Welcome to “Cloud, crowd, & outsourcing will eat your lunch!” Or, to “Embrace the inevitable & become an engine of transformation!”

*Two titles because we think it’s a choice you get to make.*

*There is plenty of time for questions at the end of our slides!*
We (Bob Carozzoni, and Yamin Chevallard) are Enterprise Cloud Strategists at Cornell University. We’re in year four of a full time role designed to create “Purposeful disruption in status quo provisioning”
This presentation is about the organization that reinvents itself ...

... for the era of disruptive change due to cloud, crowd, and outsourcing

This presentation is about the organization that reinvents itself in ways that won’t always be fun or pretty. But change we will, yes because it’s inevitable, and more importantly because it will free us to support core mission Teaching, research, and outreach.

image ref: vaughanmerlyn.com & blogsvmware.com
Understanding the future of Enterprise IT

- **Multi Sourcing IT Service**
- Accelerated Disruption
- Relationship with our Institutional Partners
- Reimagining the IT org

This story starts with disruptive change in IT sourcing in general
We can’t compete with cloud!

We’re not going to go deeply into why cloud. You already know the dramatic benefits. There are many high quality Educause papers on why cloud is so beneficial. I think it’s enough to say that even if we wanted to, we really couldn’t compete long term. Even if we could, we’d only waste time and money trying to compete with something so beneficial to our campus.

image ref: wordle.com
Crowdsourcing will reshape IT staffing!

Prediction: “in 15 years, predominant employment relationship for some IT work will be contract/freelance based”

Others have made this prediction about the future of IT employment being contract/freelance based. We'll add our names to it…

Gartner predicts that “by 2016, application services providers will have replaced 20% of their internal application management staff with crowdsourcing and community sourcing”.

Why should this be surprising. Many mature industries already work this way. Many of us started in this field when IT was young, but IT has grown up, and external resourcing is common in most mature industries.
In rural NY, we have a limited local talent pool. Topcoder gives us access to hundreds of thousands of developers, designers, and algorithmists from all over the planet.

BUT, we don’t pick just one person and hire them. We issue a FIXED-PRICE challenge, and many developers respond to that challenge by implementing a solution. We pay for ONLY the best from the submitted solutions.

BUT, it’s even better than that! Developers aren’t implementing the entire project. The project is broken down into the smallest most atomic tasks. People across the planet are competing on these micro-tasks. They have an incentive to hyper-specialize, and to compete only in contests where they’re among the best on the planet.

At the end, outputs from all these micro-tasks are assembled by, you guessed it, a competition between people who specialize in putting it all together!

We’re not declaring victory on this pilot yet, and we probably have more growing pains before we master it, but it’s compelling.

image ref: itproportal.com, gettyimages.com, globalconnections.uk.org, totallyuniquelife.com
Meta-Outsourcing

Traditional outsourcing firms are reinventing themselves into integrators and brokers of cloud, crowd, and traditional managed service.

They bring economy of scale to the coordination of these next generation services.

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The disruption doesn’t end with IT Sourcing
Disruptive innovation is accelerating!

In “Big Bang Disruption: Strategy in the Age of Devastating Innovation”, Larry Downes and Paul Nunes point out something significant. While disruptive innovation isn’t new, the rate of acceleration in the pace of disruptive innovation is new.
Foundations are being shaken everywhere!

Versus

As consumers we prize disruptive technology!!!

No where is disruption more transformative than where physical experiences are turning into digital experiences

Uber's ridesharing app has unleashed thousands of unlicensed “citizen-cabbies” upon the traditional Taxi market! (Zipcar, Travelocity, others)

Airbnb has unleashed thousands of unregistered “citizen-b&b-operators” upon the traditional hospitality industry.

Travelocity and their like have slammed classic travel agencies.

There are so many more examples:
Amazon wasn’t satisfied with just being a threat to brick’n mortar stores, so they’re building drones to challenge UPS.
Anyone remember paper maps? The AAA TripTik? GPS didn’t kill maps, until every cell phone became a GPS navigation system.
Match.com has digitally empowered romance!
eTrade has changed the brokerage market.

Fundamental reinvention of entire industries are happening at an accelerating pace.
And yes, Enterprise IT is being disrupted.

Tracy Schroeder, in her recent Educause article calls it the “Post-Enterprise World” of IT.

Cloud has made it possible for vendors with Enterprise class solutions to go over the heads of IT and sell directly to the business unit. Likewise, cloud vendors with Consumer class solutions go below the IT group, selling directly to the end user.

This observation is consistent with Gartner’s latest survey on where IT spend is happening. Already 42% happens outside of the IT org, and the trend suggests this will increase.
As with so many disruptive innovations, we’ve watched cloud and outsourcing disintermediate, effectively removing the middleman. Now, the middleman is us.

image ref: forexmagnets.com
Disintermediation means a change in relationships. Organizations that behave like operators will likely be disintermediated. But, organizations that add other value that is visibly contributing to business outcomes will still have a role in the new model.
We in IT tend to see the cloud as another technology that needs service management and operational support.

We don’t focus as much on how Cloud empowers business.
Campus sees cloud as a trip to the shopping mall. They feel very empowered!
We in IT tend to view our own role as Designing, Building, Administering, & Enforcing IT services
How campus views IT’s role

“Cloud companies are cost effectively emancipating enterprises from the tyranny of IT, solving lots of problems with tools and process that are a pleasure to use”

-Oliver Marks

But, our new highly empowered, consumer minded campus constituents sometimes see us as part of the problem, rather than as the solution.

When Oliver Marks in this blog post spoke of how users view cloud as emancipating them from the tyranny of IT and creating things that are a pleasure to use, he was not saying this view is right. He’s just saying this is how consumer minded IT users feel about enterprise IT when we slow them down in their pursuit of faster more cost effective solutions.
We often ask campus about their requirements. Too often, we don’t engage proactively and deeply understand the business issues that drive a unit’s priorities. If we did, we wouldn’t (in a sense) give our constituents a homework assignment… “go figure out what you want, and when you’re done we’ll try to make it happen”
How the cloud engages campus

“If I had asked people what they wanted, they would have said faster horses.”
-Henry Ford

Cloud figures out what our constituents need even before they themselves know they needed it. And then they go sell it directly to campus, bypassing us.
But, this direct to campus play isn’t without risk. Think back to the earliest days of the PC revolution. So much of it started outside of the Enterprise IT group. Campus back then felt empowered by PCs just as they feel empowered now by cloud. But, PCs and early networking caused a lot of problems too—security, integration, availability, business continuity, etc. Eventually, many of those problems fell back into IT’s lap to solve. The same is happening with cloud. The longer we resist, the slower we are to engage with consumer driven IT on campus, the further down the rabbit hole campus goes without our involvement and guidance.
We’re proposing a new model for serving and relating to campus units.
We need to reinvent the IT organization to bridge the gulf between what our current structure and staffing was built to do, vs what is required of us in the cloud era.

We need to reinvent the role we play relative to business’ use of IT.
Become a business asset

1. Expert advisor for disruptive change
2. Navigator of procedural barriers
3. Innovation hunter
4. Time-to-market experts
5. Bridger of gaps
   ○ integration, architecture, security, migrations, etc
6. Value added reseller of cloud, staff aug, etc
7. Be or support an IT VMO
8. *Refocus training & lines on core mission*

Here are just a few ways we could change Enterprise to remain relevant in the "Post Enterprise IT" era:

1. Instead of fearing the chaos of disruptive change, become an expert advisor for disruptive change
2. Change often stalls when it runs afoul of procedures that were designed for a different approach. Become a resource for clearing obstacles to new things.
3. As Bill Joys said “Innovation happens elsewhere”. Become the team that finds and supports innovation, regardless of where it came from.
4. We need to appreciate the consumer’s desire for time-to-market. As the pace of disruptive change accelerates, we run a risk that our constituents won’t experience full return on investment before the next better solution comes along. Fortunately, one of cloud’s greatest appeals is that it can be implemented in days or weeks, not years as we saw with traditional Enterprise IT projects.
5. Cloud solutions may be quick to implement, but they also create new gaps (integration, architecture, security, migration)… IT consumers need Enterprise IT to help bridge these gaps as quickly as cloud makes new ones
6. For many solutions, it’s fine for campus to acquire directly from the vendor, without an intermediary. For others, we should add some unique value (like integration) and function as a value added reseller
7. Increasingly, managing the vendor is harder than managing the technology. IT can have a significant role in being or supporting a formal Vendor Management Office for IT
8. Many of our supervisors & ADs know more about managing technology than they do about managing 3rd party engagements. At the very least, vacant lines are an opportunity to change the balance of skills from those we staffed for 10 yrs ago, to those we’ll need to manage cloud, crowd, and outsourcing. But better still… cloud, crowd, and outsourcing free up resources that we should give back to the institution to be applied more directly to CORE MISSION activities like research, education, and outreach.

Notice that nothing on this list relates to routine operations functions. What cloud, crowd, and outsourcing have in common is that they can do routine operations functions cheaper than we can. For us to become relevant in this new model, we have to move up the value chain, and become not just a technical asset, but a BUSINESS ASSET
Traditionally, Enterprise IT purchased product and then managed it. Campus looked to us as the “SERVICE OWNER”. But, increasingly the consumer is the service owner and they work directly with the vendor.

We can refactor our relationship. IT Consumers become their own service owner, responsible for solution acquisition, vendor mgt., support, internal docs, service management, service planning.

Enterprise IT’s responsibility changes to providing expert advise, consulting, being a facilitator.
Both models (traditional on the left, new on the right) still have a place.

Where is makes sense for IT to continue functioning (from campus’ perspective) as THE VENDOR (left), we should continue to do so.

Where it makes more sense for IT to function as a TRUSTED ADVISOR (right), we need to get better at doing that.
Be careful in choosing roles

Consumer behavior if fickle.

Who gets left holding services in decline?

We have to be very careful in choosing which role we play (owner or advisor) is most appropriate when! Consumer driven IT can be as fickle as any other type of consumer behavior.

If something that’s more shiny strikes the fancy of campus units, they could change solutions in a NY minute, leaving IT with an unfunded mandate to maintain a solution with an ever shrinking user base, a user base that’s too small to justify (or cost recover) the hit to our budget line.

image ref:thumbitt.com
So, our proposal is that Enterprise IT focus less on being a traditional operational function, a mere follower in the era of disruption and commoditization.

We propose that Enterprise IT should become a leader in disruptive change, viewed as a business asset (not just a technical/operational resource), and become more closely aligned with core mission activities.