

# Screen2Screen with Laura Patterson, Michigan CIO, 9-13-2012

On Thursday 9/13, [Laura Patterson, CIO of the University of Michigan](#) spoke on the bi-weekly conference call and presented slides over Adobe Connect. Her presentation was called "Why IT is important." She spoke about the changes she is leading at U/M and about how EA is integral to the success of the initiatives, and then took questions for about 30 minutes. Laura will also be presenting, along with Shel Waggoner of Internet2, at the ITANA Face2Face meeting at EDUCAUSE in November.

We were unable to record the call, but the [slides she presented are here](#). Chris Eagle, who leads Enterprise Architecture at UM referenced an [EA Framework \(linked here\)](#) UM uses for assessing technologies and projects.

Here are some of the comments from people who attended the call:

## Jim Phelps (Wisconsin):

- The importance of the two simple graphics - the Wedding Cake and the Heat Map - in convincing campus partners of the need for change and in selling her vision. Simple pictures do carry a lot of impact.
- The fact that they were very explicit that change started with culture and governance even though they were talking about changing IT investment and spend. It wasn't the other way around - fix the IT Infrastructure first.
- The way they made it apparent to the departments that they were using their resources on commodity services and efforts, not on the high-value next-generation IT services that would drive innovation in Teaching and Learning and Research.
- The close tie to Project/Program Management (Project Portfolio Management) in rationalizing and executing the complex change they are going through.

## Brenda Reeb (Rochester)

- Some departments created smaller pockets of commodity services within their local environment. I think Laura mentioned the College was doing this. The model successfully replicates into smaller pieces nested within the big picture. People can replicate the model, once it is familiar.

## Colleen Nagy (Case Western)

- It helps to have a goal for the whole university to drive out costs beyond the budget constraints. Everyone is expected to pitch in. So, Laura and her team have gotten the support from top leadership of the university.
- I agree with the simple pictures. Service and funding strategy and flipping the types of IT services are areas we try to explain to our customers, but we don't have pictures to make it clear.
- The methodology for commoditizing would be interesting to explore further. How do they find all the costs when things are so decentralized? Are the schools and departments willing to share their data on costs?

## Glenn Donaldson (Ohio State)

- Laura was great presenter.
- She seemed really connected to and passionate about the NextGen Initiative, and really expressed how EA is related and important.
- It is great to have an executive understand and promote these types of endeavors.

## Detailed Minutes from the Screen2Screen

Jim Phelps introduced Laura Patterson, CIO at University of Michigan. Jim met Laura about 3 years ago when Jim talked at U-M about Enterprise Architecture.

Note: Laura Patterson and Shel Waggoner will be at the ITANA Face2Face at EDUCAUSE2012 in Denver.

Slides: <https://docs.google.com/presentation/d/1YzQezpbXfxLWl8xB0f-5jNoWSk7CNFA7RMdTQtbMrKo/edit#slide=id.p17>

Laura Patterson's Comments:

- Honored to have the opportunity to share experiences at U-M
- Hopeful that many will join the ITANA Face2Face at EDUCAUSE to continue the conversation
- U-M has been facing budget pressures for past several years, like all of higher education
- U-M used the economic downturn as an opportunity to come together around a strategy for the future
  - strategy involves maintaining the quality of student U-M attracts
  - and preserving breath of academic programs
- committed to not increasing size of student body and not cutting academic programs
- Started effort to significantly reduce unnecessary cost and waste across the U-M
- And to invest in U-M's top priorities
  - including next generation technology that support the U-M's mission
  - with particular emphasis on research and teaching and learning
- talk will cover how we are maturing the Michigan IT organization
- and the important role of Enterprise Architecture in that transformation

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U-M is large public research university  
includes research institutes  
academic hospital is part of the institution  
distributed decision making is very highly valued  
U-M embraces culture of choice

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NextGen Michigan strategy was developed in 2009

Wedding Cake graphic shows how NextGen Michigan is about shared vision and shared infrastructure

Next generation technologies involve personal choice

Decided to embrace as part of NextGen Michigan:

- personal choice
- social
- cloud
- big data
- mobile

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- U-M did not have Enterprise Architecture prior to 3 years ago, with NextGen Michigan.
- Needed to rationalize IT across campus, to move the U-M to having a shared infrastructure
- in order to adopt next gen technologies more rapidly

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Governance Model

- mission-aligned governance was developed
- governance model is not structure according to the structure of the university
- it is organized by the missions of the institutions
- also brings to table the critical IT providers
- The IT Council is led by faculty, thought leaders, and deans
- each domain is led by a respected faculty thought leader
- there is an assurance group, led by chair of Computer Science Engineering Dept.

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- In 2009, along with establishing the governance, brought three IT groups together into one
- Group is called ITS (Information Technology Services)
- ITS cut \$8 million and handed it back for new investment in for next generation technologies
- In 2010-2012 work was done to rationalize IT across campus
- Accenture Consulting documented where IT expenditures were
- Accenture found that U-M spent \$300 million / yr on IT, excluding the hospital
- the hospital spent at least \$300 million in addition
- the heat map diagram showed that there were a large # of services being redundantly performed

- There was redundant spending on commodity ID and infrastructure
- 40 email services on Ann Arbor campus
- 160 desktop support groups
- 130+ storage services

- 80% of total IT spending was going to commodity and infrastructure support
- as opposed to going directly to support faculty and students
- potential to flip the proportions
  - leading to faster innovation and
  - substantial savings thru consolidation of services

- when planning for new shared infrastructure
- the critical role of enterprise architecture became clear in order to realize strategy

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Q: Did Accenture do an architectural assessment?

A: Yes they did assess the architecture

Accenture had a good understanding of the U-M culture and the U-M budget model (called responsibility centered management)

- all the revenue that comes into the university flows out to the colleges
- so they have the funding and they can purchase the IT solutions they want

FUNDING MODEL:

- Accenture recommended a new service and funding model
- *see slide titled "Service and Funding Strategy"*
- Public Goods = creating shared services around commodity and infrastructure
- everyone pays for them whether they use them or not
- goal is to incent the deans to use the shared services that they are paying for
- there are also
  - toll services that are paid for on an "as used" basis
  - community services
  - unit specific services

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- Goal is not to centralize
- still need strong IT people in the colleges
- but they must support faculty, do mission unique services
- they should not do commodity IT, such as backup and Email
- There are unique needs in medical school (simulations), engineering school (CAD systems), etc.
- IT units in the schools must focus on those unique needs

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- Established the NextGen program office
  - Some members of the schools and colleges joined the NextGen program office
  - multiple projects underway at once
  - needed a common approach across projects
  - At end of 3rd year of a 5 year program; it will go beyond 5 years
  - building a new culture
  - truly transformative change takes many years to achieve
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Q: Are you using Enterprise Service Bus to help modernize the shared services?

A: Not at this time, but it is in the plans. It is a critical strategic item. Was previously challenging to decide what the right investment is

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Q: Are Cloud-based services a big part of strategy?

A: Yes, very much, the strategy is cloud first.

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Q: Are you using any leading EA frameworks?

A: Chris Eagle: It's based on TOGA, but loosely modified

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NextGen Program Office was organized around traditional pillars of IT:

- Application Group
  - Infrastructure Group
  - User Service Group
- Maturing into plan, build, run model
- Because of recognition of the importance of the PLAN in the U-M NextGen strategy
- will talk more about that at EDUCAUSE2012
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Q: Could this strategy work at the college level, such as college of business?

A: Yes, and there can be savings to reinvest

- the schools and colleges are moving in the direction on their own
  - there have also been multiple IT groups within the colleges, large degree of fragmentation
  - in many cases, the more scale you can achieve, the more savings
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- the wedding cake picture and the heat map are both simple one page documents that we can grasp
- sometimes we get diagrams too complicated

Q: How important are the graphics?

A: Critical, the wedding cake is a powerful diagram and it really worked

- Sometimes blew up certain bubbles in the diagrams depending on the audience
- For communicating across the community, a simple graphic you use repeatedly is critical
- must deliver the message over and over so people will buy into it
- wedding cake diagram makes people buy in to the vision

Q: Did a consultant to create simple graphic?

A: No, it was someone within the IT communication group,

- made adjustments based on feedback received

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Jim: interesting how the diagram started at bottom with culture and governance

Laura: yes, must continue to pay attention to culture and must show people the win and what has been accomplished.

NextGen Michigan is about changing the culture around IT

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Q: What about the business side?

A: Chris E is involved in all aspects. He works across campus on the business aspects

- there is not a lot of top-down authority
- we must work to keep people aligned to the vision
- and put in place an architecture that we keep reviewing and advancing

See Architecture Framework: <https://docs.google.com/document/d/1lcfXh1LhvPBhzLS3DNz3ngZRD0DkZF0d895aq6Xb8zM/edit>

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Q: What about going beyond boundaries of the campus to working with other institutions?

A: Yes, but we have not built the services with the goal of extending beyond the campus, due to the work at hand of dealing with the challenges on campus.

- Getting organized at home first
- Big supporter of the Internet2 Net+ services approach
- We must all work together to support the challenges of research and teaching and learning.

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Q: What methodology is used to classify what is "mission unique" vs "commodity"?

- How will services move from one category to the other?

A: Use a loose methodology

- it's driven by our costing and funding model
  - moving to activity based costing
  - so we can be transparent about what a service costs
- planned criteria for determining if a service is a commodity service, includes questions like:
- how widely is the service used on our campus?
  - how is this service delivered at other universities?
  - how easily could it easily be acquired in the market?

Plans going forward:

- if there is a service tried out in a unit
- i.e., if a faculty member innovates something
- and others are adopting it
- then it can move from mission unique to community
- with broad adoption it can move from community to public good
- and become a commodity service offered to the whole university

- can go other way
- if adoption is dropping
- then a service should move to a toll service
- so those wanting to use it are bearing the full cost
- this is not happening yet, but this is a goal

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Q: Re administrative transformation, are you looking at admin business functions the same as an IT commodities?

A: Yes, a number of HR and financial transactions have been looked at, things like travel expense processing, AR, AP, have been looked at.

- targeting these for coming into a shared service model
- this project has been underway for a couple of years
- but not yet gotten approval from the executive officers
- waiting for approval
- issue may be not to introduce too much change at once
- issue of change fatigue

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- program management office is crucial
  - still in the middle of the effort
  - victory not declared yet
  - this month desktop support will be consolidated
  - involves moving 66 people

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- Laura feels strongly about universities working together to meet the challenges
  - our industry will look different 5 years from now
  - none of us can do it alone

Thanks to Laura Patterson for providing an excellent talk