Implementing Capacity Management: A Journey Into the Unknown

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Session Description

What if we told you that there's a process waiting to be unleashed that can take ITSM from reactive to proactive? One that results in less down time and increased cost savings while making sure processing power and storage are ready and waiting when your business needs it? This hidden gem is called business capacity management, and this session will show you how to implement and grow this process to deliver real business benefits. (Experience Level: Fundamental)

Speaker Background

Malcolm Gunn is well versed in implementing and developing ITIL processes, having worked with internal supply chains and IT outsourcing companies. Working initially in the reactive areas, he realized that if a proactive process could be effectively implemented and aligned to critical business goals, ITSM could become the game changer it was always meant to be. Malcolm is a firm believer that capacity management is one of those key proactive building blocks.
Session 703
Capacity Management
A Journey Into The Unknown

Malcolm Gunn

Background

- Retail Banking
- Commercial Banking
- Service Management
- IT Outsourcing
Why Capacity Management

9 PERSONS 1000KG
OR
1 HORSE
5,050 BANANAS
6,666 HENS EGGS
2,941 PIGEONS
88 HADDOCK
10,526 POUND COINS

We all Capacity Manage
Capacity Management Vs Monitoring and Alerting

“We have monitoring and alerting in place across the estate”

“I’m not going to paying twice for the same thing”

“We’re cloud based, capacity is always there when we need it so we don’t need capacity management”

“We can remove monitoring and alerting now we have capacity management”

The Starting Point

REACTIVE

PROACTIVE
4 Questions and a Process

- Where are we
- Where do we need to be
- How will we get there
- How will we know when it's worked

Feasibility Study

The Basics Component Level

- Monitoring and alerting
- It's not just the level we are now
- How quickly can we add capacity
- What will be the impact of extra capacity
Looking at a Service Level

- Reporting at a service level is useful.
- Past performance
- Predicting the future
- Understand the context
- We need something more

Business Capacity Management

- Know the history
- Add in business demand
- Understand business impact
- Plan for the future
- Clear, costed solutions
- Track expectations against actual
- Adding a toolset
**Capacity Management Level’s**

- **Level 1 Capacity Management**
  - Active Management (Business)
  - Deployment
  - New Goals

- **Level 2 Capacity Management**
  - Internal Reporting (Service)

- **Level 3 Capacity Management**
  - Monitoring and Alerting
  - Plus (Component)

**Deployment**
In each case a Capacity plan will be created to document the level of capacity service being delivered and the scope of coverage for that service.

**Service Stability**

**New Goals**

- Develop a low cost starter service
- Based on self service functionality
- Offer something that benefits the client
- Helps us understand the clients business
- Make the best use of resources
The Future

- All new accounts automated
- Standard processing
- Standard toolset
- Make the best use of resources
- Reducing delivery cost

Make it Visible

- Action Log
- Regular briefings
- Include highlights in your reporting
- Bring capacity into general conversations
- Areas to consider
  - Cost of incident
  - Cost of alerts
  - Cost of an outages saved
Time For a Few Questions

The Basics

• Capacity Management elevator pitch
• Capacity Management process
• Capacity Management Plan
• Capacity Management report
• Capacity Management templates
• Capacity Management acceptance criteria
• Capacity Management cost model
In Summary

• Understand the challenges you will face
• Start simple and build up
• Build a standard repeatable process
• Be positive talk solutions and benefits
• Have the collateral in place
• A toolset really does help
• Wherever you are on the journey never stop
• Have fun,
• Make it matter

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Any Further Questions?

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A Journey from the Unknown, Implementing Capacity Management

Capacity Management is sometimes seen as an afterthought when setting up IT service management something we will do at an undefined time in the future. This approach means we can miss out on a vital process. With Capacity Management we can transform the business areas view of IT service management. It brings the business and IT functions closer together and provides one of the three fundamental building blocks to delivering resources the organisation requires when they need them in a controlled and managed way. Capacity management is something we all use every day in our lives its second nature to us. Yet when it comes to implementing capacity management within organisations it seems it’s a luxury rather than a must have. This paper looks at a three step process for implementing and embedding Capacity Management within your organisation and the challenges that will be faced as you journey from nothing to full business capacity management. The paper finishes with a series of frequently asked questions and challenges around deployment.

Background

Capacity management has the ability to transform the way the business areas view IT. It’s an everyday skill that we all use from the moment we open the fridge in the morning till we go to bed at night we capacity management hundreds of times each day. However to ensure its part of the must have set of ITIL processes within an organisation the journey can be a long and interesting one. Especially as most organisations default position will be either we already do it, or why do we need to be proactive and pay to fix things that might not happen.

For some reason organisations have become fixated with reactive ITIL processes incident and problem management, and ignore or pay passing lip service to the important processes that can deliver stability to their IT Infrastructure. What are these processes? Capacity, Availability and Performance they are the three pillars on which successful IT infrastructure management should be built upon. When we think about it, it covers off the basic needs we have, a system that is available when we need it, working at a speed that is acceptable and with room for growth, what more could we ask for. Perhaps having something work just isn’t exciting enough so we work on incident management and problem management holding these processes up as the best processes we have which is an issue, because its admitting failure. Now things will break and need fixing that’s just a fact of life but if we can work on them before they break that must be a better approach.

To move into the proactive space isn’t easy and we can’t expect things to change immediately but we can look at changing things one process at a time. This paper looks at how we can change one process by starting and continuing on the capacity management implementation journey. It’s not a theory paper this is a review of a journey that’s taking place right now, a travelogue if you like of a process implementation. It’s been a long journey at times is been difficult, at others it’s been like pushing against an open door. There have been highs and lows mistakes and surprises but it’s a journey that continues as the business requirements change and evolve.

Preparing to Take the First Step

Well let’s start the journey and the first steps are getting buy in within the organisation, now you may be lucky and the organisation could have made the decision itself to start. Either way it’s good to have an elevator pitch ready because one of the first challenges that faces you is why do we need capacity management? Now you will develop your own based on your character, the company you work for and how long you expect to be in the elevator but here’s one I’ve used recently
Capacity Management Elevator Pitch

Capacity management it’s the key to effective IT infrastructure management.

If you don’t know how much you have, how much you’ve used and how quickly you’re using it. Then how can you plan for the future, how can you know if something’s about to break or how long it will remain functioning.

Capacity management gives you the confidence that when its need the space and processing power will be there.

It reduces outages, delivers increased availability, improves client perception, and delivers cost savings whilst allowing everything to run safely.

Starting the Journey Component Capacity

So why wouldn’t you want capacity management in fact how have you managed without it, well I’m sure people will come up with any number of reason as to why they don’t need it, because you’re going to be changing the culture of the organisation as well as implementing a new process.

That’s a challenge but it’s also something that will bring much enjoyment along the way. As they say the longest journey begins with just a single step and the first challenge you face will be yourself. You may want to do this as fast as you can to get the process in fully implemented in one single push. That might be possible but remembering the internal challenges you’ll face its more effective to go through a series of steps building up to a full business capacity management process which should, or perhaps I should say may be your expected end state because depending on your requirements you may never need to get to that level or you may have a series of different levels depending on the services you are supporting.

First of all let’s start at the beginning let’s do the basics, beginning with the most important step and the one that many people will jump over and so end up down the wrong path and this could be why many implementations never get to the goal they wanted to. What is that first step? Well it’s the first step that every process implementation should begin with a feasibility study. If that sounds obvious I make no apology because often we go ahead and implement a process without doing this step and so we risk ending up with three main problems one is an over engineered process that is too complex and resource hungry for the size of the operation it supports. The other is that we implement a process off the shelf from someone else that worked in their organisation without understanding what the requirements are for our organisation. The final problem is ending up process that’s quick to implement but that is too simple and isn’t robust enough to maintain the levels needed by the company.

Once we are ready to start there are three main levels of process and ideally we need to work our way through each of these gain buy in and acceptance so we can move forward to the next level. Let’s not forget here that acceptance and buy in will be needed both upward to senior management and downward to the technical teams who support our infrastructure.

The first step is component level capacity management and even at this basic level you’ll face a challenge as a capacity manager and the first and potentially the main challenge you will face is the statement often from technical teams and that is,

“We already do capacity management we have alerting on the boxes at 85% and 90% and when they hit the limits we have a look”.

It’s a statement that’s used a lot and there is some validity to it, as it’s possible that from your feasibility study and size of operation this may be all that’s needed. Even if it is we need to be clear this isn’t capacity management this is monitoring and alert. There is a difference between monitoring and alert and component capacity management.
Monitoring and alerting will only take you so far capacity management adds a layer of understanding that helps underpin the monitoring and alerting and ensure that the alerts are at the right level and that we have sufficient time to react to those alerts. Where does capacity management add value at this level? Well it’s in understanding not just the level we are currently at but how fast resources are being burned as well as knowing how much spare CPU memory or storage is available. What use is it to have an alert at 85% and even knowing that if everything continues you have 6 weeks growth left if you have no spare space and your procurement process has a minimum delivery and deployment time of 7 weeks?

It’s at this level that capacity management starts to show its value as it tracks usage, trends what’s happening and can start raising concerns before we get near the alerting process allowing if required new equipment to be added. Or if not ensuring we can plan ahead so changes are completed in advance at a time that’s most effective for the technical teams and gives the least disruption to the business and end users.

This is may be a new way of working, it’s probable that the technical teams will still be doing the same changes they would with monitoring and alerting or that they would be doing if we ran out of resource and had an incident but the work can be done in a controlled manner at the best time for all parties. It also ensures it’s changed managed and because it’s done in a well-controlled manner we won’t leave behind any ticking clocks that sit waiting to break in the future. Now we can add further value because as we are spotting trends early we can carefully assess various options so where as in an incident we will deploy the quickest simplest solution we can and that is often throwing more tin or storage at the problem we can come up with more cost effective solution perhaps better more effective ways of using the existing resources within the infrastructure.

There is another area where capacity management adds value at the component level that is to understand the impact of increasing capacity because we are working in a more controlled manner we can assess the options review the potential impact and come up with the best solution.

So we can see that at this level we as capacity managers can already start to demonstrate the value we add. Before we move onto the next step in the deployment journey a note of caution or a warning to check every step you are going to take. This level of capacity management may be all that’s needed for background services with little or very clearly understood slow linear growth patterns. Working at the component level is a long way from business capacity management it’s more like an enhanced monitoring and alerting process but it takes you beyond the “let it break then fix it” mentality into a more controlled and managed position.

Whilst this level may be seen as little more than enhanced monitoring and alerting it is critical to get this first step in place. As not only does the longest journey start with a single step that step is the hardest and must be in the right direction.

In implementing this introductory level you are building the foundations on which the next two steps are built on so the foundations must be strong as they will start to dictate how well the next steps perform

The Next Step Building a Service View

Once you’re ready for the next step, things will be slightly easier as the organisation will have started to realise that there is a difference between capacity management which is what we do, and capacity reporting which is what organisations often get, reporting tells them what’s happened and broken, capacity management tells them what is going to break in the future and makes sure it doesn’t. Once that hurdle has been overcome the journey gets ever so slightly less rough.
Whilst the component level capacity management adds value it’s not very closely aligned to the overall organisation business goals. Moving to the next level also starts to move capacity management into a proactive space. To do that we need to start looking more at end user services than components in isolation. Taking a service view is a useful step but it’s not as good as it might appear at first glance. Moving to this level brings with it its own set of challenges and will start to make demands on other ITIL processes, that’s not a bad thing in fact it will help add value to other process areas across the organisation.

So what does working at a service level require, we need to understand all the components that go together to make up the delivery of one or more applications to provide a service to an end user. This could well be the first challenge you face when you start looking at your organisation’s configuration management database (CMDB) if you have one. So challenge one is do you have a configuration management database that lists and links services to components or do you have an asset list. If you have an asset list you’re going to need a full CMDB. If you have one then you’ll need to validate the data and if you want to pile on the value add, start to build service maps based on the CMDB.

With your access to the CMDB set up you’re ready to start the next step on the path because you’ve overcome one of the biggest hurdles in terms of background requirements. This step is about bringing the reporting of each component together to deliver a service based view and the best way to do this is to identify the business critical services. If we start with most important services we can start to show the benefit capacity management can add to services that are important to the business. Added to that as we talk with the business areas to identify these services we will start to make important links with that part of our organisation and that will lead to a closer working relationship moving away from the “them and us” approach so prevalent in many companies.

There is a downside with this level of capacity management and it’s not always obvious at first it does bring with it limitations and these need to be understood.

The first is when we use past performance to drive our future projections, we must remember that the past performance tells us where we’ve been we can predict what may happen in the future but only within the parameters of what’s gone before.

In many ways it’s like the trip computer on your car it brings together two components to give you a service view, the current remaining capacity in your fuel tank and the historic way you’ve driven the car to give you a figure for how far you can travel before you need to add more, makes sense nice and simple.

So now I know I can drive for another 90 kilometres, or can I? That figure is based on the fact that I will continue to drive in the same manner as I have since the trip computer was last reset. The problem arises if I’ve been driving nice and economically recently but know I’m driving down the motorway at a very uneconomic 112 kilometres an hour. The reported value although it looks impressive is just a rough estimate and I must be aware that the current situation is different from the historic measure performance.

That’s the problem we need to insure that people understand when we use this type of projection the limitations if we project forward CPU disk and memory usage it will be based on the business continuing to work in the same way it has in the past. If the business model changes then the projections won’t be valid. When we talk of the business working in the same way that includes user numbers of applications.
remaining the same applications being used in the same way any changes to these and again projections are no longer valid. To make this work effectively we need to take the next step towards business capacity management.

**Business Capacity Management**

It’s the future and in some cases the future has arrived. This is the point where it all comes together and when the IT and business parts of the organisation come together to effectively deliver services to its end users. It’s also where capacity management really starts to add value by working proactively. Now we start by taking all that’s gone before our component figures and our services figures but we now add in business demand. This will mean building a close working relationship and building trust with business areas to ensure they fully engage with you as they plan any changes of direction or marketing campaigns so you can ensure that the background infrastructure can support these changes. Its at this point we start to feed in project demand as well making sure we have a clear picture of the organisations plans for growth.

Its critical for the organisation as a whole just imagine the damage to an organisations reputation if they plan a big marketing campaign to increase on line sales or to drive up new customer numbers only to find that when people log on the web site it crashes. Or when the company users try and set up new accounts for customers say following a savings account drive they can’t log in due to lack of network or database bandwidth or processing power. At which point they say that phrase that kills a new customer relationship “The systems down at the moment” that’s a real deal breaker.

If we can build a close working relation with business areas we can project ahead even building in known seasonal trends to provide the business with a full business impact assessment of any changes in strategy along with clearly planned and costs options. As we mature through this step we can then track actual usage with our projections and use that to amend our modelling process or return to the business to check that what they expected to happen happened. So if we see actual levels lower than projections that may be an issue with modelling or it could be that the business hasn’t actually seen the increases in volumes they had expected to we can revise our plans, perhaps some upgrades can be stopped so we don’t spend on items we don’t need.

Working in this way also means we really move fully into a proactive capacity management rather than reporting what’s happened we can report what will happen with some confidence. We can also start to look for the hidden dangers that are lurking below the monitoring and alerting radar working proactively to flag these and start to implement changes in a controlled manner so the end users never see any issues. It’s at this level that we really start to see the added benefit of increased availability as we stop incidents from happening.

We must be careful not to think that of we have reached this level the journey is over, the journey never ends as now it’s about refining and improving the process to bring it closer and closer to the overall business aims and ensuring it remains close as the business changes over time. Just because the process works now doesn’t mean it will remain fit for purpose this is the point where continual service improvement kicks in.

By the time you’re working at this level you’re going to have to start if you haven’t already to look at supporting this with a toolset. You can do the initial level with spread sheets. The service level can be done with spread sheets but it gets harder and takes more resources much better to let the toolset take the strain and you can work on interpretation and management of recommendations and action plans.

**Why Use a Toolset? (Also see the frequently asked questions for more information)**

Now I’m not here to sell a specific toolset there are many on the market with varying cost, effectiveness and complexity. Choosing the
toolset that’s right for you is a paper in itself. However there are some rules of thumb you can use. This really goes back to starting on the capacity management journey.

First look at the feasibility based on the size of the infrastructure, the size of the business the number of critical services and midrange services you will be asked to manage. It’s possible but unlikely that you can run business capacity management using a set of spreadsheets.

Once you have decided you need a toolset then which do you choose? and the answer is depends so set out some selection criteria that you require, work out a short list and then measure those tools on the short list against the criteria.

Some criteria you may want to include are
- Cost (it’s an important factor)
- Your reporting requirements
- Ease of set up
- Ease of maintenance
- Licencing model
- Specialist skills to operate
- Out of the box value add.

The list is yours to make but make sure it features everything you want to see in a toolset.

Having implemented the process there is a key function that you will need to consider.

**Ensuring People Know What You’ve Done**

The more proactively we work the less people will see what we’ve been doing as capacity managers, the better we do this the more stable service becomes. We need to find ways to ensure that people understand what we’ve delivered that the reason things are stable is because we’ve been working away in the background. How do we do this well let me share some of the things we’ve done to ensure the profile of the team remains high. Whilst these ideas seem obvious strangely they are the part of the process that many teams fail to implement or deliver effectively.

**Actions Logs**

As you identify areas for investigation keep a log of each item you identify this may be an increased usage of a specific drive or increasing CPU trends whatever it is keep a log. Do this for every piece of work you identify and discuss with other areas, There will be times when you raise incidents and/or proactive problem records if you do track these on your action log. You will be surprised how quickly the numbers rack up and if anyone asks especially your boss what have you been doing? You can show them all the actions you’ve investigated which probably more impressive than showing your boss a big fat report document every month.

**Hold Regular Briefings**

Meet regularly with service managers initially explaining what it is you do and then showing them what you’ve delivered. Hold regular sessions with the technical teams to tell them what’s going on in your area. It easy for people to forget who we are, so make sure they don’t. If you can push your way into senior managers meetings to showcase the process and what’s been delivered. Most of them will be surprised at the benefit’s you’ve been delivering without them even knowing so make sure they know who you are and what you’ve done.

**Report What You’ve Done**

I’m not an advocate of big reports full of green telling people everything that’s working well much better to report areas that need investigation. So in your capacity reports, the frequency of which will be detailed your capacity plan make sure you flag up all the investigations you’ve started. Then make sure you detail the investigations that have been closed these may be closed because you’ve made changes or the investigation may reveal no action was required either way ensure you report it to make sure people know how much work is being done.
Look at Documenting Cost Savings

If your organisation has a way of calculating the cost of an outage you can use this to show the amount of money saved by reducing outages. This isn’t absolutely scientific but it does help paint a picture. If you’ve proactively identified an increase that’s needed and if not adding it would have caused an outage then look at how long a similar outage lasted and calculate the cost because you’ve proactively made the increase and there’s been no outage then count that as costs saved.

Another option is to look at outages saved if to add the storage or CPU would have led to an outage and because we’ve proactively identified the requirement and made the change in a controlled perhaps by linking it other changes on the same device or as part of a release you could log outage time saved as now you’ve had one outage rather than two.

Have the Collateral in Place

This is a simple step to take but really will help to quickly build the credibility of your team and its process. It’s an easy way to build the confidence of your senior managers that you are in control. What do you need well just a few simple documents, documents that you will already have put in place as you built your process but always have them to hand.

Document your process does that sound to simple well do you all have a clearly documented processes saying what you do the levels of service you provide, its important as you may offer all of the three levels this paper has looked at depending on the services you are managing.. I’m sure you do but if not document it now.

Next document is a capacity plan template this will cover off almost all eventualities. Have sections for each area you cover windows Unix networks etc. and have an area covering what’s included and what’s not included. This will help ensure that every plan looks and feels the same and that you don’t have to start from scratch each time. Underpinning that will be a capacity report template prepared so reporting is a simple repeatable process.

Have a basic 30, 60, 90 day plan template detailing the steps you will take for the take on of a new service or if you’re in IT outsourcer how you will take on a new client.

Finally have some sample depersonalise reports with data and graphs. To show what the business will get from you should they take the capacity management service.

Why do all this? Well its simple when someone comes and asks what do I get if I want take capacity management on my account you can quickly show them the process in action. It really does build confidence if you can turn round and produce this in seconds. It’s simple but effective way to show you’re fully in control of process.

Talk Capacity Whenever You Can

I don’t mean talk about the process all the time to anyone who will listen. No this is about mentioning capacity management in a humorous way to keep it in people’s minds. Opening the work fridge to find no milk and commenting we have a capacity issue here as well as a monitoring and alerting issue. Strange but true it works when other people are making similar comments then you’ll know the process is embedded in the organisation.

Frequently Asked Questions and Objections

Questions

How do I get buy in

A quick and effective way to build buy in is to find a service with known capacity issues or alleged capacity issues and focus on that. This may be a service that’s complaining or it may be a service that you identify as you run your capacity baseline either way get the fault known and make sure you get your fixes known. If your process is new there will be plenty of opportunity just waiting for you to start looking at. If it’s
maturing the opportunities may be fewer but they are there and you do have the chance to start looking proactively identifying a service that’s at risk.

If you can add some clearly measurable cost savings from reduced outages or less unplanned changes the buy in will come quicker but remember each time you fix something your reputation grows. It can take time but track and log everything you do, build a portfolio of success to include in your monthly reviews.

What does Success Look Like?

So if we put in the process what will it deliver, which really takes us back to the elevator pitch. If we do this right we will see:

- Reduced incidents and specifically major incidents,
- Reduced cost for call out (this can be a barrier to deployment and acceptance)
- Improved availability, outages are carefully planned to make changes rather than waiting for failures.
- Consolidate the environment to reduce cost.
- If you can save enough power you may even find some environmental success.

But we need to be able to show what’s changed so take a baseline view and measure against that for 6 months. Once you’re up and running it’s about maintaining the new levels and pushing them down slowly. Initial results should be good. The first thing is to make people understand is that not everything that fills up is a capacity issue. If you get people to investigate why something filled up or CPU suddenly become fully utilised and find the true root cause rather than the symptom that will give you a significant win and stop many repeat failures, so saving more time, money and reputation.

Improved user Perception

Making sure people know what’s been done the better you do this the less people will see what you’re doing so we need to make ourselves visible. Push into incidents and problem resolution reviews. The more stable things become the better IT services will be perceived by the end users.

Will Overall Workload Reduce

Initially workloads won’t reduce but you will be doing some of the things you were doing during incidents in a controlled and planned manner which makes things tidier and is less likely to leave ticking disasters in the background.

By increasing availability and proactive making fixes the overall system stability will increase which will reduce workloads over time. That improved stability will increase user perceptions the next challenge will be to continue to meet these new perceptions.

What Value Does a Toolset Add?

We have looked at the value of a toolset quickly earlier. This paper is toolset agnostic and the benefits will apply to most toolsets available.

Toolsets really add value to trending reporting not just comparing increases on a day to day basis but allowing mapping of week to week trends, The great benefit they give is continuity we are no longer relying on someone to manually check graphs or figures against each other the toolset will do that and throw out the anomalies for us to investigate.

It builds repeatable reporting no matter who’s working with the toolset. With spreadsheets people get used to what they do new people coming in don’t have the same skills or history.

With a toolset you can be confident that underlying dangers can be spotted flagged and actioned. With a manual process you can never be sure we all miss things from time to time. It’s much easier way to run modelling looking to see what happens if we add users or increase transaction numbers or even what happens if we add or removed processing power.

Running spread sheets even with Macros is time consuming process it’s not really interesting, using a toolset takes the dull out of the process.
and allows our people to do the interesting investigation and actioning work. Even if we build our own toolset using excel or access databases that brings problems. Over time you need to spend time maintaining the application you need to amend coding even with the best in house operating instructions if the original person moves on or leaves it gets harder and harder to make changes.

Working in house reduces the visibility you have to what’s new and up and coming in capacity management reporting trending and modeling using a toolset opens you up to the wider horizon of the supplier

**Objections**

**We don’t work that way**

Now there will be a few reasons for this, one will be a reluctance to change but others will go deeper, in some cases people will feel threatened, If they are used to fixing incidents especially if they have built up a “hero” reputation by taking away the incidents and fixing things in a controlled manner that removes some of their glory and potentially some of their callout fee in their salary. So we need to win these people over by encouraging them to work in different ways to show them they can still be a “hero” by identifying and fixing things without client impact. The time it frees up they can use to look at improving the way they work finding ways to add value to the organisation and to their reputations.

**Releasing knowledge takes away my power**

It won’t be phrased like that but this will be what is meant the more the knowledge of the systems is dispersed the less power that gives individuals as we remove single points of knowledge failure. On the plus side as we disseminate the knowledge each person on the team will get a bigger knowledge pool for themselves and increase their skills.

Knowledge has to be shared, knowledge stored isn’t power its weakness. Selling to technical teams means encouraging them to release that sharing their knowledge allows them to grow their own knowledge from other areas and can open up opportunities in new areas.

Looking at it the other way round as you share your knowledge and gain knowledge from others you increase your power so perhaps we should say your value to the organisation increases.

**We don’t have the time to work proactively we are too busy fixing things.**

You don’t have time not to work proactively, You’re wasting your valuable time lets work smarter and more effectively there will be some short term pain but with good prioritization we can remove some of that and over time the workload will be much more controlled and easier for the technical teams to manage.

**Business critical service aren’t they all critical**

All our services are important could be the response you get when you try and find out the business critical ones, and yes everyone thinks what they do is the most important thing. However there are some functions that are critical vital customer facing services the ones that bring in the revenue those that support your core business functions identify those as a starting point