO investment priorities.

In some ways these results are both encouraging and understandable. A number of commentators have indicated that one way ICT can help organisations through this economic anguish is by helping them achieve greater operational efficiencies through automating and streamlining existing operations. As such, it is a positive sign that local CIOs seem more or less willing to maintain their investment levels in application and development. The resulting new systems will be the avenue to achieving desired performance improvements. It is also heartening that the economic downturn is seen as an opportunity to boost staff development. Clearly, greater versatility in staff will help organisations adapt better to any new circumstances they encounter. In addition, the growing importance of governance and compliance should be a mechanism to ensure users do not abdicate their responsibility for helping drive new IT investments to fruitful outcomes.

The IT Nation questionnaire then probed further in to these application and technology areas to look at where IT executives in Asia expected to increase investment and to highlight those where they envisaged expenditure would decrease. The places where the outlook for increased expenditure looked the most solid is shown in figure 5. This highlights the most favoured area for extra funding is information security and risk management with 31.4% of respondents believing that this would increase this year. However, those in mid sized businesses (500-1000 staff) were even more positive with nearly 37% expecting to boost their spending on IT security in the year ahead. In large enterprises while there was solid support for extra funding on security in 2009 the most popular choice for extra investment was virtualisation. Around 33% of CIOs in this sector are planning to grow their expenditure in this area in the current year.

On the other hand, as if to illustrate that not every one in ICT sees the world through the same set of eyes, while a third of large enterprise respondents to IT Nation were expecting to increase investment in virtualisation 17.6% anticipated decreasing expenditure on this functionality. This decline though was not quite as bad as that predicted for IT service management (ITSM), ‘Green IT’ and Unified Communications (UC). Those from Asian businesses with over a 1000 staff who planned to decrease expenditure in these areas were 20.4%, 19.4% and 18.7% respectively. Furthermore, across the overall survey respondents were most negative about the outlook for investment in ITSM and UC, see figure 6.

This may reflect the fact that neither ITSM nor UC are really quick fix solutions. Each entail significant changes to the corporate culture which takes time, something which many CIOs may feel they lack at the moment. Nevertheless, IT Nation also explored what local CIOs saw as the drivers for the adoption of this functionality. For ITSM the key factors influencing its proposed use were to do with enhancing IT service quality and in increasing IT operational efficiency. With research elsewhere showing that CEOs regard excellence in execution as their number one priority[1] it would seem the time is ripe for a concerted effort from local CIOs to embrace the principles of ITSM. As such, the increasing lack of commitment for it, as revealed by the latest version of IT Nation, must be seen as something of a concern.

The large negative sentiment towards Unified Communications (UC) is also surprising. With the plethora of communication options now available to business executives, and with the travel demands on them in this globalised world, one would have thought that Unified Communications would appeal to many because of its ability to cut through the voice mail frustrations most of us encounter when we are trying to reach someone in a hurry. Certainly, respondents to IT Nation reported that one of their main drivers for embracing UC was its ability to enhance corporate collaboration by integrating all the various corporate communication options in to one medium.

Nevertheless, when contrasting replies to the 2008 and 2009 studies, see figure 7, it was noteworthy how there seemed to be a diminished enthusiasm for all the main business drivers for implementing UC. In fact, nearly 40% of respondents said they had not implemented UC, up from 25% in the 2008 study. In addition, as can be seen in the accompanying diagram, even when they had installed it the numbers were down in each potential catalyst for a UC project. This included: using it to integrate email and instant messaging; deploying UC in order to integrate email with other business applications; utilising it as a way of integrating IP telephony, instant messaging and email and, finally, as a way of tying IP telephony, email, business applications and instant messaging together. Such a decline in the popularity of a technology often indicates a hard earned realisation among CIOs that the potential benefits it could provide are, in reality, not that simple to realise.

On a slightly more positive note the study did indicate fresh enthusiasm by local ICT executives in Business Intelligence (BI) applications. The research looked at both business intelligence and data warehousing. After IT security and virtualisation BI was the third most nominated area where IT executives expected to increase funding and, even then, BI only trailed virtualisation by .2%. Data warehousing, usually seen as a necessary foundation stone to implement BI functionality, was also a popular choice for likely extra funds this year, especially among CIOs in organisations with over a 1000 staff. Again this enthusiasm for BI among local ICT executives is an encouraging indicator as it probably reflects a belief within local organisations that investing in technology will be one way that they can get ahead in these tough times.

This recognition of the strategic potential of BI is also evident in the responses to the question asking how BI would be applied by businesses in this region. A similar question was also asked in the 2008 survey and when contrasting responses between the two years it is evident that this year there was much stronger support for BI's capability to provide greater insights in to the operational performance of the business, (see figure 8). For example, there was a significant growth in the use of BI to measure and analyse operational, financial and transactional data.

[1] Conference Board 'CEO Challenge 2008: Top Ten Challenges – Financial Crisis Edition'

Moreover, it was also apparent that organisations are beginning to use BI to look outside their internal operations and to better understand their clients. A new option offered in the 2009 research asked how many were deploying BI to better understand their customers' behaviour. Over a third of respondents (34.5%) agreed that they were doing this.

These indications that BI is increasingly being used in a pro-active way to enhance an organisation's decision making capabilities are reinforced by the findings to another question in the survey. This looked at what local executives thought ICT could bring to their businesses in 2009. Over half of those responding considered that one of the main things ICT could add was an ability to increase an organisation's competitive edge. With business prospects for the current year looking increasingly bleak such a capability could well be what separates the wheat from the chaff in determining who survives the downturn.

The most popular choice of respondents though was that IT would help their organisations automate more business processes. This was nominated by 61.8% of the survey respondents and it was noteworthy that there was little variance in this preference when the responses were analysed by a size of company breakdown (see figure 9). In fact the only noticeable differences to this question were that small businesses attached less importance to IT's ability to help with regulatory compliance while mid sized organisations were more enthused about IT's ability to help with information security. These differences probably reflect the fact that up until now compliance has largely been the province of organisations that trade on the stock market, which would exclude most organisations with under 100 staff, while the increasing dependence of mid sized businesses on IT has probably heightened their appreciation of the consequences of any IT security breach in their operations.

After looking at where respondents thought IT could deliver the most value it was only natural that the survey should examine where Asian respondents believed ICT had delivered the least compared to what had been originally promised, (see figure 10). This highlights that local CIOs seem to be most disappointed in 'Green IT'. On average, nearly a third of respondents (32.6%) considered it had failed to deliver. This though probably indicates impatience on the part of Asian IT executives. Interest in 'Green IT', and sustainability initiatives in general, only really began in earnest in 2007, largely in response to the momentum generated by the Al Gore documentary 'An Inconvenient Truth'. Yet it seems many must have expected that these initiatives would deliver instantaneous benefits. Instead the reality is that they require significant changes to business practices before their value will become apparent.

This is highlighted when looking at another question in IT Nation which examined what ICT executives saw as the focus of their 'Green IT' strategy. The most favoured choice was cost savings. Yet the cost savings from 'Green IT' initiatives tend to be incremental. They are found in reduced paper consumption, lower energy bills and easier systems management through consolidation and virtualisation. These do add up but it will take time. Unfortunately, it would appear that too many local CIOs have been led to believe that the returns from a commitment to 'Green IT' could be realised in one or two budget cycles. Nevertheless, on a more encouraging note for advocates of 'Green IT', when ICT executives were asked at the end of the survey for their anecdotal feedback on the current IT environment and their strategic approach, several respondents noted that they thought the economic slowdown would result in a growing importance for 'Green IT'. These people felt the mood of the times would encourage rationalisation of the corporate IT architecture which would, in turn, help bring down IT's energy costs. Certainly, reduced energy cost was seen as the dominant driver for an investment in 'Green IT' with 66.5% of responding organisations agreeing with this option.

After 'Green IT' the next most popular choice where CIOs had felt let down by the unfulfilled promises of technology was the area of Service-oriented architecture (SOA), or snake oil architecture as some are unkindly beginning to call it! This disappointed 30.7% of those replying to IT Nation. Certainly, the potential of SOA to integrate business applications has appeal with 32% identifying this as their main driver for adopting SOA. Others saw that SOA could bring down development and operation costs, mainly through the perceived ability to reuse existing application code. Yet, a large proportion of respondents remained unconvinced about the benefits of SOA. 42.2% reported that they had no plans to adopt it. Certainly, the potential of IT to facilitate corporate agility has appeal. This was the fourth most popular choice (39%) in respondents' expectations as to what IT will do for their business in 2009. However, the current downturn is very much a time where potential purchasers of IT are likely to be looking for short-term guarantees of business returns. As such, it would appear that local CIOs are viewing SOA's promised ability to facilitate greater corporate agility as something that is still unproven.

The same could probably be said of cloud computing, an area that has been attracting considerable attention of late. This promises to free CIOs from the burden of owning and managing their own IT infrastructure yet, as in the example of SOA above, it appears that Asian ICT executives seem to be adopting a wait-and-see attitude to this functionality. Only 4% planned to increase investment in cloud computing in 2009. However, perhaps of more concern to proponents of cloud computing would be the sizeable number (26%) of respondents to IT Nation who confessed their disappointment in software-as-a-service, perhaps the best known example of the cloud computing model in operation.

Perhaps these responses reflect challenges CIOs might encounter when they entrust vital IT infrastructure, such as key business applications, to a third party. Earlier it was reported that 13% of respondents envisaged outsourcing more IT functions as a reaction to the current economic downturn. While this might provide a fresh influx of funds for IT, with the outsourcing provider acquiring the existing IT infrastructure assets, nearly a quarter of the respondents to IT Nation indicated that the use of ICT outsourcing in their experience had been a disappointment.

Again the issue seems to be one of IT suppliers over promising and under delivering. Nearly 40% of replies revealed that the main driver for their organisations use of outsourcing was a perception that this would result in cost savings. While this might be the case in the short-term, when the IT assets are moved from the capital expenditure budget to the operating expenditure one, there is little evidence anywhere that ICT outsourcing reduces the long-term cost of IT in the corporate budget. In fact, the opposite is much more likely. The concern is that CIOs might be clutching at straws in their attempts to navigate their IT operations through the current economic storms.

However, while cost savings was the most popular response it is also clear that CIOs are gaining a much wider appreciation of the potential benefits of outsourcing. In particular, the second most popular choice in the question examining motivators for outsourcing was the fact that it would enable internal staff to focus on mission critical and business related projects. This was rated only marginally less important than cost savings by respondents. This in turn was closely followed by a realisation that outsourcing could allow access to skilled technical resources. In the end these expectations are likely to prove much more realistic than cost savings. Moreover, in the long run they could be much more beneficial for Asian CIOs. Freeing the IT department from the daily chore of keeping the IT infrastructure up, available and responsive can be a thankless and time consuming task that detracts many IT departments from thinking more creatively about where IT could help the business strategically. Similarly, the challenge of finding, training and retaining the necessary operational staff to do this work is also a significant drain on many a CIOs time.

Certainly, the evidence from the IT Nation study is that CIOs recognise that ICT has a vital role to play to help their organisations through the current economic difficulties. This comes through strongly in the anecdotal comments made in response to the survey question on the current IT environment and corporate strategic approach. The talk is very much one of focused IT investments. A common theme is deploying ICT to help streamline existing business processes. There was an appreciation that some investment IT could help remove costs in business operations through things like bandwidth optimisation, restructuring and server consolidation. Others considered that now was the time to undertake operational benchmarks so the ICT department could better identify those IT activities where greater efficiencies are most likely to be realised. Yet another respondent reflected on the old saying that necessity was the mother of invention by arguing that CIOs now needed to help their organisations by focusing much more on where ICT could deliver innovation in existing business practices. Through all this feedback the constant seemed to be an appreciation by ICT executives of the difficulties that most businesses are likely to face in 2009 and a desire on their part to provide a positive response from the IT department to help the executive tackle these problems.

Most CIOs and their reports can remember the downturn that happened in the ICT industry after the dot com bubble burst in 2001. In many ways ICT has never quite recovered from those heady days. Yet in today's business climate these experiences are probably serving most CIOs well. It has equipped them with the advantage of familiarity, certainly compared with executives elsewhere who most probably have never had the challenge of handling a downturn. Furthermore, many of the big cutbacks in ICT budgets happened back in the early and middle years of this decade. As such, it is less likely that ICT will now have to endure heavy budget cuts. Instead there is a growing consensus among many industry commentators that organisations will be looking to IT for ideas on how and where operations can be enhanced during this downturn.

Certainly, the message from the 2009 IT Nation study is that Asian CIOs appear ready for that challenge. The indications are they appreciate that in these times all corporate expenditure will be under the microscope. However, it is also clear that they are not daunted by this reality. Instead they see the task ahead as one of focusing on where targeted ICT investment can help their businesses achieve greater operational improvements. In fact it is possible that the economic downturn could provide a blessing in disguise for many people in ICT locally. It could present an ideal opportunity for CIOs to re-educate their executive peers on the transformation potential that can be unleashed by the smart and creative application of IT in the business. The saying goes that every cloud has a silver lining and, if so, there are likely to be opportunities for forward thinking organisations that will probably emerge. Perhaps IT will be one of them. However, we shall probably have to wait till the MIS Asia conducts the 2010 IT Nation survey to find out whether this has been true for those of us in ICT in Asia.