

## 1. Death by software. Or...how to avoid being taken to the cleaners by technology

### 1.1. The trouble with technology

The conventional approach to implementing major enterprise software is to create a set of high level business requirements and then go to market to select a technology and/or vendor. This is not necessarily the best approach. Invariably, one or more of the following happens:

- ◀ Potential customers are wowed by the size of the vendor's customer base – the majority are never wrong, right? If it works for all these organisations, how can we go wrong?
- ◀ Vendors then offer a cheap entry price into the world of ERP / CRM and make various claims about the superiority of their software and the impact on your business,
- ◀ The executive, although somewhat jaded by IT's continued troubles in delivering technology that works, engage the vendor thinking it will be different this time,
- ◀ The vendor starts work and swarms of 'Consultants', still quite wet behind the ears, are everywhere poking around in your business, telling you how you need to change this and change that,
- ◀ You have regular meetings with the vendor where you argue, negotiate and then resign yourself to the sacrifices you need to make because their software 'doesn't work that way', and you need to change your processes to suit, otherwise they say 'Sure we can do that, but it's a change request'. And 'Caching – Caching' goes the cash register,
- ◀ You review and sign-off large lists of 'change requests', thinking that there's something funny with the pricing in relation to the original quote way back during the tender process,
- ◀ Years after the project was supposed to finish, the same consultants are now getting married and having kids, all toasting you for making it possible.

While a combination of all of the preceding represents an extreme case, it is to some degree reflective of the common experience of companies that implement large scale enterprise applications.

Importantly, I haven't even mentioned the problems with the user interface. The reality is that the ultimate success of a given technology is not dependant so much on issues of technical elegance as it is on user acceptance. That is, when staff have to figure out how all of the different business processes inherent in an ERP system relate to the way they're used to doing things. They need to 'learn' new screens that bear little or no

resemblance to the applications they've used before, let alone their actual work activities. They invariably have a better idea – spreadsheets and access databases (also known as corporate chewing gum). Think of the implications – your ERP / CRM integration strategy has just been defeated by a basic spreadsheet.

I'm not saying that all enterprise software is destined to fail, or that you shouldn't (or can't) use it to run your business. Indeed, there are probably many successful cases. What I am quite categorically stating is that success can be achieved with a far greater degree of certainty and at a fraction of the cost. It all has to do with the way you engage a vendor and their technology. The traditional approach invariably leads to a greatly diminished return on investment.

Before I go any further, ultimately describing the means to greatly reduce the risks associated with the introduction of packaged enterprise applications in any business, let's take a step back and absorb the lessons of history. Winston Churchill once said that those who didn't learn from history were doomed to repeat its mistakes. Unfortunately, this has been the case with enterprise applications and not just packages. The tidal wave of packaged software take up, starting in the early 90s, was a knee-jerk reaction to failed custom system development projects. For example, in the banking sector, multi-hundred-million dollar system disasters are the stuff of legend. They caused the affected management of these organisations to seriously lose their appetites for more of the same. The thinking then became "we would have to be better off with packages because a high degree of what we need already exists". This really appealed to the systems integration community, for obvious reasons, and many of them experienced truly explosive periods of growth. However, retrofitting a major application actually amounts to a more complex exercise than developing one from scratch, as many organisations have discovered.

So, what was the lesson that needed to be learned? What was the factor common to both approaches that caused the grief? Answer: there was no blueprint or master road map that fully defined requirements and created a clear line of sight between strategy and application behaviour and application code. No matter whether it is custom or off-the-shelf software, the method of engagement caused the problem.

Now, let's return to the central topic - how to effectively engage a technology vendor to get it right the first time.

## 1.2. Don't engage a technology partner to help with your business

One of the biggest mistakes organisations make is to engage the technology vendor too early on the premise that they will help them with their business processes. The technology vendor knows about technology – not about business – after all, you wouldn't get them to run your next business strategy meeting – so why are they relied on when it comes to the business processes that have to deliver on the strategy?

With such a focus on the technology, IT begins to think that business is all about technology – in fact, business is about people. That is, people doing business with other people to exchange value through deliver products and services. Therefore, if you only engage a technology company, you immediately create a void on the people and business side of things. In our experience, successful organisational change comes about when people, business and technology are fully aligned.

When they're not aligned, staff who want to do a better job are forced to find workarounds for poor practices. But once the processes are embedded in the software, it becomes harder to get around the inefficiencies. Then two things happen – people all start performing at the same lower level and / or they return to the old applications or use Excel and Access databases to compensate.

So why doesn't the business **first** engage a business management expert to assist them in ensuring their business processes are best practice **before** embedding them in software?

### 1.3. Pick a vendor that can match 'your' business model

Instead of forced compliance with the application's embedded business model, organisations must ask the fundamental question about their technology partner: *'what do they know about my business?'* Even better, *'what does this technology vendor know about best practice, change management and other fundamentals of running a successful business? How can I tell that the embedded processes really work and are best for my staff and customers?'*

After all, while the vendor may be able to successfully run their own business, selling software, what do they really know about other people's businesses and people's performance? How can you know that the changes their application will invariably force on your business (because one size does **not** fit all) are in fact the best way to do business or drive success? You could even ask if the technology vendor uses their own software to run their own business. And with all these just graduated IT consultants running around, how confident are you that they know what makes for a successful business?

Before you pick a vendor, you need to be absolutely clear on your business processes, user requirements and interface designs necessary to implement your business processes. Technology vendors are not generally good at this aspect and leave it to last, or downplay its importance.

### 1.4. Cheapest is not best

The tough competitive landscape means that vendors need to cut their prices to 'get in', knowing full well they'll make up fees in the ongoing change requests and the fact they'll still be working on it years after they said they'd finish. For its part, business has also been known to twist vendor's arms on pricing. Something's got to give and it is invariably the quality of the end result.

Despite the promises of off-the-shelf software, there is always some customisation required as you find out that the software doesn't work the way you want it to. How did you end up in this situation? Mainly because the initial requirements were sufficiently vague and ambiguous that any of the vendors appeared to deliver on them – so you picked them on price. But as we all know, the devil is in the detail. With all the customisation that is inevitable, custom built software may actually be a better solution in many circumstances.

## 1.5. The critical success factor: The user interface is all people see!

With technologists in charge, the user interface is generally the last thing to be designed. Why is the user interface critical? First, the user interface defines the application behaviour and implements the business processes, and second, this being the case, to the user, it is the application.

Consider that you don't take the executive down to the server room to stare at the hypnotic qualities of the flashing lights, or let them ogle in wonder over the coders' shoulders. The only thing they (and end users) can make sense of is the user interface.

I mentioned earlier about the gap technology vendors have in getting the people and business side right – well this is where it all goes pear-shaped. If your staff can't use the application, or it takes twice as long as before, then this is where your return on investment will evaporate. They'll just go back the old ways or use their spreadsheets instead. The alternative is to continue to engage your vendor as you work through hundreds of iterations with the user interface as you try and get something that people get and can use.

## 1.6. Don't assume customisations will work when the base program is updated

The vendors regularly update their fundamental codebase to introduce better and better technologies. Unfortunately, all that customisation that you had to get to make the application do something close to what you need is not compatible and needs to be done again. If you don't go through the upgrade, the vendor simply 'desupports' the old version and you stuck in a bind – pay more money to stay up to date with an application that will still not work the way you want it to.

As I suggested earlier, sometimes custom software may be better.

## 1.7. Where to from here

There is no doubt that ERP / CRM and related applications usually have little trouble in representing the business rules, policies and procedures for your business, but it's the user interface that will make or break the success of the implementation in the workplace.

If you're in the middle of implementation, then there are a few things you can do:

- ◀ Check the current progress against the initial estimates. If you haven't gotten too far, then consider putting the project on hold. A month to take a breath and consider your options is nothing in the context of a multi-year implementation schedule.
- ◀ Examine the business processes you're embedding. Are they best practice? Are they what your customers value? Consider engaging business management or change management consultants to work with you to get the best efficiencies from your processes.

- ◀ Where is the user interface up to? Can people actually use them quickly, easily and without training? If you haven't progressed too far, then engage usability and user interface design consultants to spend time to get all the interfaces right, and then control ongoing development against the interfaces.
- ◀ What are your implementation strategies? If you have committed to months and months of training across all staff, then there is bound to be a problem with people using the interface and increased variance in performance. Training is just not an effective strategy – if you have to train people to use the interface, then the interface is not helping people do their job. The interface should guide and constrain people's activities so they deliver best practice in a consistent manner.

If you're contemplating ERP / CRM for your business, consider the following:

- ◀ Get all of your requirements fully specified up front. This means all business requirements, all user requirements, and all user interface designs. These three components will then influence your system architecture. Armed with this 'Blueprint', you can then go to market and seek a vendor that can build to the blueprint. You may even find that custom software is a better option than off-the-shelf software with hundreds of customisations.
- ◀ During requirements, engage change management consultants to work with you to ensure the business processes are the most effective and efficient they can be, and they that match customer expectations.
- ◀ Create a performance management framework that will demonstrate the required return on investment. This becomes the testing frameworks to control activities and ensure things are being done that contribute directly to the success of the business.

## 2. About the Author

Craig is the founder and Managing Director of The Performance Technologies Group (PTG Global), with over 15 years in user experience, user interface design and change management.

Craig runs the R&D function at PTG, having produced a number of world firsts including XPDesign – the first systematic methodology for user interface design and Certified Usable – the first guarantee for usability and user experience.

Craig has been the primary architect behind many of Australia's most popular websites including CBA, Virgin Blue and ASIC and works on cutting edge technologies such as touch, medical and special-purpose applications.

Craig holds a Masters qualification in organisational psychology, is a member of the APS and the APS College of Organisational Psychologists and is a Registered Psychologist in NSW. He is also an Associate of the University of NSW and Macquarie University.



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