

Why IT and Business need to talk

'Two nations separated by a common language?'

In *The Canterville Ghost* (1887), Oscar Wilde wrote: 'We have really everything in common with America nowadays except, of course, language'. I have an English-American/American-English dictionary in front of me as I write this, and have learnt over the years that Americans think chips are crisps, whereas we British expect them to come covered in salt and vinegar and wrapped in a piece of newspaper. However, I digress.

All of this musing came about because I have the distinct feeling that IT and business people speak two totally different languages.

Business - "IT spends too much and delivers nothing"

IT - "They give me no budget and expect Roll-Royce service"

Business - "I don't have time to learn all that techy nerd stuff"

IT - "I don't understand all that business mumbo-jumbo"

Business - "I never understand the IT part of our board meetings"

IT - "I never understand the business part of our board meetings"

Business - "All I get from IT is a string of reasons why they can't do what I want without lots of cash"

IT - "They never invite me to explain what IT is doing / can do for them"

Both - "I just get the blame for everything that goes wrong"

Let me try and explain why IT and business have to learn a common language and talk about some of the steps you need to undertake to get IT really working for your company.

A typical scenario

Your IT department has spent days gathering all the information on server availability, and come to the board meeting ready to prove that they have been delivering 99.99% availability for the last week and cannot understand why anybody is complaining.

Unfortunately the application is being used by online options traders who need a response time of less than 12 seconds in which to make a trade. Availability is meaningless to them without performance. Bit like giving me a Ferrari with no petrol in it. I am sure it is beautiful and works well, but frankly it is absolutely useless to me as it stands.

A simple example (which is actually true), and you would think that it was obvious from both sides what was going on. The problem was that no-one thought of explaining the issue in terms that the other side would not only comprehend, but also act upon sensibly. Had the IT department understood the fact that trades have a very short time in which they can be made, then the design of the system would have been totally different. However, would they then have had the chance to present the options available?

Many IT departments focus on the technology and delivery of availability of platforms, databases and applications. But although all of these are important, it is how these elements interact to provide a business service that is the key issue. It is vital that the IT department understands not only the technology but also the way that the technology interacts to deliver service. Dealing with technology in isolation can lead to huge problems when it comes to diagnosing service outages.

If you have just had the opportunity to try out one of your competitor's offerings and think that their paint finish or whatever is better than yours, what do you do? You go to the manager in charge of the production line, give him/her a sample and ask him/her why you haven't got the same quality. He/she will then go away and do some cost estimations for various different levels of finish and present them back to you, possibly with some samples to match, and you will make a business decision based on costs / possible increased sales etc. A simple scenario, because each side can rapidly understand what the other side wants.

Do you get the same level of response from the IT department, or is it all couched in language that you don't want to hear, and leaves you thoroughly confused? Do they truly understand your business requirements and the options that they should be evaluating? Have you explained to them what you want in terms that they can understand?

Where the problem comes from

Background

The first part of the problem is that IT managers and Business managers have tended to be different types of people with different training. More and more the need is arising for each party to be "trained" in the other's area of competence. This does not mean that business managers have to understand control blocks and log records, but they do have to understand that disaster recovery, for instance, can have multiple solutions involving varying levels of expense. How much data are you prepared to lose, how much time are you allowed for the recovery, how much money do you want to spend? The IT department can provide a solution if they are armed with the necessary business requirements, but they must also present the options in a clear and non-jargon-ridden way. They similarly need to have a fundamental grasp of business thinking. This is why more and more CIOs are being taken from the lines of business rather than a pure IT background, but

they must be prepared to learn enough of the IT language to truly understand what is going on and the IT department must learn how to communicate their options (and frustrations) to the CIO.

Mainframe to distributed

The IT landscape has also become infinitely more complex. In the old days you put in a big central box - a mainframe - attached dumb terminal to it on a network and that was it. With the advent of distributed computing, multiple storage options, all sorts of networks and a plethora of ways of joining it all together, it is difficult for the IT manager to keep track of all the options, let alone the business manager.

Dotcom madness

Then came the era of dotcom madness, when systems were installed because they were possible, not because they made sense. This meant that IT got the reputation of being able to do anything, but also the reputation for spending huge amounts of money with little (or probably negative) return. This era, thank God, is now over. However, the pendulum has now swung violently the other way with all IT spending being seen as an extravagance and an almost frenzied demand for the IT department to squeeze every last drop out of the investment they have made already.

Obsolescence

Unfortunately, all computer equipment is designed with inbuilt obsolescence, and if you lag too far behind then it is difficult to get spare parts, software maintenance etc. Also, the user demands escalate almost exponentially. In the old days there was little or no direct contact with the end-user, and hence you could use simple systems with crude interfaces used by internal personnel only. Then came the Internet revolution and suddenly your systems were being presented direct to the end-user, who wanted graphics, sound, video or whatever. As a result your network demands changed dramatically, the amount of data you have to store (for all those digital pictures and videos and audio clips) has gone through the roof and you wonder where all that money you have spent on IT infrastructure has gone to.

How we should use IT

Requirements

Back in the “good old days” (actually they weren’t totally good, but at least we did not have to watch those awful reality TV programmes) computer systems were usually designed based on the requirements. This approach got completely ignored for some years during the great dotcom fiasco, where a new method was used:

- Can it be done technically?
- Yes, then do it and spend lots of money
- No, try to do it anyway and spend lots of money

You will notice a frightening lack of business principles being applied here - will it save me money, will it make me money? Not difficult questions, but basically fudged for many years as they were made up from weird and wonderful inaccurate meaningless projections of how we were all going to use e-systems 24 hours a day and could not live without them. Not surprisingly, IT developed a reputation for spending money on stupid systems for reasons that were neither clear nor justified. A lot of the people in the dotcom arena were unfortunately technically brilliant, but totally business naïve.

People then got more and more paranoid about what systems they should be using. Magazine management became common - "it says in this magazine that UNIX/Oracle/SAP/SQL server/LINUX/Java/XML/SOAP/Web Services/ whatever is the cornerstone of the future, we must have it". All of these are excellent in the right environment - are they necessarily the correct solution for every application? No. The fact that someone else is using a particular combination does not mean that you should be using the same combination - the only advantage is that they may find the bugs (errors) first.

System choice

So, what system should I be using? The only answer, which I can categorically state as being correct, is that there is no correct answer to this question. The choice should be based on the requirements, and they will include interface, performance, ease of use, availability, cost etc. Do not get hung up on what other people are running. Yes, you want to know if the combination works, but the fact that someone else is running a particular combination does not mean that it is correct for you.

There has also been a dreadful fear that you might be missing out on something. A few years ago, a lot of IT decisions seem to have been driven by magazine articles, and comparison with other companies as opposed to the fundamental requirements of the business.

There is no single combination of platform, operating system, database etc., which is correct for all applications. Every business will run something slightly (or significantly) different and that is correct.

Service

At the end of the day, the reason you are using IT should be because it enables you to deliver service to a user more cheaply, more efficiently, for longer hours etc. In other words, you are using IT as a business tool, not to keep some IT techie happy. There are no IT projects nowadays, there are only business projects, which may or may not use IT if appropriate.

So, IT needs to understand that its sole function in life is to enable the business to run better. This means that it is either helping to reduce costs, and/or it is helping you increase revenues. If it is not achieving either of these functions, then why are you using it?

However, the IT department is between a rock and a hard place as they are being told to reduce costs, and by far the most important factor - when budgets are restricted, it is also the one that often gets pushed down the list of selection criteria - is actually quality of service.

Some managers see low cost and high quality of service as being mutually exclusive but this need not to be the case.

By using best practices, leveraging economies of scale and focusing on service delivery, IT departments really can deliver on their promises. This also means that you have to start thinking about who is using the systems. Most IT systems are measured and designed from the point of view of the IT department, which is totally wrong. The systems are there to service end-users, so they should be designed and measured from the end-user point of view. Two examples to show you what I mean.

1. A few years back, my UK bank wrote to me offering 24x7 online Internet banking. I signed up and starting using it, as I travel the world and being able to handle my bank accounts whilst on the road is very useful to me. I started using the service and it was frankly awful. It was nearer 19x6 than 24x7, the performance was chronic and it was frequently down for hours at a time. So I used one of my company's products to measure the service from my point of view, printed the reports and took them to my bank manager. His response? "Thank you, Mr Armstrong, I have been asking for reports like this for years, you are the first person to show me what you are seeing. Can I have a copy?" I gave him a copy and also told him what was causing the problems (one of my colleagues used to work for them and knew what was wrong). I am glad to say the problems have now gone away, the users are much happier, and they now have a service, which is competitive, and is saving them money. And yes, I am a lot happier and decided to stay with them.
2. Probably the longest-running and in my opinion best e-business service is ATMs (cash machines). Here is the intelligent application of technology to provide a useful service to the end user, and save transaction costs (it is much cheaper to service me via an ATM than via a human being in a branch of the bank).

How good is my service?

One of the most interesting things to try out is to go the web armed only with the name of your company. Now login to your company's website and try and find out what your company actually does. Remember that you must not use any knowledge you already have - you must pretend to be an end-

user. Alternatively use your wife / mother / children to try it for you and watch what they do. You will be amazed at where they click on the screen, the paths they take and the information they either find or fail to find.

I tried searching on my company's website a couple of years ago for a particular product that we have. I searched by function, platform, database etc (it was an online copy product I was looking for) and found nothing. When I then searched by product name (Extended Buffer Manager Snapshot Upgrade Facility) I found about 20 hits. How many customers are going to search on that name?

Who is using your IT systems? Why are they using them? What are you trying to sell them? Is it easy to contact you if they have problems? Is the data up-to-date? Are the systems available (and this includes performance)? What are the availability and performance requirements (some systems perform better than required, which is a waste of money)? Do you have Service Level Agreements (SLAs) in place and are you measuring against them? Are you measuring from the end-user point of view or from your own point of view?

I was visiting a major University in Australia last year, who told me that they were very happy that they had the local systems under control (which was good news as they are using my company's products!), but what they really wanted to know was whether a potential student in South Africa was able to access their systems and apply for a place on next year's course, because this is what generated the revenue.

Service measurement

Another area of concern is that of service measurement. The cornerstone of any managed services contract is the service level agreement. This is meant to be the yardstick that measures the performance of the "service provider", but unless the agreement is written and reported on with measurable and meaningful values it can lead to very difficult situations.

The vaguer the service level agreement, the more chance of confusion on what should be and has been delivered as part of the contract. Service level agreements need to be written with factual, measurable metrics included and the service provider should regularly provide detailed reports based on these metrics.

The most common metrics tend to relate to issues such as call-response times and mean-time-to-repair faults. However, valuable as these are, they are measures after the fact. Never having to call in the first place because there are no problems is better than having access to good call-response times. Service level agreements should be based on the availability and performance of the service - not just its reaction to failure. In fact SLAs should be based on what the business needs - most of the time they are written from a pure technology point of view.

I was visiting a major customer last year, whose IT operations are outsourced to one of the major outsourcing companies. The contract is, of

course, couched in terms of CPU used, number of housekeeping jobs run, number of tape mounts etc. etc. - totally and utterly wrong in my opinion. The bank want a service - how the outsourcer actually implements it technically should be of no concern as long as it is safe, reliable and conforms to the business SLAs. In this particular case the bank wanted the outsourcer to install a product, which would save 20% CPU. The outsourcer, of course, refused as they saw it as a means of losing money. If you stand back and look at the bigger business picture, you realise that the outsourcer can provide a better service with less hardware expenditure (= no expensive upgrades, ability to handle more workload / customers etc.) and the bank gets a faster response time.

Reporting

Reporting is another critical area that can get overlooked. A good IT department will not only provide good service but also prove it by providing meaningful reports. These reports should relate directly to the service being provided to the customer and also show the value that the IT department is bringing to the equation. They should be couched in language that the business people can understand - Oracle availability is meaningless, ability to print invoices on time is significant.

Some more examples

A couple of examples of IT and business not coming together as well as they should.

1. I went to visit a major European bank. They had come to us with requirement to run their systems 24x7, and as they were a leading edge IT user (sysplex, sharing, dual sites etc etc) we had to write some extensions to our software to cater for their environment, but it all worked fine. I was invited in to meet the DP Manager, whom I have known for years.

“Do the products work?”

“Yes, no problems.”

“Are you happy with our support and assistance?”

“Yes, brilliant”

“Do the products do what you require?”

“Absolutely”

“Are you going to sign the contract?”

“Not my decision”

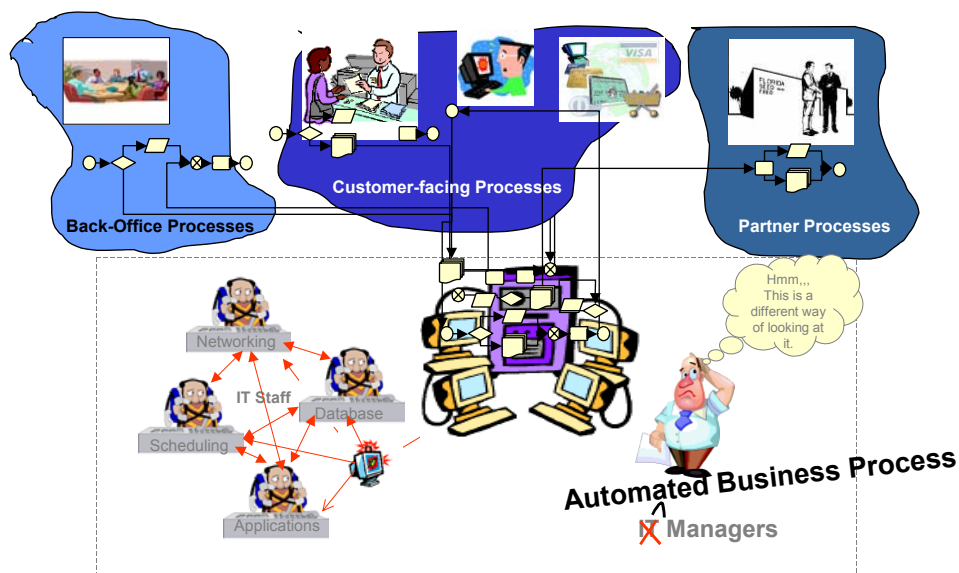
It transpired that the salesperson had never spoken to the Business Manager, who had raised the 24x7 requirement in the first place and had never established what the business benefits were to the bank of a 24x7 service. I unpacked my steel-capped boots and kicked the

salesperson from here to eternity. We then worked on meeting the Business Manager, who we discovered had the requirement to make the bank one of the 5 leading banks in the world, and could not see how they could do that on an International scale without offering 24x7 services.

2. I went to visit a large European insurance company. Their requirement was to extend the online day by 3 hours, and hence squeeze the overnight batch processes by 3 hours. Working with the technical staff we worked out that we could achieve this easily, and I was taken in to meet the DBA manager and explain the brilliant internals of our products and how clever we were at doing things online, which previously had to be done offline. I asked the salesperson if he knew why they needed 3 hours and he said no, so when I met the manager I asked two questions.
 - a. Why do you need 3 hours? He gave me 6 good business reasons.
 - b. How much is it worth to your company? He had no idea, but asked if he could go and ask his boss. He came back 15 minutes later, saying that his boss did not know either, so they were going to run an internal task force and could I come back next week. One week later we discover that the 3 hours are going to be worth large quantities of money to them and the IT project immediately got the blessing to go ahead.

The missing pieces

Business service vs IT process



IT departments tend to think from the bottom up - in this diagram they would be thinking about databases, networks, job schedules etc. The line of business manager on the other hand is thinking about whether the back office functions are running, whether the customer-facing processes are operating efficiently and what sort of service is being provided to the business partners.

A business service is dependent on a set of processes to ensure that it is executing and performing as expected. In not-yet-automated business services, the management is done primarily by business-side managers. The IT organization exists to manage the infrastructure and software applications. What this translates to, is that some or all of the management of the business execution is transferred to the IT organization, and hence businesses should understand that IT management is an integral success contributor.

Automated business services provide many benefits. However, they also bring with them considerable inherent risks. Computing infrastructures are extremely fragile and 'dumb' by nature, and all different. Due to the considerable inherent risks associated with IT-based business services, it is vitally important to the business that the environment in which the business service will execute is managed extremely well and cost effectively toward business needs and expectations. The most effective method to date to manage automated business processes is through a set of mature IT management disciplines like ITIL®.

IT Best Practice

Hopefully, no-one runs technology for fun, so each component has to provide some degree of functionality to the business. Managing these components is just as critical as the components themselves, because a failure can affect the service that relies upon them. At a technical level the key issue is how the IT department actually proposes to manage the environment. The use of industry-leading solutions and best-practice methodologies should be common to all good "service providers" but they are surprisingly often absent.

Some IT departments see tools merely as a way of reducing their cost of operation by reducing the number of people required to manage the environment. However, the use of tools to manage technology can greatly increase the availability and performance of the infrastructure. By exploiting the functionality within the toolset and applying that functionality to best-practice standards such as ITIL, the business - and ultimately the customer - receives the benefits.

This means that not only must IT and business learn to talk to each other, but they also need new tools to make their life business oriented. When a component fails or performs badly, you need to see the impact from a business point of view rather than a technology point of view. If you give an IT person 5 problems, they will typically work on them in a first-in-first-out order as they don't have any information to tell them not to. When you add in a business criticality view, the order of resolution of problems / performance tuning / infrastructure investment etc. becomes totally different and IT begins to build value for the company rather than act as a cost centre.

Through implementation of sensible IT processes, combined with business-related tools and methodologies, the advantage to the business is the true and correct exploitation of the IT investment. This is why the two parties need to learn to talk to one another.