BusinessConnect and SolutionsConnect
It's time to make bold moves.

SHINE THE LIGHT ON
YOUR SHADOW IT

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Welcome to Solutions Connect. My name is Kirk Nesbitt and I am the national product manager for Cloud & Smarter Infrastructure within IBM Software Group. Together with my colleague Tom Watson, we will be talking about shadow IT.

Now, whilst Shadow IT is one of those scary sounding terms that may fill some of the CIO's and IT managers in the audience with dread, I hope that by the end of todays session that you can see there are healthy ways to adopt Shadow IT and that there are potential benefits to letting shadow IT flourish within your organisation.

I'll be discussing the background of shadow IT. Tom will talk about a number of capabilities that your organisation will require in order to successfully adopt healthy shadow IT

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Definition : Shadow IT

Technology used by individual employees or departments for business purposes who's use has **not been approved or sanctioned** by the IT department

So, we have this term that the industry calls "shadow IT". Which sounds pretty scary……..and it is, if it is not done in a healthy way. But what exactly is Shadow IT.

Very simply it's technology related projects or use that supports an individuals day to day work or business related projects that is occurring without any of the usual IT approvals

Today, cloud and SaaS feature heavily in the way we define Shadow IT.
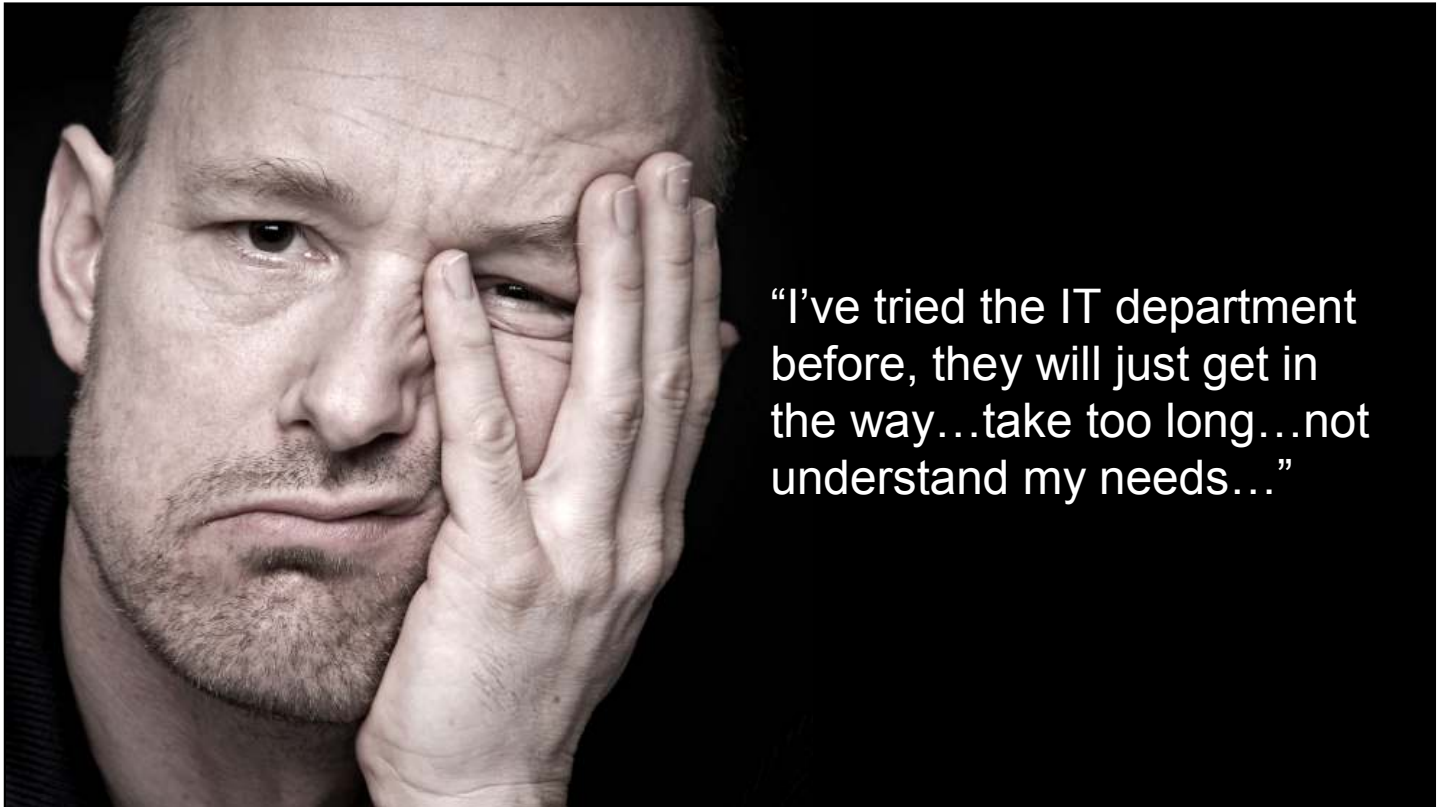
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Definition : Shadow IT

- Not limited to Apps / websites

- Departments within companies are building applications using 3rd party developers and 3rd party environments such as Softlayer

- Composable environments, like BlueMix will accelerate adoption rates

We are not simply talking about apps and consumer based websites.

Many departments outside of IT are using 3rd party PaaS providers and are building their own applications, that become integral to the business and allow the business to engage in new ways, that they never thought possible.

This really leads to the discussion around IT's role in a multi vendor environment.

How can IT provide oversight and management, whilst still maintaining control and deliver a stable and highly available services that continues to enable the business.

"I've tried the IT department before, they will just get in the way…take too long…not understand my needs…"

So lets look at why Shadow IT is occurring.

IT makes it all too hard, they don't understand the business imperatives and priorities that are driving decisions and as a result they are often engaged far too late or not at all.

IT is also seen as process heavy, difficult to deal with and slow.

As a result, users who have a job to do and targets to meet often look elsewhere.

People want to make their lives easy, but the issue is they are often unaware of the risk / consequences associated with these kinds of decisions.

The challenge we face as IT is that when these experiments go wrong, or result in solutions that become business critical, we usually end up supporting them, whether it be formally or informally

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What is driving demand for Shadow IT
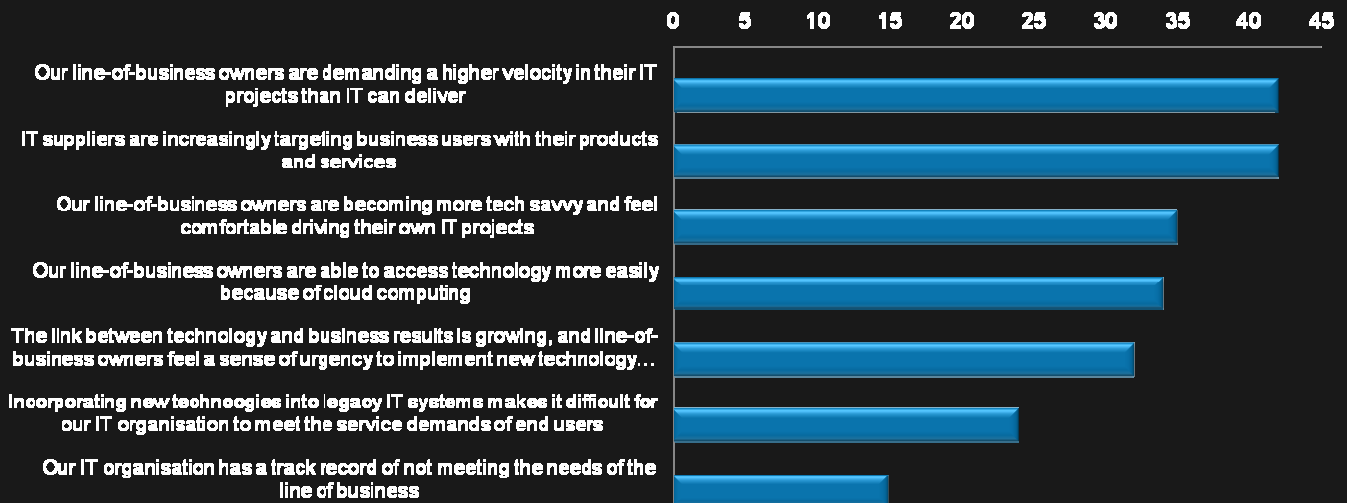
The statistics bear this out.

The business wants faster delivery of their technology related projects, because of this industry wide trend, vendors are now increasingly selling to line of business and cloud is making it easier and easier to access technology

There is a generation of users who have never installed applications onto a PC. These users are carrying their own experiences and expectations into the workforce

In addition to this departments are sourcing solutions from major vendors that have also now moved to a cloud environment

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So what are people up to…
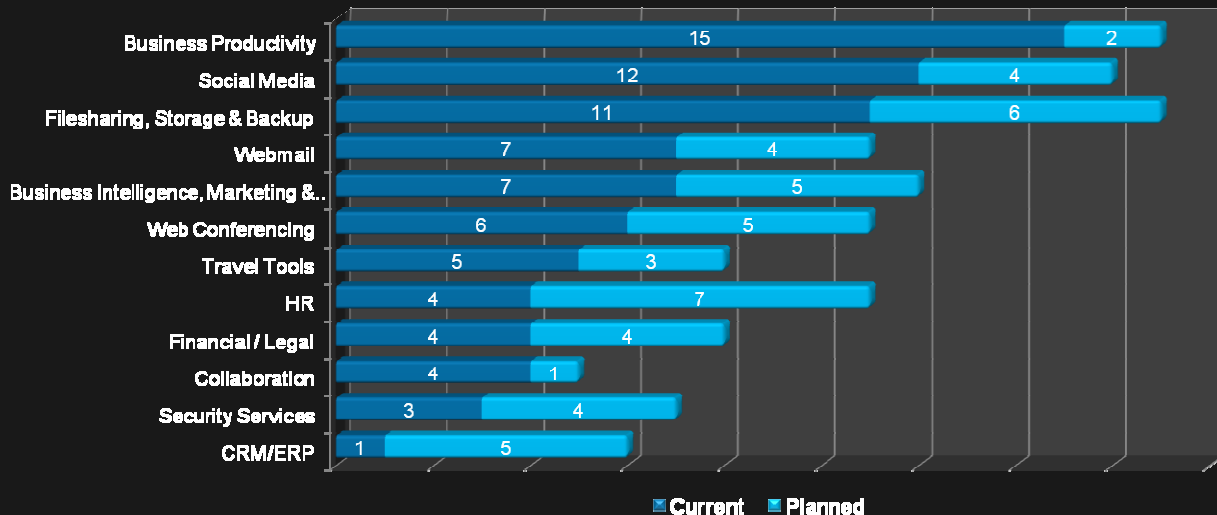
I think that this chart is very interesting. We can look at the obvious and say that people are using the usual suspects

i.Google Docs and other online productivity suites like evernote

ii.Facebook and LinkedIn

iii.File sharing like DropBox, SugarSync and Box…….as well as iCloud

However, what we need to pay attention to is the growth in categories

associated with proprietary data (including HR, ERP, and financial/legal).

These are expected to grow at an even greater rate. This indicates that whole departments or divisions feel

comfortable breaking away from the corporate systems to implement their own choice of

software. In fact, they are even now making plans that deliberately circumvent corporate

processes for software adoption.

It's not just Facebook that your employees are accessing, without approval, to do their

work. As shown in Figure 4, non-approved SaaS encompasses every category. Business

productivity (e.g., word processing, spreadsheets) is the top category, with a

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But we've always had Shadow IT.

VisiCalc and the IBM PC were early examples of Shadow IT

http://www.informationweek.com/applications/the-rise-of-shadow-it/d/d-id/1105361?

By **2015** Gartner predicts that **35%** of enterprise IT expenditures will happen **outside of the corporate IT budget**

However, what is different now is that the pace of adoption is increasing. This is because of the availability of IaaS and PaaS offerings. As well as SaaS offerings

We can see the evidence of the growing nature / influence of Shadow IT.

Hold on to the old way of doing things in a highly controlled and centralised way

Become the enabler of the business by helping users and departments get access to the tools they need to do their jobs
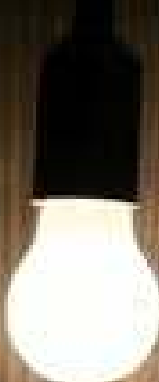
So what role does IT play in all of this. We can continue to hold onto the old ways and act as the police force trying to maintain tight centralised control. OR we can become the enabler of the business, position ourselves as consultants and educators so that we can enable the business in a healthy way.
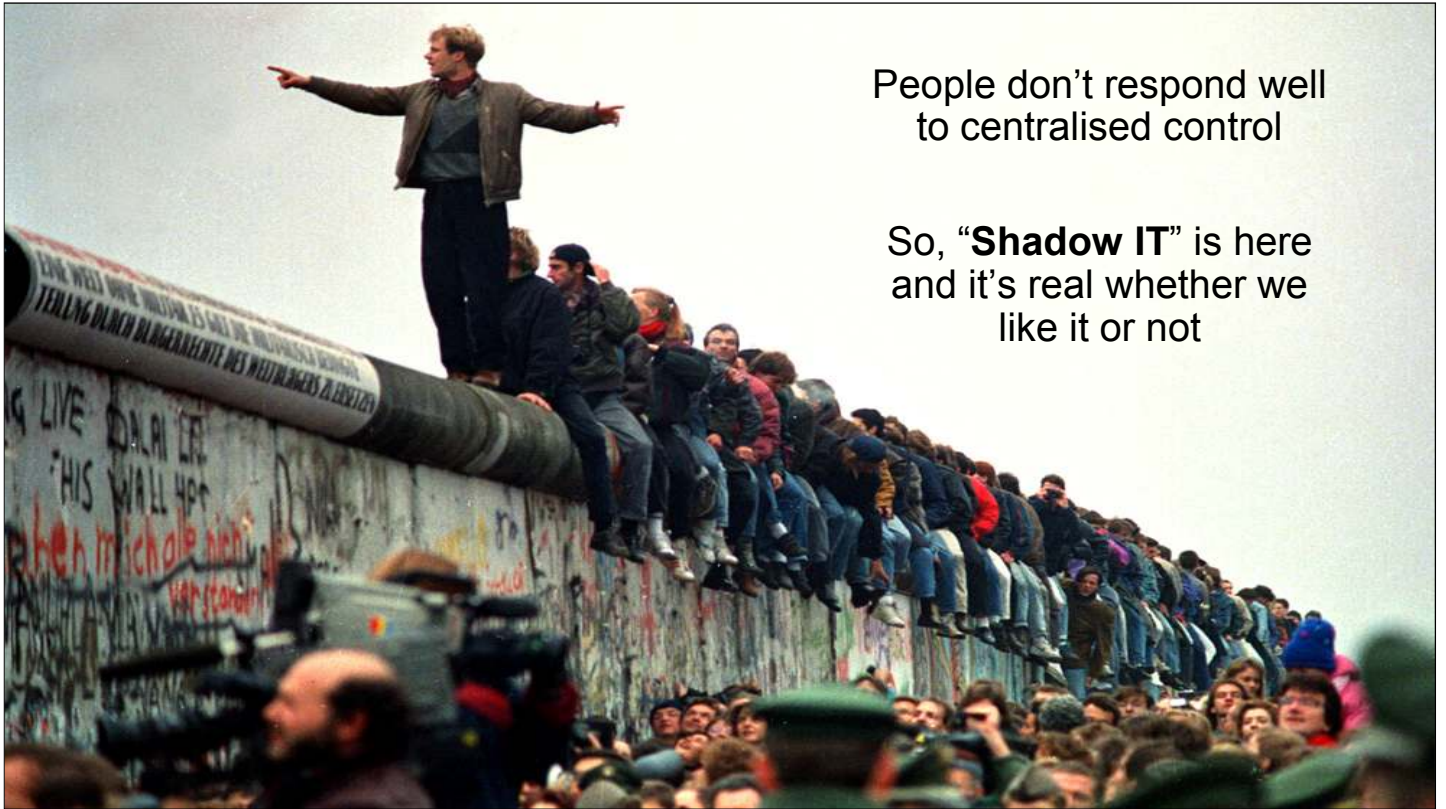
People don't respond well to centralised control

So, "**Shadow IT**" is here and it's real whether we like it or not

Centralised control doesn't work. Centrally planned economies, like centrally planned IT cannot efficiently allocate resources to projects, at the velocity and timeliness that business require. Therefore shadow IT will always be with us.

In 100 of the companies PwC ranks as "**top performers**", IT controls less than **50%** of corporate technology expenditures

Source : PriceWaterHouseCoopers Digital IQ Survey

But if we look at the statistics from the PWC Digital IQ survey……

"100 of the companies PwC ranks as "top performers," IT controls less than 50% of corporate technology expenditures.

So, if we can embrace shadow IT, we can use it to advantage

PwC defines a top performer as ….
 respondents who said they are in the top

quartile of margin and revenue growth and innovation, and

who reported growth of 5% or more in the previous year

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Embracing Shadow IT can offer real benefits

- Develop Innovative Products
- Create New Ways of Working
- Engage with new markets and customers more quickly
- Line of business understand what they need better than IT
- Save costs

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Broadwater also notes that what was once considered shadow IT has also saved the company money. For example, the enterprise YouSendIt service, which costs $50,000 for two years, replaced FTP services that were costing $140,000 for the same period. Similarly, before using Central Desktop, staffers were physically shipping hard drives. The cloud-based service has cut those costs by $20,000, Broadwater says. – computerworld article

From the upside of Shadow IT

http://www.computerworld.com/s/article/9226415/The_Upside_of_Shadow_IT?pageNumber=2

https://www.softlayer.com/press/release/1941/softlayer-now-powers-online-games-for-more-than-100-million-players

Save Costs

Engage with new markets and new customers more quickly

Speed up the pace of innovation

Develop new ideas for using technology, faster

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Embracing Shadow IT can offer real benefits

- "Game developers don't have the time or resources to manage their own complex infrastructure because they need to focus on their core business – developing great games, launching on time and keeping players engaged," -SoftLayer

- Sesame Workshop has saved $90,000 on file transfer and $20,000 on shipping by adopting consumer technologies in the cloud – ComputerWorld

- CNO Insurance have improved the way they reach their target customers by using a mobile application that was developed by the company's independent agents and not the IT department –IT World Canada

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https://www.softlayer.com/press/release/1941/softlayer-now-powers-online-games-for-more-than-100-million-players

CNO Insurance have improved the way they reach their target customers by using a mobile application that was developed by the company's independent agents and not the IT department –IT World Canada

http://www.itworldcanada.com/article/the-upside-of-shadow-it/45403

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Adopting shadow IT is not without it's challenges….

- Higher risk of data loss or leaks

- When there are problems, they will become IT's problem

- Controlling costs and cost blowouts can be challenging

- How do I comply with regulations like Sarbanes Oxley

- How do we respond for legal discovery demands when I don't' know where my data is

Higher risk of data loss or leaks.

-This is probably the biggest risk facing corporations today. Many users are using DropBox, Evernote, Google Docs and Gmail to store sensitive corporate information

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What do we need to do to adopt healthy Shadow IT

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- Change the role of IT
- Architecture that supports service centric delivery
- Adopt an agile adoption mindset
- Appropriate security controls
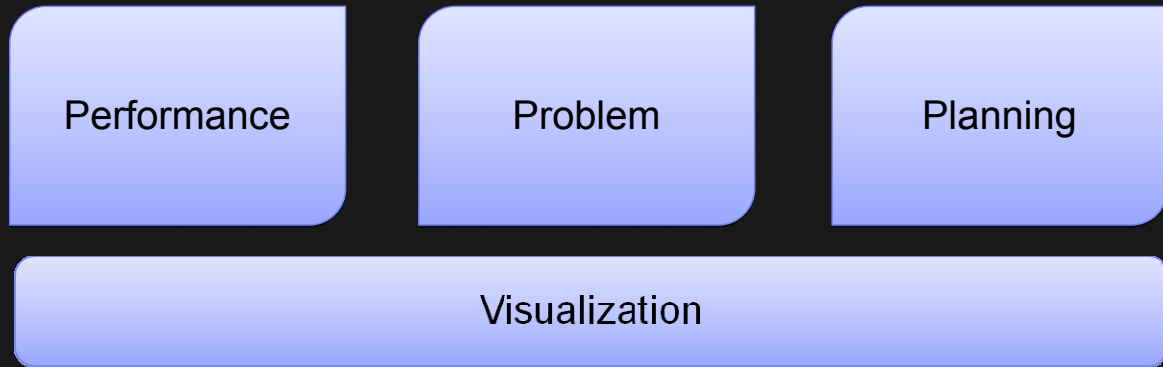- Ensure the right technical capabilities are in place

Redefine IT's role of educator and policy maker

Understand what users are doing, become part of the solution

Adopt a service centric mindset

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What does this look like?

Cloud ready Management and Control system

Performance	Problem	Planning

Visualization

Tom Watson

SMSA

Technical Architecture

Share a name with our founder, sadly I don't share his stock options

Talk through some of the capabilities that enable the IT department to embrace shadow IT.

Service Management is hardly a new concept.

What is new is using these toolsets in the cloud

Some of the principles the old way relied on don't exist the cloud

What I see as most important when dealing with off premise / out sourced infrastructure …

Performance

-Being able to monitor key technical resources in elastic, off premise environments

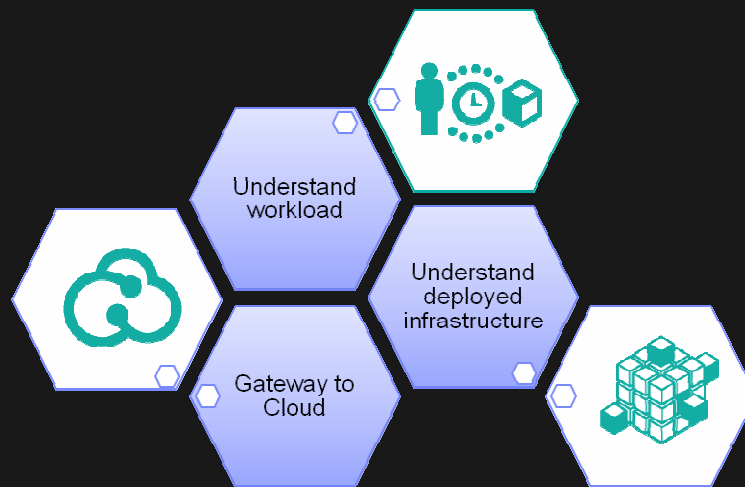- Latency becomes key – how to you ensure response times for your customers?

Problem

-Reacting to alerts

-Is the HR system still available? Are you going to wait for your users to tell you?

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There are a few non-technical principles that underpin this.

Workload:

-Change of architecture means that system profiles have changed. Gain insight through analytics

Understand the infrastructure

- How many machines are out there, what are they doing in terms of network throughput – does It make sense for them to be in the cloud?

Gateway to cloud

-Provide users with a corporate gateway to the cloud. Gives IT a chance to provision the Service Management infrastructure enable this new paradigm.

-Most users want to do the right thing, but if there are barriers, they will use a credit card.

Cloud Ready

-Need to be able to gather information from Dynamic off premise environments

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Capabilities

Performance Monitoring

Event Consolidation

Capacity Analytics

Visualization

The capabilities that make this a reality are:

-Understand the performance, use this info to plan for seasonality

-Take information from different sources (multiple cloud providers, core IT)

-Understand the characteristics of your infrastructure – it's all changed. You probably don't have the time to re-baseline everything to establish the bottlenecks

-This information needs to be then surfaced to the business, this gives them something tangible for engaging IT, but also helps make the connection between technology and their business

Help the business understand if they are getting what they paid for

Consider your audience

Surface application centric information

Architecture
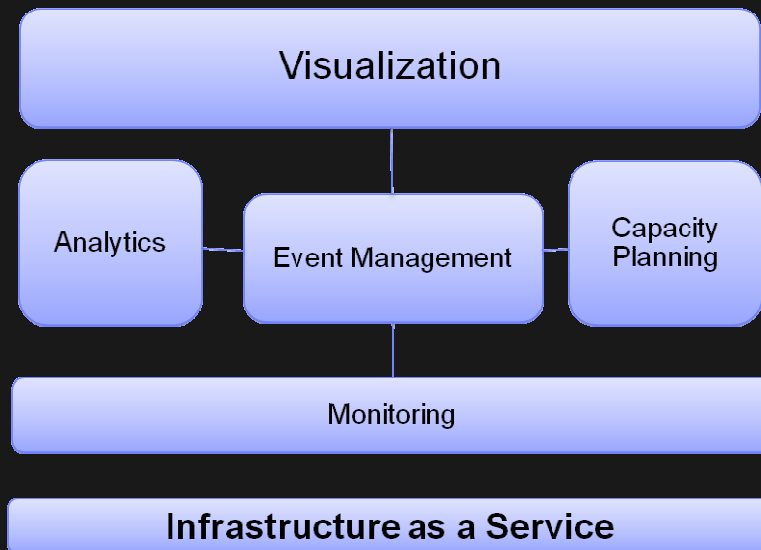
When you look at how this hangs together, at the core of all this is event management.

Allows you to consolidate information from multiple cloud providers / on prem / monitoring systems / networks etc

Once you have that consolidated source, you can run capacity planning tools and analytics to predict outages

Your visualization layer should allow you to pick and choose what data elements should be surfaced for certain users

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Software

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Application
Performance
Management

Netcool
Omnibus

SmartCloud
Analytics

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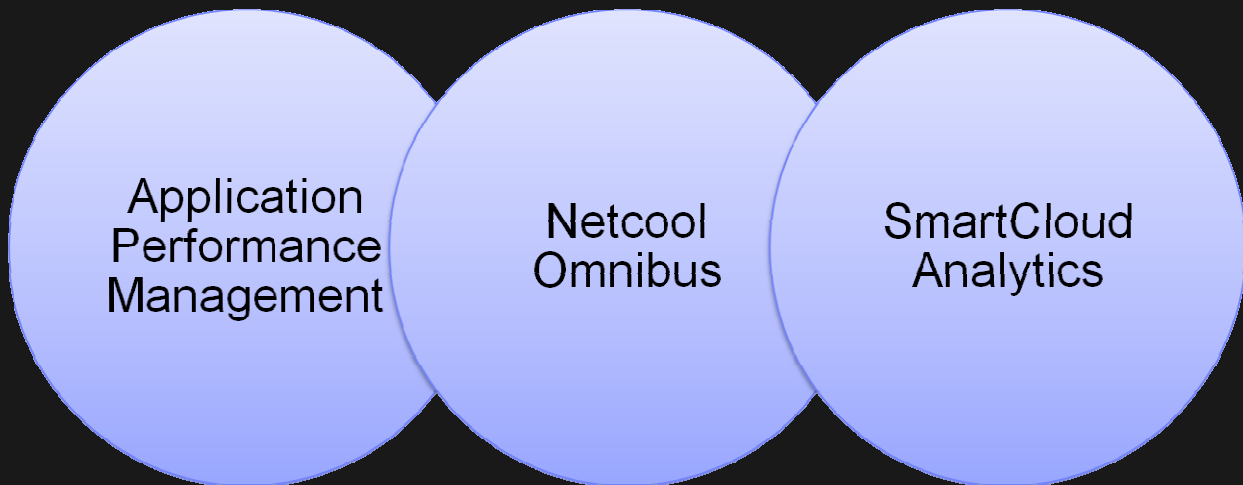
APM – One of the most comprehensive monitoring suites on the market today, really good in built analytics to do capacity planning

NetCool Omnibus – established, scaleable & robust event management solution

SmartCloud Analytics – ability to understand complex relationships between metrics and perform predictive alerting

Service engage plug

Visualisation
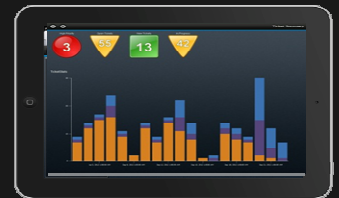
When designing a dashboard consider the users and: ask them

What information do what it to convey?

What time of day are you looking at it?

If you see a problem, what additional information would you like to see?

Shadow IT

What do you need?

- Cloud ready IT Service Management Architecture
- Understanding of the system characteristics
- Ability to provision externally & self service
- Consolidate information from different sources
- Visualize it

Cloud Ready

-Need to be able to gather information from Dynamic off premise environments (manage your performance, problem & planning)

System Characteristics

-Change of architecture means that system profiles have changed. Gain insight through anlytics

Provision Externally

-Provide users with a corporate gateway to the cloud. Gives IT a chance to provision the Service Management infrastructure enable this new paradigm. Capitalize on elasticity and performance information

-SUMMARY

-Quotes – validate it

-Intro slides for me?

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When IT adapts to support Shadow IT, they can influence how it's done.

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It's time to make bold moves.

THANK YOU

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