

New to EA: re/Launching your Enterprise Architecture Practice

Itana Face2Face 2019

[EDUCAUSE Pre-Conference Session](#)

Meeting Room W179a - 8AM to 4PM

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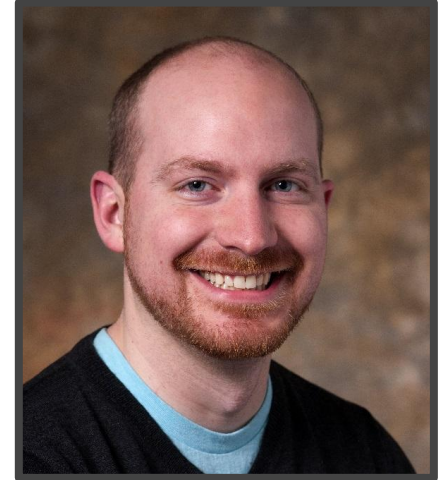
Facilitators for the day



Chris Eagle
IT Strategist & EA, U-Mich
Steering Committee, Itana



Louis King
Enterprise Architect, Yale U.
Vice-Chair, Itana



Jacob A. Morris
Business Architect, U-Wash
New2EA WG Chair, Itana

About Itana (Itana.org)

ITANA

Home

Created by Steve Olshansky, last modified by Piet Niederhausen on Sep 13, 2017

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Coming Up

Fall Face2Face 2017 - October 31, 2017 in Philadelphia, PA

Join us for a full-day preconference session at EDUCAUSE Annual 2017. The **Itana Fall Face2Face** will focus on the shifting role of Enterprise and Business Architecture in the Digital Transformation.

Go to the **EDUCAUSE Registration** site to register for this event.

Next Conference Call

NOTE: October 31 - Itana Face2Face at EDUCAUSE No Call November 3

Topic: Young Professionals Outreach

Day/Time November 17, 2017 - 11AM PST, Noon Mountain, 1PM Central, 2PM Eastern (7PM GMT)

Adobe Connect: <http://confer.uw.edu/EA> -Audio is only on the phone, not Adobe.

Dial-in number: +1-734-615-7474 Access Code: 0165350

Autumn 2017 Call Program

Date	Track	Session	Materials
Oct 6	n/a	2017-2018 Kick-off Call - Book Club, Working Groups, Face2Face 2017, Focus for the Year - Digital Transformation, DEI, IoT Call for Practice Examples Facilitator: Jim Phelps	2017-10-06 Itana Call Minutes
Oct 20	EA Maturity Model	Report out on the Maturity Model and how we include it in the year ahead.	2017-10-20 Itana Call Minutes Presentation (Google) EA Maturity Model Working Doc (Google) EAMM.pdf

Recent Activity

Spring 2016 Face2Face Meeting

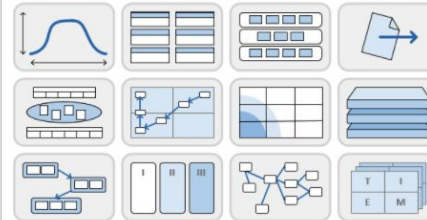
Face2Face Outcomes: [Architecture Leadership](#)



See the [Spring Face2Face 2016 Notes](#) for more on this F2F.

Spring 2015 Face2Face Meeting

Face2Face Outcomes: [Architecture Methods](#)



See the [Spring Face2Face 2015 Notes](#) for more on how the participants worked together.

Engage with Itana

Bi-Weekly Calls

Annual Face2Face

Working Groups

API - Ashish Pandit

Business Architecture - Dana Miller

Book Club - JJ DuChateau

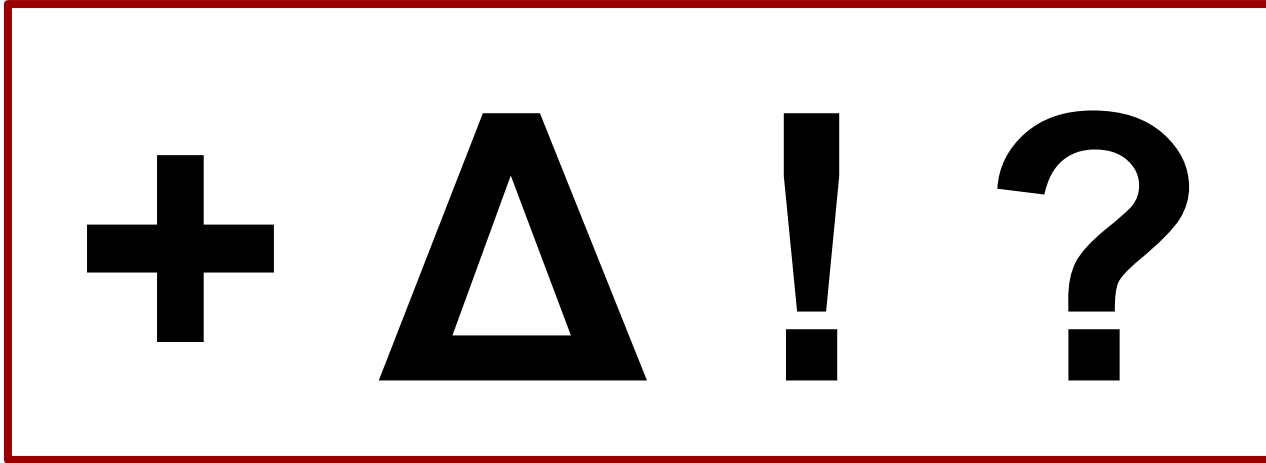
New2EA - Jacob A. Morris

Book Club



“I” Time
1, 2, 4, all
Shout-Out

Reflection: Important to learning

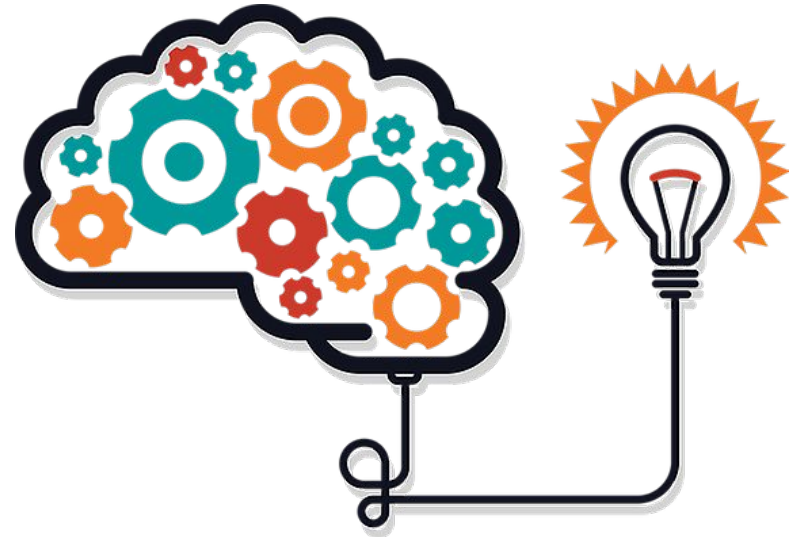


Time	Section	Who/Links
8:00 - 8:15	Intro Kick Off - Ice Breaker	Jacob
8:15 - 8:30	Table Setting Talk	Louis
8:30 - 9:15	Executive Round table	Chris
9:15 - 9:30	Activity: What skills would you need?	Jacob
9:30 - 9:45	BREAK	
9:45 - 10:15	Practical applications of EA skills (3x10 minutes) - Case studies	Louis, Chris, Jacob
10:15 - 10:45	Role Playing Exercise: scenarios to practice your skills	Jacob
10:45 - 11:00	What skills are you going to focus on?	Jacob
11:00 - 11:30	+, Δ, ?, ! - morning recap, what's next	Chris

Time	Section	Who/Links
11:30 - 12:30	LUNCH - W375 B, Level 3	
12:30 - 1:00	Panel: “It started like this...” 5 short studies	Beth
1:00 - 2:00	Scoping Your Practice	Louis
2:00 - 2:15	BREAK	
2:15 - 2:45	Digital Transformation as a Driver for EA	Jim
2:45 - 3:40	Building your Roadmap	Jacob
3:40 - 4:00	Itana Resources, Member Contributions, Wrap-Up +, Δ, !, ?	Chris

Learning Outcomes:

1. **Learn** essential skills and methods to re/Launch your EA practice
2. **Apply** lessons-learned from other institutions
3. **Develop** your EA scope using the Itana Scoping method
4. **Develop** a 1-year action plan
5. **Build** your personal professional network



Icebreaker

1. **Count off:** 1, 2, 3, 4, 1, 2, 3, 4, 1, 2...
2. **Line Up:** 1s & 2s across from 3s & 4s
3. **Meet:** 1s go find someone across from you whom you don't know
4. **Inquire:** Learn something about each other



Reflections on EA in Higher Ed

- What are the elements of Enterprise Architecture practices in Higher Education?
- What opportunities do you see?

Context: Your institution or more broadly

5 Minutes

What is EA in Higher Education?

A **discipline** that uses holistic enterprise analysis, design, planning, and implementation practices, to guide an organization through business, information system, and technology changes, in order to execute their strategies while optimizing investments.

Note: See also other definitions from Wikipedia, TOGAF, Gartner, and EACOE.

Where Might EA Help?

1. Improved enterprise engagement
2. Improved organizational agility
3. Improved quality of transformative solutions
4. Improved IT governance
5. Improved IT operations
6. Reduced total cost
7. Reduced organizational risk

Who Might be Thinking about EA?

- > CIOs
- > Application Architects
- > Business Architects
- > Business Analysts
- > Cloud Architects
- > Data Architects
- > Information Architects
- > Integration Architects
- > IT Service Management Leaders
- > IT Service Management Specialist
- > Portfolio Management Leaders
- > Security Architects
- > Solution Architects
- > Technology Architects
- > User/Customer Experience Leaders
- > **And more...**

How is EA Practiced in Higher Ed?

1. Ad Hoc

Works to identify opportunities, provide EA value to leading opportunities, and through these experiences define the value proposition and scope of an EA practice appropriate to the particular organization.

2. IT Operational Excellence

Works largely within the IT organization to optimize the technology architecture of the organization and to govern architectural standards and solution implementations.

3. Digital Transformation

Works as a strategic partner to the functional units of the University to support digital transformation that executes their strategies while optimizing their investments.

Executive Round Table



John Barden
Chief Information Officer
Yale University



Vince Kellen
Chief Information Officer
University of California San Diego

What Skills Do You Need?

1, 2, 4, All

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9:30 - 9:45	BREAK	
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Break



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Skills

Storytelling

Leading as an Architect

Influencing (12 strategies)

*Detroit
Institute of
Arts*

*Judith and
Her
Maid-servant*



*Artemisia
Gentileschi*

c. 1625

Baroque

Chiaroscuro



Leading as an Architect

From Jim Phelps' presentation to the New2EA WG

Leading as an Architect

An Architect is a **Leader**

“A leader’s job is to make sure the organization *does the right things* while a manager’s job is to make sure we *do those things right.*”

Warren Bennis

Why Leaders Fail

Leading as an Architect

Being Visible

Building Followers

“The essence of leadership is found in the ability to **transform vision into significant actions**. The two dimensions are vision and ability to implement.”

William Hitt

The Leader Manager: Guidelines for Action

Leading as an Architect

“In doing adaptive work, the problem is often unclear and therefore the solution is unclear.

Adaptive work is generally messy work that requires persistence, creativity and courage to work through.”

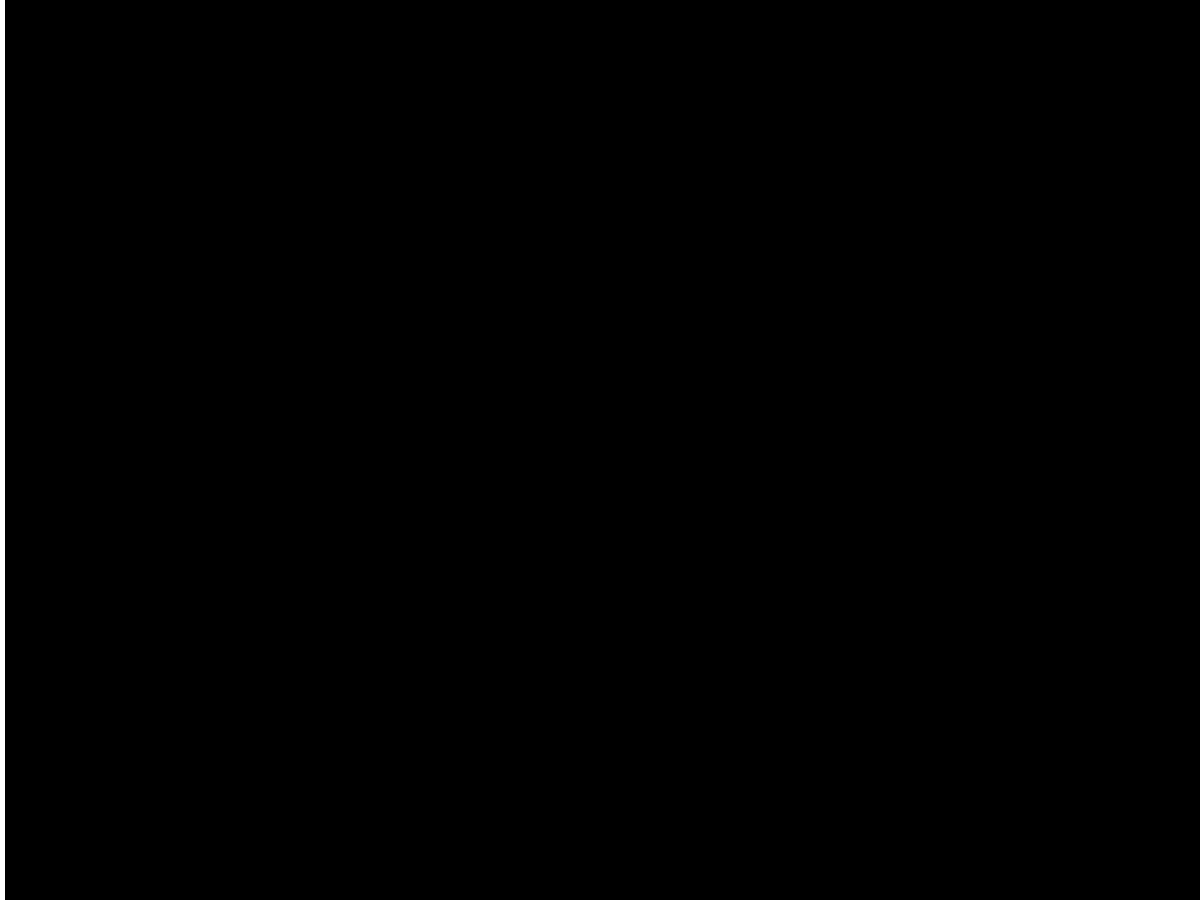
Ronald Heifetz et al,

“Political Leadership: Managing the Public’s Problem Solving”

Leadership is:

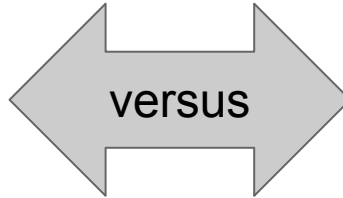
- > Doing the right things vs. doing things right
- > Being visible
- > Building followers
- > Transforming vision into action
- > Solving adaptive problems

One more thing: Presence



Think about your presence

Formally Dressed
Standing Up Front
Attentive
Leaning Over the Table



Casually Dressed
Sitting at the side
Head in your laptop
Leaning back / pushed back

Above all - Be Intentional.

You are a Leader. Invest in your leadership.

The things you do have effects.

Influencing Strategies

What approaches do you use to influence people?



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1. Empowerment

Making others feel valued by involving them in decision-making, and giving them recognition.

2. Interpersonal Awareness

Identifying other people's concerns and positioning one's ideas to address these concerns.

3. Bargaining

Gaining support by negotiating a mutually satisfactory outcome; exchanging favors, sharing resources, making concessions.

4. Relationship Building

Taking the time to get to know others personally; to maintain friendly communications so that they will be inclined to support your ideas in the future.

5. Organizational Awareness

Identifying the key people in your organization, and getting their support. Knowing who the key influences are.

6. Common Vision

Showing how your ideas support the organization's broader goals.

7. Impact Management

Choosing the most interesting, memorable or dramatic way to present ideas, in order to gain people's support.

8. Logical Persuasion

Using logical reasons, expertise or data to convince and persuade others.

9. Coercion

Using threats, reprimands or pressure to get others to do what you want?

Influencing Strategies

1. Empowerment
2. Interpersonal Awareness
3. Bargaining
4. Relationship Building
5. Organizational Awareness
6. Common Vision
7. Impact Management
8. Logical Persuasion
9. Coercion

Influencing Strategies

Logical Persuasion



Frequency of Use (by %)



2 Impact Management



Inspirational Appeals

2

Relationship Building



Consultation

Tactic

Commitment Compliance Resistance

Rational Persuasion

Legitimizing

Personal appeals

Exchange

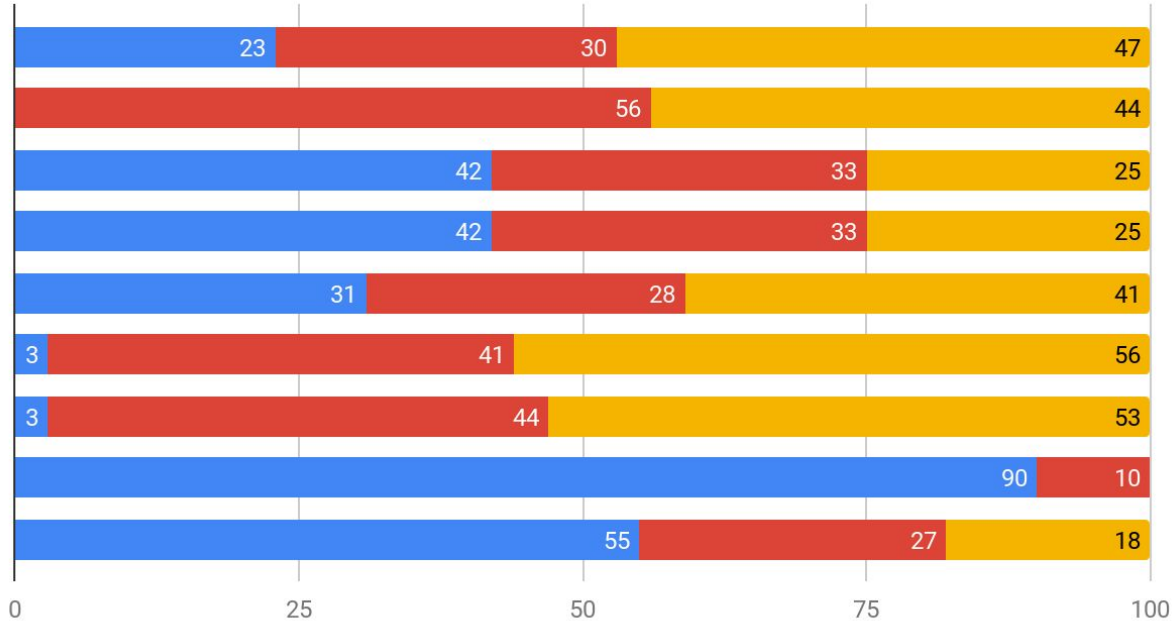
Ingratiation

Pressure

Coalitions

Inspirational Appeals

Consultation



Falbe & Yuki, 1992

Threshold Test

When crossing a threshold...

1. What do I want to get out of the activity?
2. What role do I want to take?
3. How do I want to present myself?
4. What triggers might I encounter?
5. How will I respond to those triggers?

Role Play Exercise

1. Each table will get a scenario
2. Together you will design a role play that demonstrates some or all of the skills presented
3. Decide how you will respond to the scenario
4. Write down the characters and their roles
5. Draft a rough script
6. Select actors
7. Do the role play for the group



Scenario A: Saving Money at the Zoo

“I have a great idea. We can combine two habitats into one, make it twice as big and allow the animals more room to roam. The lions and zebras are already next to each other, we just have to pull down the fence separating them! Here’s the analysis of the cost savings to the zoo.”

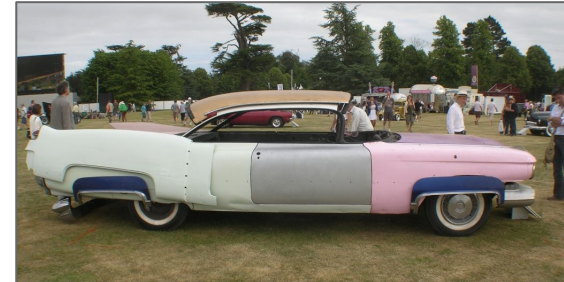


How do you respond?

Scenario B: Best of Breed Car

“We need a new vehicle. I’m tired of always buying an off-the-shelf model with some good points and some bad ones. This time I want to pick the best of each component and make the perfect transport.”

How do you respond?



Role Play Exercise

1. Each table will get a scenario
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Using the Skills

Consider:

How would you use these skills at your institution?

What can you do to build these skills?

Volunteers needed

Share your EA origin story in under 3 minutes after the lunch break

Plus, Delta, Big Ideas, Questions

+ - What **went well** this morning? What did you like?

Δ - What could have been **improved**?

! - What “**Big Idea**” or “**Aha! Moment**” did you have?

? - Any “**Big Questions**” strike you during the day?



Lunch

Room **W375 B**, Level 3
Reconvene at 12:30PM



Stay where you were...

We are going to switch tables as a group!

We will count off: **1, 2, 3, 4, 1, 2, 3, 4, 1, 2...**

Time	Section	Who/Links
12:30 - 1:00	Panel: "It started like this..." 5 short studies	Beth
1:00 - 2:00	Scoping Your Practice	Louis
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Panel: “It started like this...”

- > 5 volunteers
- > 3-minute stories each & Q&A

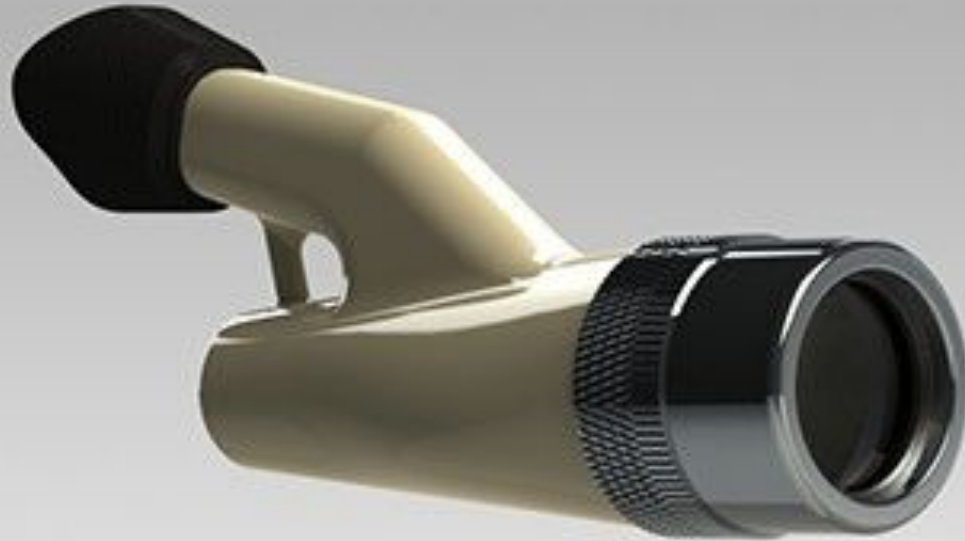
Scoping Your EA Practice

1. Review of what we covered today
2. Introduction to the EA Maturity Model for Higher Education
3. Introduction to Scoping Methodology
4. I-Time to develop a 1-year scope for your EA practice
5. Table Talk

Scoping Your EA Practice

1. EA Definition
2. EA Practice Models
 - a. Ad Hoc
 - b. IT Operational Excellence
 - c. Digital Transformation
3. Skills
 - a. Storytelling
 - b. Leading as an Architect
 - c. Influencing Strategies
 - d. Threshold Test
4. Practice Start-up Stories

Scoping your EA Practice



"Spotting Scope" by Zach Challies is licensed under CC BY-NC-ND 4.0

Scoping the EA Practice
https://docs.google.com/presentation/d/1qjxKHMGpZHOV3CP_LTLMcHleYEol9GLDGzrmAtXsL3M/edit#slide=id.g38e845b6e2_8_165

Defining Scope

In higher education, **EA practices vary widely** in the scope of their mission and the impact of their work.

We believe it is for leadership in each institution to **define why an EA practice is needed, set expectations for it, and create the conditions for its success.**”

Documenting Scope

When you are ready -- after some period of open-ended exploration and perhaps initial demonstration of value -- it is helpful to document the scope of the EA practice. This makes it possible to:

- > Further clarify scope with stakeholders
- > Widely communicate the mission of the EA practice
- > Gain feedback and buy-in

A good way to record scope is in the form of a summary **strategy** for the EA practice. A simple one-pager helps your own team and others understand why the EA practice exists, what is driving its work, and the outcomes it is working toward.

There are many ways to capture strategy; here is a simple “strategy on a page” template:

Strategy statement: To enable ___ to ___, we provide ___.

Vision: *What is the future you envision as the result of your strategy?*

Drivers	Initiatives	Outcomes
<i>What major factors in the environment drive and focus our work?</i>	<i>What are you doing in response to your drivers to reach desired outcomes?</i>	<i>What will be different as a result of your strategy? What business value will result?</i>

Example: Strategy on a Page

The sample strategy on a page at right summarizes scope for an imaginary EA practice:

- > **Why:** This practice is going to increase the effectiveness of the university's IT spend (see blue highlights at right)
- > **What:** This practice is focused on IT infrastructure and services (see green highlights at right)
- > **Where:** This practice is going to deliver outcomes in central IT and with central administration (see orange highlights at right)
- > **How:** This practice is going to do certain work such as systems analysis and business capability mapping (see purple highlights at right)

Having determined this scope, the EA practice can now review its ability to, for example, engage with stakeholders in the identified organizations, or create the stated deliverables.

Strategy statement: To enable the university to make best use of its IT spend, we work to rationalize IT infrastructure and align IT services with business needs.

Vision: Sustainable, highly optimized IT infrastructure supports IT services that directly enable the university's strategy.

Drivers	Initiatives	Outcomes
IT budget cuts drive need to reduce costs by eliminating redundant platforms.	Work with service teams in central IT to analyze platforms and roadmap EOL for redundant platforms	Central IT applications consolidated from X to Y platforms, resulting in Z cost savings.
IT governance needs better ways to understand IT services for investment decision-making.	Work with business units in central administration to define business capabilities	All applicable IT services mapped to administrative business capabilities, enabling those units to participate better in IT governance.

EA Maturity Model for Higher Education

Dashboard / Home / Themes

EA Maturity Model Home

Created by Piet Niederhausen (washington.edu), last modified on Sep 06, 2018

[Home](#) [Maturity Levels](#) [Maturity Attributes](#) [Model on a Page](#) [Quick Start](#) [Member Contributions](#)

The Itana Enterprise Architecture Maturity Model for Higher Education (EAMM) is a guide to understanding, assessing, and maturing enterprise architecture (EA) practices specifically in higher education institutions. It is intended for practitioners who wish to assess and grow their EA practices within a structured framework. These same practitioners may also use the model to facilitate EA conversations with higher education leaders who are considering initiating or expanding EA practices.

The maturity model is organized into Maturity Levels and Maturity Attributes (illustrated at right).

[EA Practice Maturity Levels](#)

As an EA practice matures, it typically progresses through several levels of maturity:

- 1. Initiating:** The EA practice is not yet formally recognized.
- 2. Formed:** The EA practice is formally recognized and resourced.
- 3. Defined:** The scope and capabilities of the EA practice are clearly defined.
- 4. Managed:** The work and capacity of the EA practice are controlled and measured.
- 5. Improving:** The EA practice is being continually improved.

[EA Practice Maturity Attributes](#)

An EA practice may mature differently in different attributes. The attributes in the maturity model are:

- A. Scope Definition:** How the scope of the EA practice is defined and evolved
- B. Engagement:** How the EA practice engages stakeholders based on its Scope
- C. Impact Assessment:** How the EA practice measures its performance within its Scope
- D. Delivery:** The means by which the EA practice delivers value
- E. Management:** How the EA practice manages itself.

[Maturity Model on a Page](#)

View the EAMM on a page.

[Quick Start Guide](#)

How to review your EA practice, identify actions, plan, execute, and re-assess.

[Itana Member Contributions](#)

	Maturity Levels				
	1	2	3	4	5
A					
B					
C					
D					
E					

ITANA WIKI - Maturity Model Home
<https://spaces.at.internet2.edu/display/itana/EA+Maturity+Model+Home>

EAMM-edu on a Page

	Level 1 Initiating <i>(Identify)</i>	Level 2 Formed <i>(Validate)</i>	Level 3 Defined <i>(Repeat)</i>	Level 4 Managed <i>(Change)</i>	Level 5 Improving <i>(Future)</i>
Attribute A Scope Definition	The initial scope consists of identified opportunities with potential to realize the value proposition.	The initial scope is validated through key engagements and optimized to best realize the value proposition.	The scope is clearly defined, and the value proposition widely understood.	The scope is regularly evaluated and processes to implement changes are in place.	Investment is regularly made in validating new opportunities to expand scope.
Attribute B Engagement	Key stakeholders, ready to explore and support EA capabilities, are identified and relationships with them are established.	Engagements strengthen existing stakeholder relationships and form new professional relationships.	Key stakeholders value and advance EA within the organization. A network of professionals engaged in EA activities forms.	EA practitioners are welcomed and integral to the processes of stakeholder organizations.	The EA practice is a trusted business partner to its key stakeholders.
Attribute C Impact Assessment	The organizational context is assessed and potential measures of the value proposition are identified.	Outcomes of key engagements are measured against the value proposition using qualitative assessment methods.	Outcomes are measured against the value proposition using established assessment methods and defined metrics.	Cost benefit is optimized using assessment data and operational costs.	New and alternative measures are explored, evaluated and adopted to improve assessment accuracy.
Attribute D Delivery	Potential methods are identified to deliver the value proposition within the defined scope.	Delivery methods are validated through key engagements and refined to improve outcomes.	Delivery methods are well defined and expected outcomes repeatable.	Delivery methods are regularly evaluated, and processes are in place to implement improvements.	New and alternative delivery methods are explored and evaluated.
Attribute E Management	The vision, business case and initial organizational structure for the EA practice is identified.	The EA capability is approved by the organization. EA resources are identified and charged. Progress towards the value proposition is tracked and reported to stakeholders.	The EA program has a clear and measured value proposition. Proper financial and staffing resources are available. The program is embedded within the organizational structure of the	The EA practice has processes in place to regularly evaluate its value proposition to opportunities	The EA practice engages in strategic thinking and long-

ITANA WIKI - Maturity Model on a Page
<https://spaces.at.internet2.edu/display/itana/Maturity+Model+on+a+Page>

EA Practice Profiles and Maturity Reviews

Yale University EA Maturity Review (Current 2019))

Created by Louis E King (yale.edu), last modified on Apr 22, 2019

Background

What is your name and title?

Louis King, Enterprise Architect, @Louis E King (yale.edu)

Completed by the Technology Architecture Committee

2019-02-08

How is Enterprise Architecture defined at your institution, and what are its primary functions?

Enterprise Architecture is not widely understood at Yale. The capability is owned by the Infrastructure Design Services group in the central Information Technology Services group in ITS and in the professional schools in a federated approach. The EA focuses primarily on application, data, and technology architecture of enterprise architectures and technology standards, and digital transformation in a few key functions of the University.

Review by Maturity Attribute

X indicates where Yale currently evaluates itself to be. X indicates where Yale

	1. Initiating	2. Formed	3. Defined	4. Perfected
A. Scope Definition		X	X	
B. Engagement		X	X	
C. Impact Assessment	X	X		
D. Delivery			XX	
E. Management		X		

Yale University EA Practice Profile

Created by Louis E King (yale.edu), last modified on Feb 07, 2019

EA Practice at a Glance

Year formed 2014 Initially, Reorganized in 2017

Submitted by Louis King, Enterprise Architect
@Louis E King (yale.edu)

EA team is located in Information Technology Services
Infrastructure Design Services

Roles on EA team Director, Enterprise Architect, Senior Solution Architect

Narrative The Enterprise Architecture and Design Services capability focuses primarily on the application, data, and technology architecture of enterprise services, architectural governance of solution architecture, and digital transformation in a few areas that the team has deep expertise in the business functions of the University.

Maturity Yale University EA Practice Review

- Scope definition - 2
- Engagement - 2
- Impact assessment - 1
- Delivery - 3-2
- Management - 2

What is your name and title?

ITANA WIKI - EA Profiles & Maturity Review
<https://spaces.at.internet2.edu/display/itana/Itana+Member+Contributions>

Table Exercise

1. Review of what we covered today
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Break

Back at 2:15PM



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Digital Transformation as a Driver for EA

Jim Phelps

Director of Enterprise Architecture & Strategy; University of Washington
EDUCAUSE Digital Transformation Task Force Member
Chair, Itana

...we digitize information,
we digitalize processes

**Digital transformation is
about the customer.**

[Digitization, Digitalization, and Digital
Transformation: Confuse Them At Your Peril,](#)
Forbes, Apr 29, 2018

Learning Outcomes:

Understand What is **digital transformation**, and what does it mean for higher education

Explain Digital Transformation and our current place on **the cusp between Disruption and Transformation** and why that is important.

Explain The impacts of **experience focused design, shifting workforce and economic forces** on Higher Education.

Apply the **transformation driven responses** in your architecture practice.

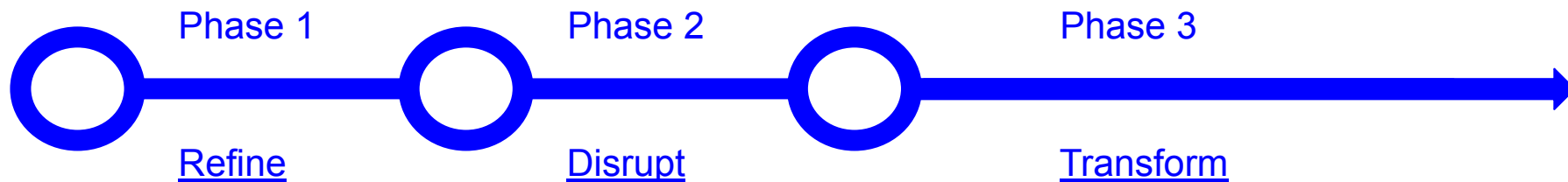


Digital Transformation

Digital transformation is the change associated with the application of **digital design & technologies** to all aspects of human society.

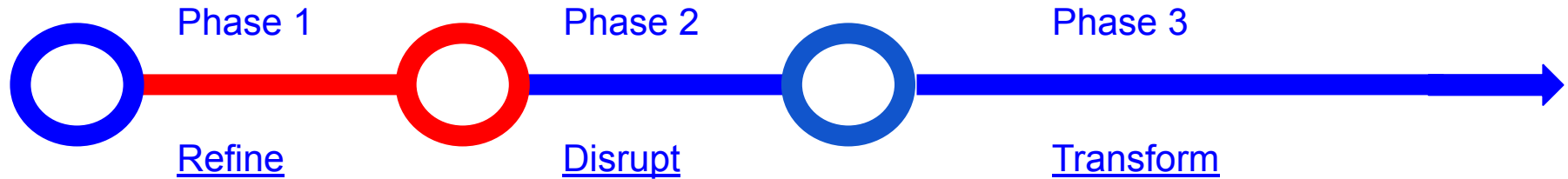
The Shape of Transformation

Phases of a Transformation



From: Chris Eagle, U-Michigan, Itana Face2Face 2017, EDUCAUSE Annual

Phases of a Transformation



Replacing old with new



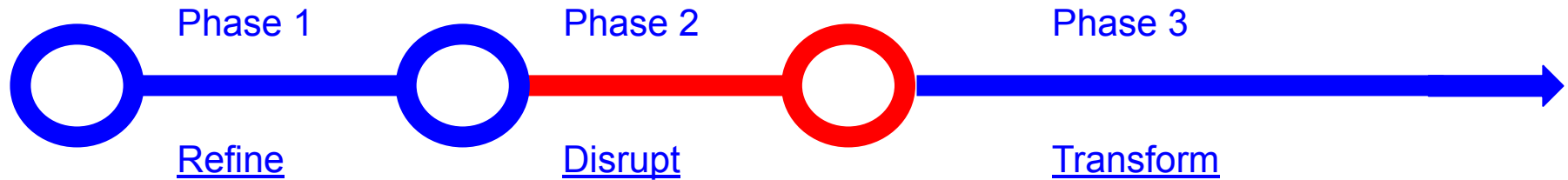
Replacing old with new

By the Harvard Innovation Lab



From: EDUCAUSE 2017 Annual Conference Panel on the Future of IT Workforce

Phases of a Transformation





Guglielmo Marconi. The Print Collector/Getty Images



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Art &
Collectibles

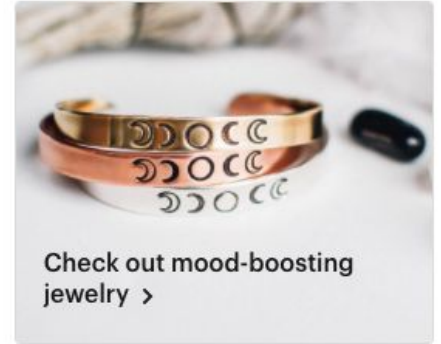
Craft Supplies
& Tools

Vintage

WOMEN'S HISTORY MONTH

Women make our
community great.

See how >



Check out mood-boosting
jewelry >

Shop leather with personalized
letters >

UPS has been quietly delivering cargo using self-driving trucks

The delivery giant has announced a minority stake in autonomous trucking startup TuSimple

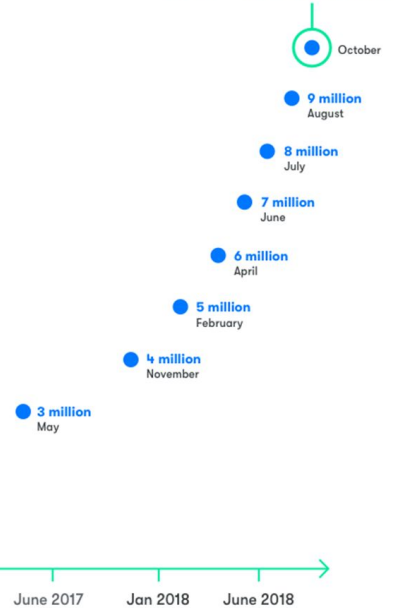
By Sean O'Kane | @sokane1 | Aug 15, 2019, 9:00am EDT

f   SHARE



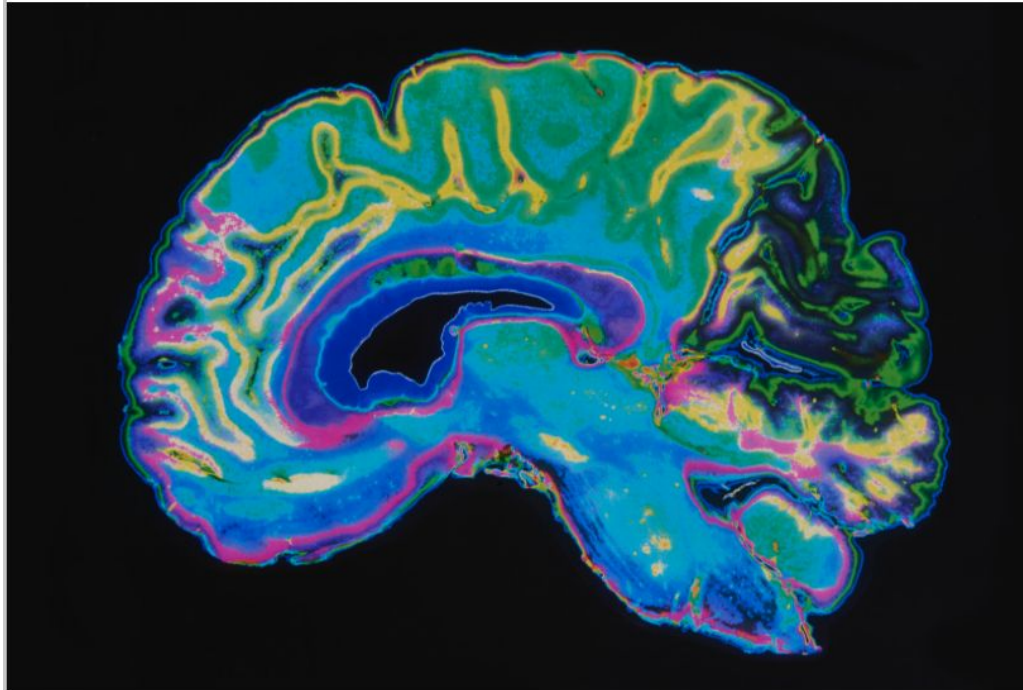
Photo by Sean O'Kane / The Verge

10 million



ounting

IBM's AI can predict schizophrenia by looking at the brain's blood flow



Highwaystarz-Photography via Getty Images

Nature Partner Journal - Schizophrenia www.nature.com/npjSchz

The Apple Watch can accurately detect hypertension and sleep apnea, a new study suggests

Posted Nov 13, 2017 by Sarah Buhr (@sarahbuhr)

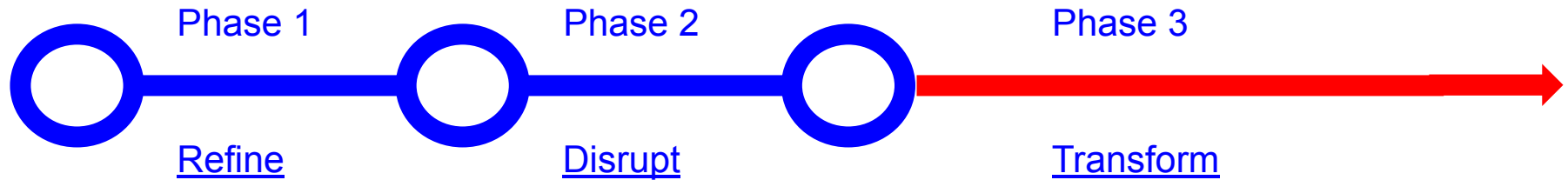


Cardiogram and UCSF previously demonstrated the ability for the Apple Watch to detect abnormal heart rhythm with a 97 percent accuracy.

.... can detect sleep apnea with a 90 percent accuracy and hypertension with an 82 percent accuracy.

Techcrunch, Nov 13, 2017

Phases of a Transformation





Founded May 1935

Washing Machines + Refrigeration = Women's Vote



Ted talk - Hans Rosling: The Magic Washing Machine

Driver/Sales Workers and
Truck Drivers



Cashiers



Managers of Retail
Sales Workers



Retail Salespersons



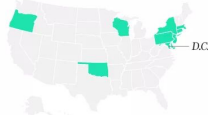
Elementary and Middle
School Teachers



Registered Nurses



Administrative Assistants



Agricultural Managers



Customer Service
Representatives



Janitors



Nursing Aides



Software Developers



Cooks



Personal and Home
Care Aides



Laborers and
Material Movers



Agricultural Workers



Assemblers and Fabricators



Chief Executives



Lawyers



Maids and Cleaners



Management Analysts



Waiters and Waitresses



MOST COMMON JOB

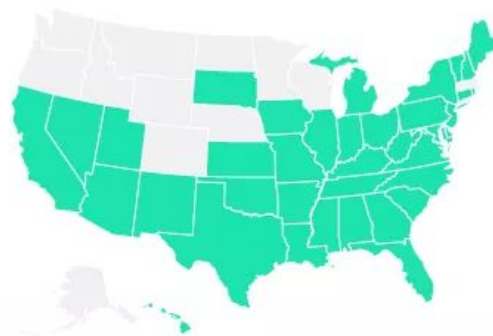
If a job was in the 5 most common for a state out of a possible 569, it appears here. Each unique job gets a map. Jobs were sorted by most national to most state-specific from top to bottom.

SOURCE Current Population Survey, 2015-2018
BY FlowingData, <http://flowingdata.com>

Driver/Sales Workers and
Truck Drivers



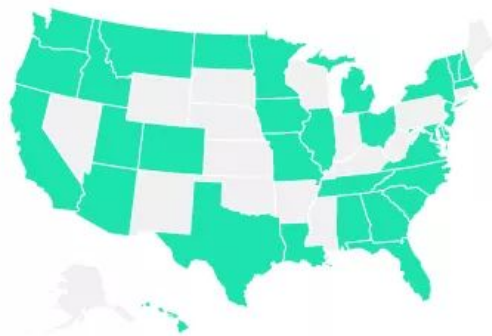
Cashiers



Managers of Retail
Sales Workers

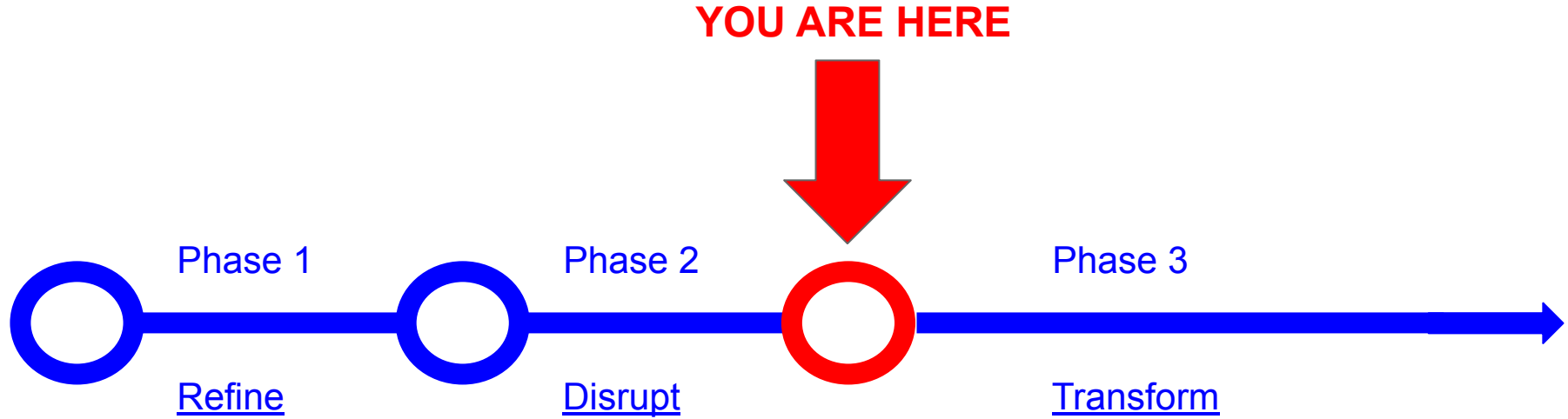


Retail Salespersons



[Flowing Data - Most Common Jobs, By State](#)

Digital Transformation on the Cusp



- **Agility and Adaptability are key.** Invest in things that enable you to adapt to whatever the future holds.
- **Scenario Planning is a critical planning practice.** Senior leaders should do scenario exercises yearly to prepare for whatever comes.
- Drive investments based on **future adaptability and future needs** not “how we have always done things”.

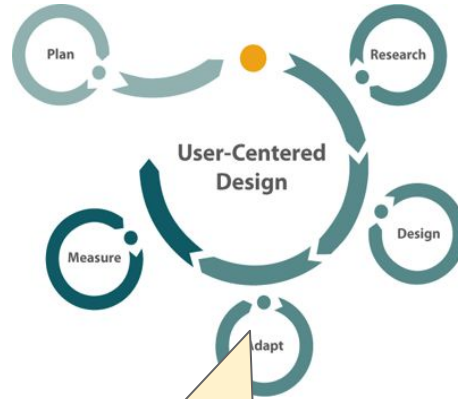
Customer / User Experience is Core



Customer Experience Design

Where can we delight our customers?

Where is there pain in their life that we can fix?



How do we deliver an easy, intuitive interface?

How do constantly adjust and improve the experience?

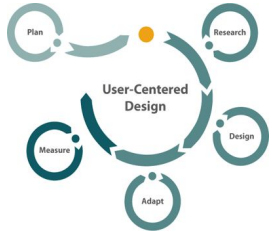


Hyper-Personalization

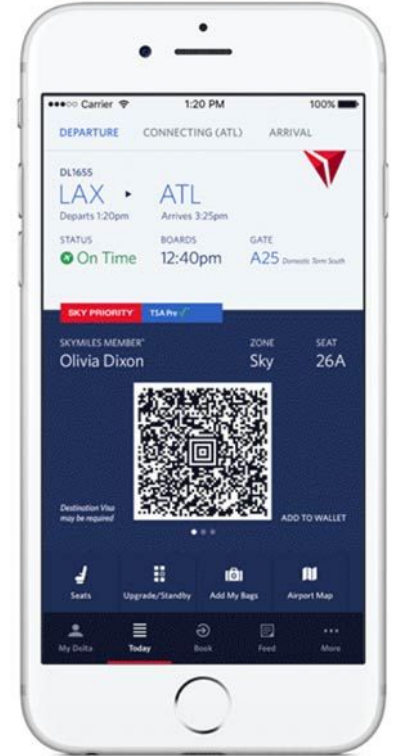
What is this users context?

How do predict what they need and put it at their fingertip?

Customer / User Experience is Core



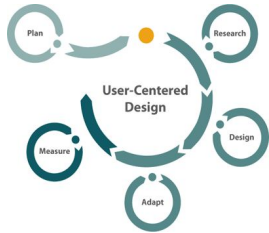
“Where is my luggage?
I hope it makes it on my flight!
Don’t lose my bag!”



Customer / User Experience is Core

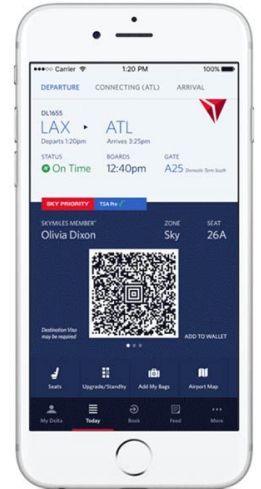


Yay! It's my luggage!
It made it!

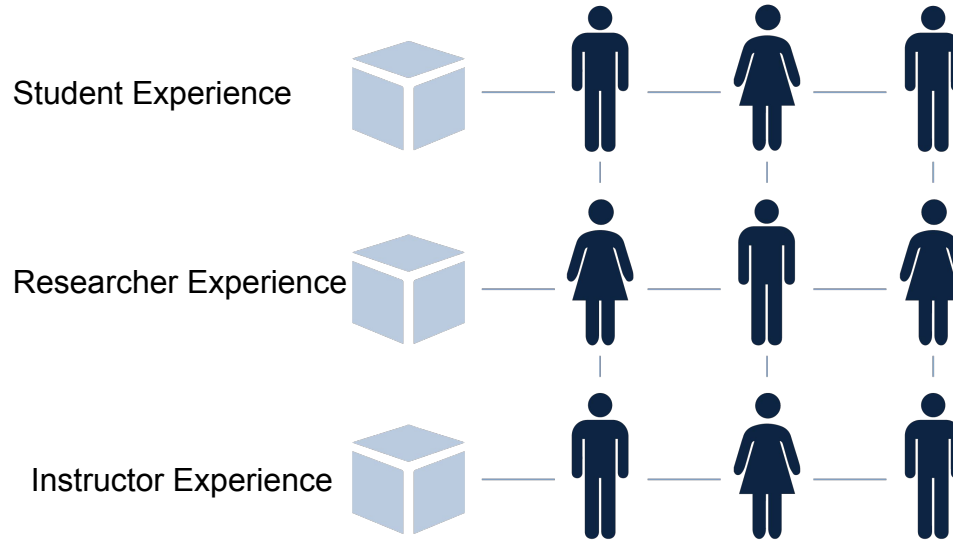
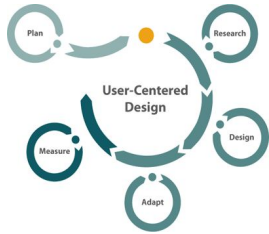


FLY DELTA now
Your bag #5006305150 is now arriving at carousel 6 in ATL.

FLY DELTA 5:50 PM
Your bag #5006561792 has been loaded onto DL0708 to ATL.



Customer / User Experience is Core



Highly matrixed organization
focused on delivering seamless
digital experiences.

- Shift **focus to the matrixed horizontal goals** away from the distribute siloes
- Focus on **work across the organization** for the whole of University
- **Business analysis and customer experience design** are core

Shifting Skills

Scott Lever - Gartner Analyst

“Nearly **80% of CIO’s and IT leaders** project that the skill and knowledge their organization will need in **10 years** have **little resemblance to the skills and knowledge** they have today.”

Impact of Changing to SaaS



Impact of Changing to SaaS

Navigate the
Change



Impact of Changing to SaaS

Navigate the Change



Shifting Expectations and Relationships



Impact of Changing to SaaS

Navigate the
Change



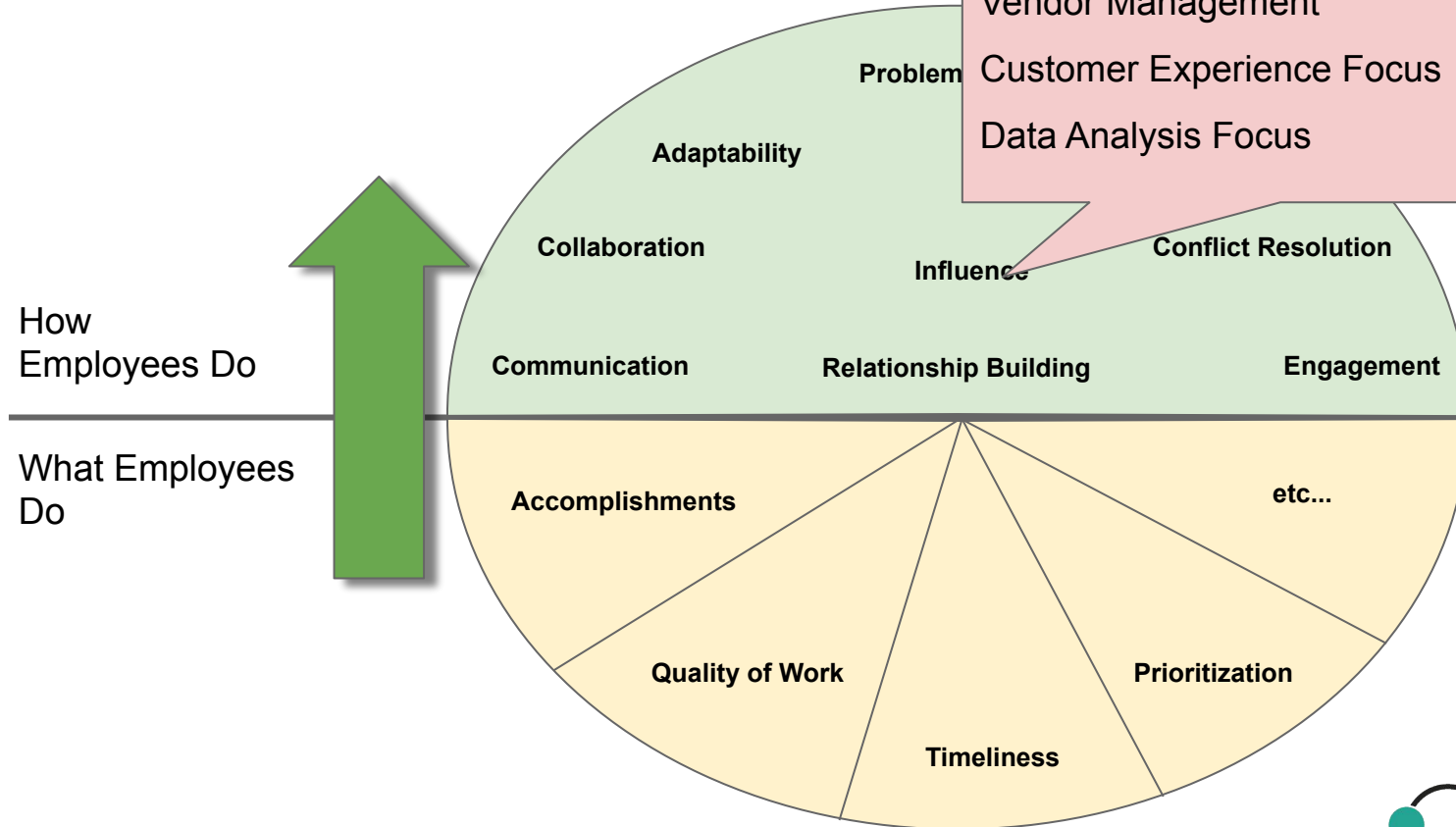
Shifting Expectations
and Relationships



New skills for the
same work



The Workforce of the Future



Business Relationship Management
Vendor Management
Customer Experience Focus
Data Analysis Focus

- **Strategic Plans** for reskilling our workforce
- Create a **Strategic Workforce Development Center** that focuses on continuous development and alignment (including Job Descriptions)
- Build a **continuous learning and improvement** culture
- Building **Over-the-horizon plans for new skills** that will be needed in the future

Income Challenges

Prediction 1: World Economic Forum and Boston Consulting

A grim future for workers who don't learn new skills

Almost 1 million Americans will see their career change or probability
Boston Consulting. This interactive visu

“Almost 1 million Americans will see their occupations vanish entirely by 2026”

The bottom line: In all, some 1.4 million
years, including 70 percent
them — 41% — will have either minuscule
affected.

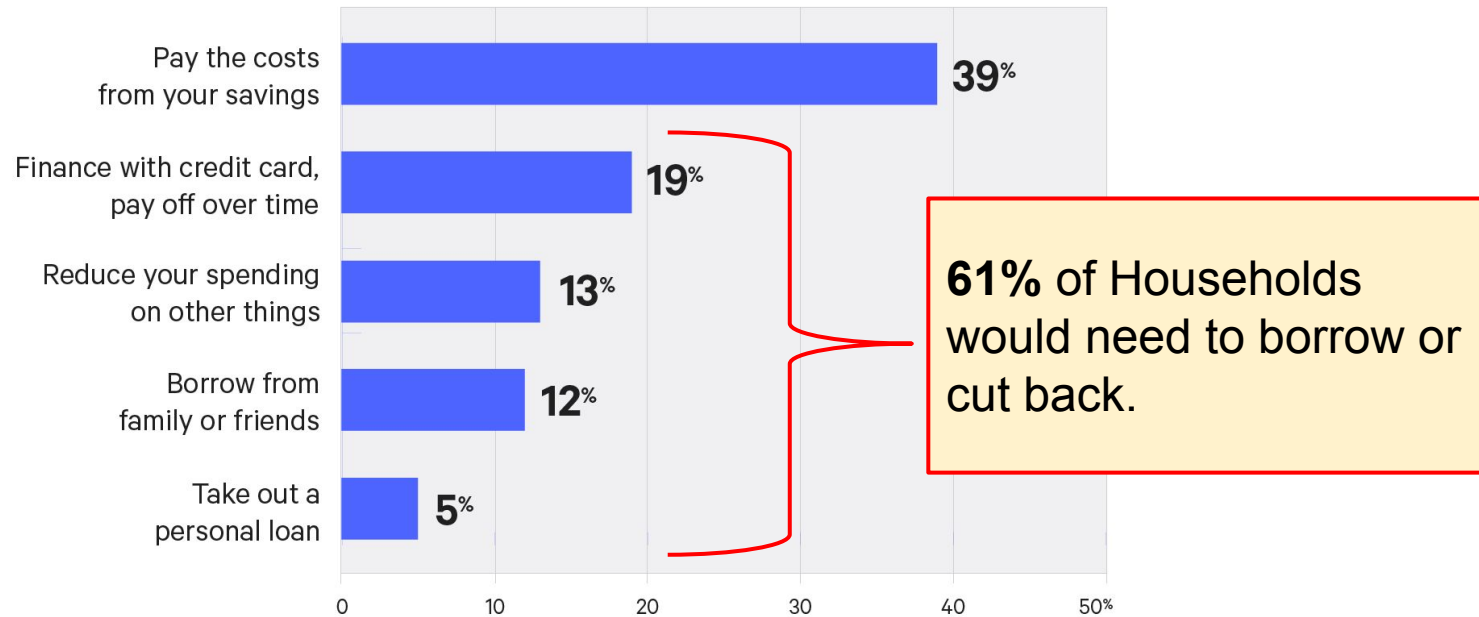
“Without new skills...41% will have minuscule or no chance of finding other work”

Axios: A grim future for workers who don't learn new skills

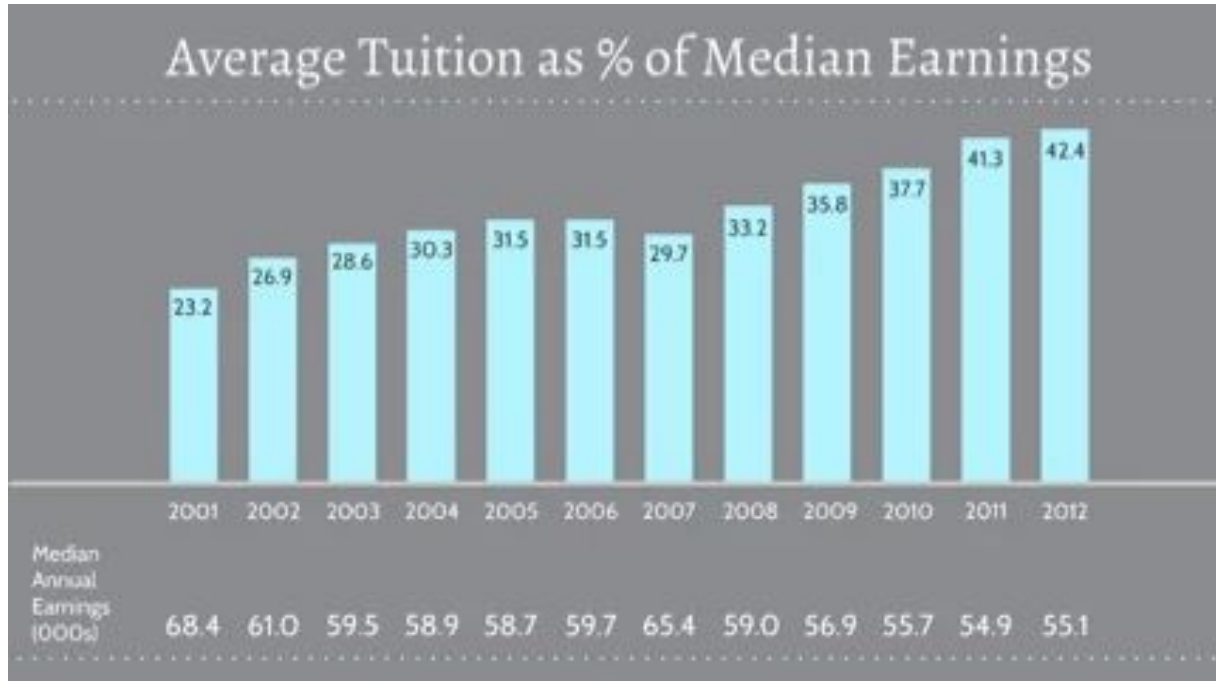
<https://www.axios.com/workers-automation-lost-jobs-skills-2d944533-3f51-40ee-b2c0-b65e4644a9db.html>

How Americans pay for unexpected expenses

How would you deal with a major unexpected expense, such as \$1,000 for an emergency room visit or car repair?



Tuition is eating up more of earnings

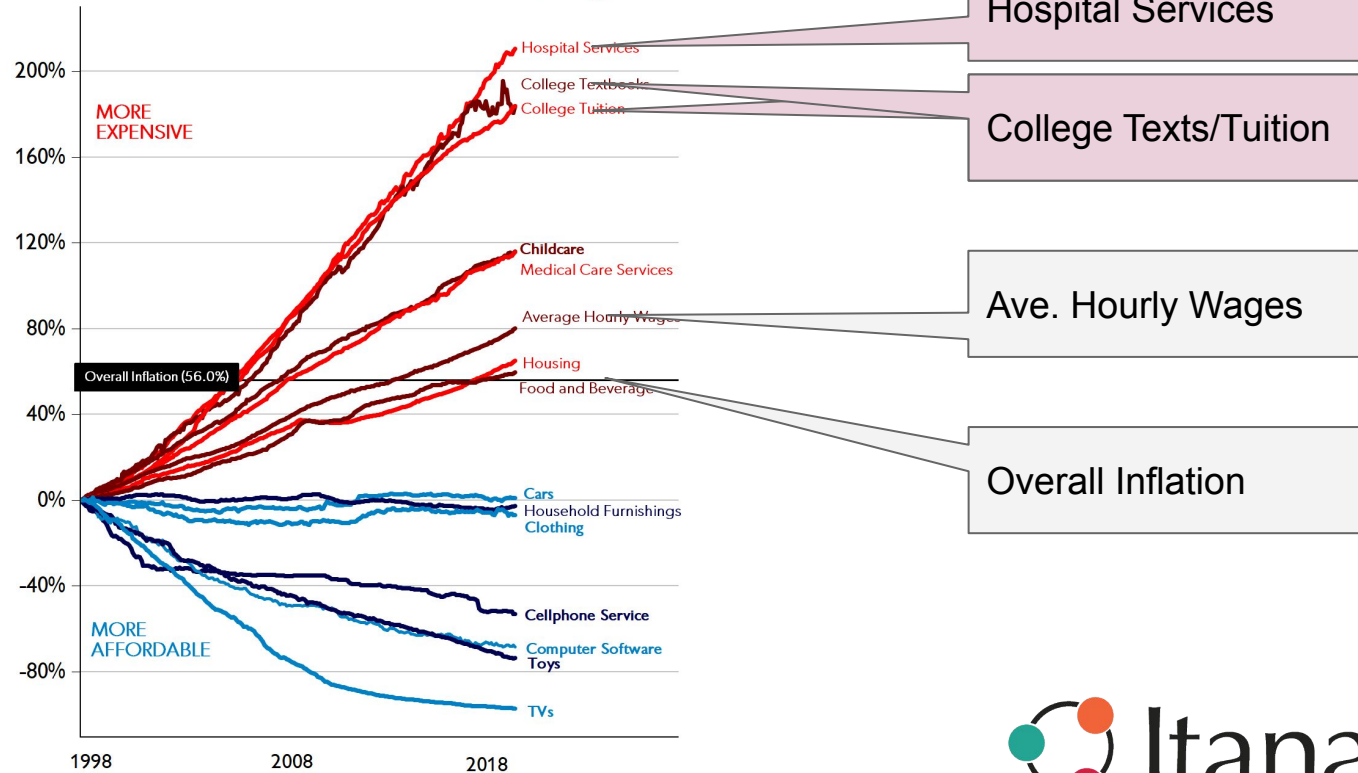


Washington Post
[The Biggest Problem Facing Higher Ed in One Chart](#)

Climbing Costs of Higher Education

Price Changes (January 1998 to December 2018)

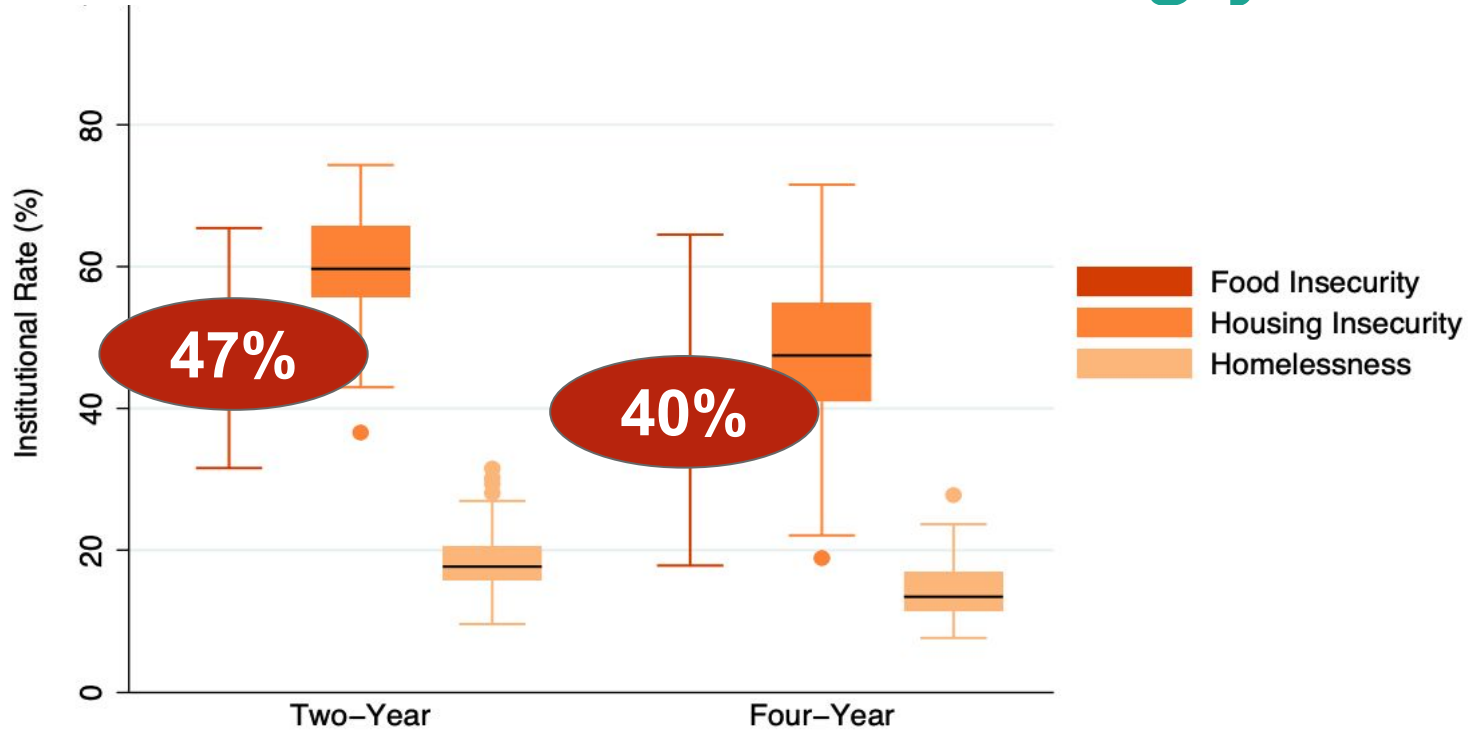
Selected US Consumer Goods and Services, Wages



Source: BLS

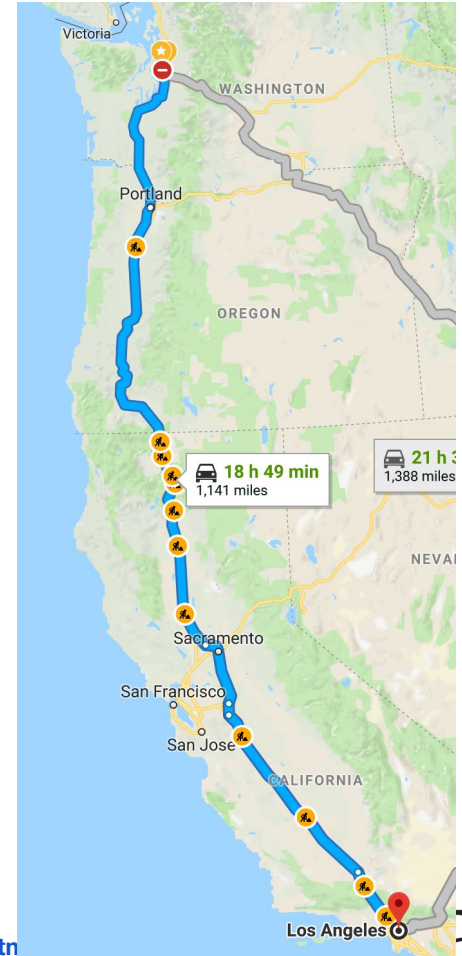
Carpe Diem **AEI**

Students are Homeless and Hungry



Student Loan Debt

(\$1,606,500,000,000)

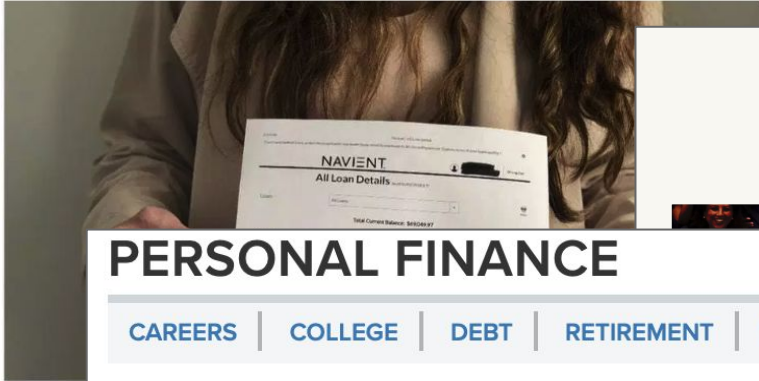


Federal Reserve - Consumer Credit G-19

<https://www.federalreserve.gov/releases/g19/current/default.htm>

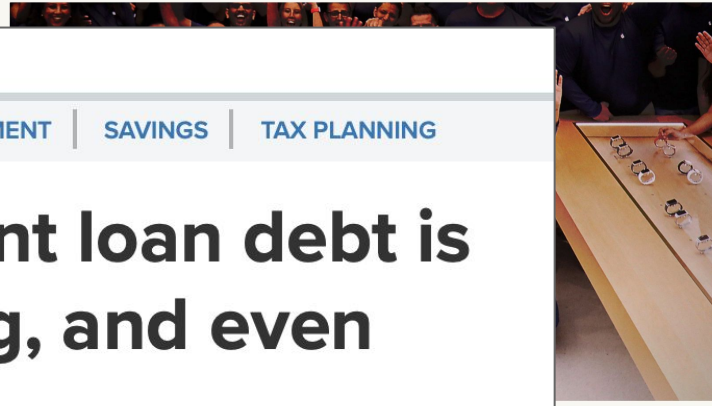
Student Loan Debt

Student debt crisis watch: pay \$18,000 of your \$24,000 loan, owe \$24,000



ZERO DEGREE CLIMATE
Apple, IBM, and Google don't care anymore if you went to college

By Corinne Purtill - August 23, 2018



PERSONAL FINANCE

[CAREERS](#)

[COLLEGE](#)

[DEBT](#)

[RETIREMENT](#)

[SAVINGS](#)

[TAX PLANNING](#)

For some, student loan debt is doubling, tripling, and even quadrupling

- For some students, what they borrow can end up being a fraction of what they wind up owing.

Challenges the assumption
that students will be able
(or willing)
to leave the workforce
for 4 to 6 years to get an education.

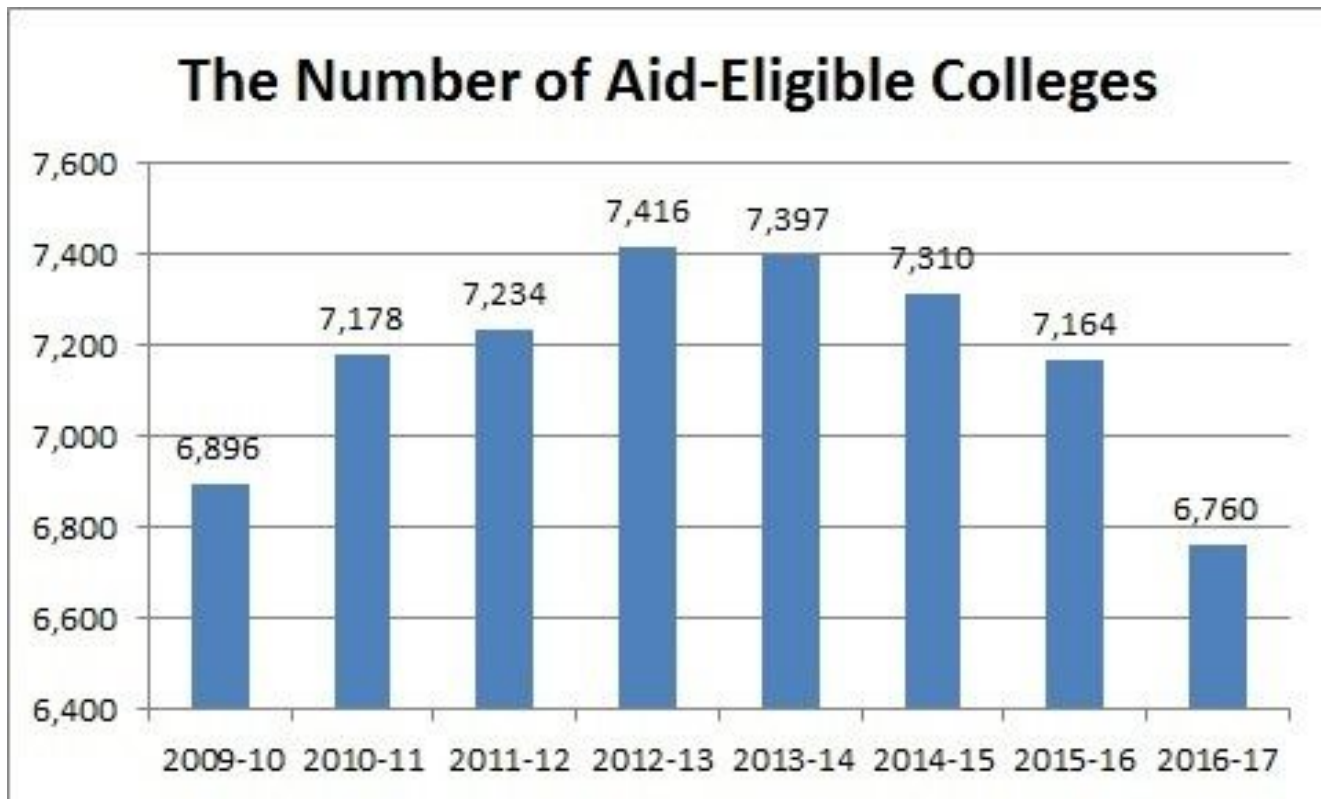
HE Financial Crisis

Bankruptcy of Higher Education

Harvard Business School professor: Half of American colleges will be bankrupt in 10 to 15 years

Abigail Hess | @AbigailJHess • 9:57 AM ET Wed, 15 Nov 2017

There are **over 4,000** colleges and universities in the United States, but Harvard Business School professor **Clayton Christensen** says that **half are bound for bankruptcy** in the next few decades.



[Inside Higher Ed: Numbers of Colleges and Universities Drops Sharply Amid Economic Turmoil](#)

- Create more **graceful entry and exit** points for students
- Leverage **DX technologies** to make sure the student receives the best, most efficient experience
- Drive down administrative costs through **automation**, autonomous systems, etc.

Learning Outcomes:

Understand What is **digital transformation**, and what does it mean for higher education

Explain Digital Transformation and our current place on **the cusp between Disruption and Transformation** and why that is important.

Explain The impacts of **experience focused design, shifting workforce and economic forces** on Higher Education.

Apply this **transformation driven design** in your architecture practice.



Architecture is focused on foundational problems

“In doing adaptive work, the **problem is often unclear and therefore the solution is unclear.**

Adaptive work is generally messy work that requires **persistence, creativity and courage** to work through.”

-- Ronald Heifetz et al, “Political Leadership: Managing the Public’s Problem Solving”

Your 1-Year Action Plan

What are you going to do differently when you get home?

On your own, start to fill in the Action Plan template. You don't have to finish, but try to think about each section.

Share your Action Plan

With someone at your table, take turns sharing what you wrote down on your action plan and providing feedback.

Share w/ a tablemate

Refine and revise

Based on your partners feedback and plan, take time to capture what you heard and to refine and revise your plan, and add any additional details.

Network and Share

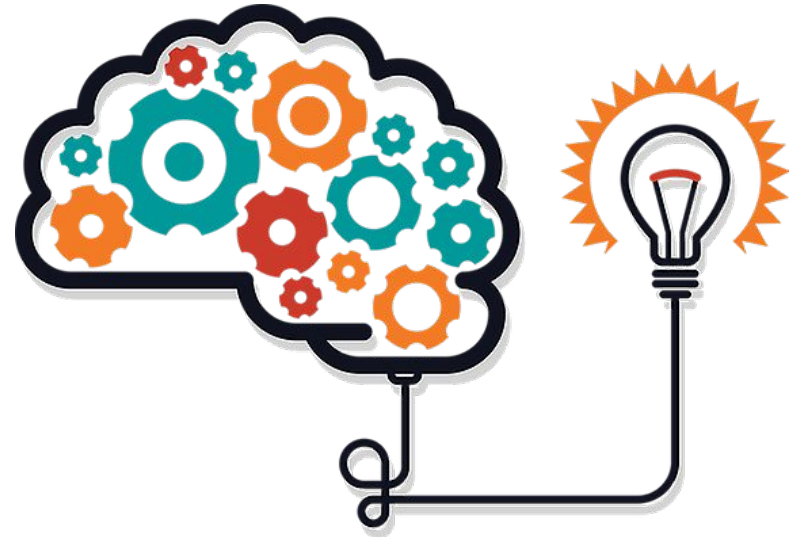
Share your EA story, scope, skills and action plan with someone you haven't had much time with today.

Use this as an opportunity to meet someone new and to share all that you have learned today.

Share w/ someone new

Learning Outcomes:

1. **Learn** essential skills and methods to re/Launch your EA practice
2. **Apply** lessons-learned from other institutions
3. **Develop** your EA scope using the Itana Scoping method
4. **Develop** a 1-year action plan
5. **Build** your personal professional network



Plus, Delta, Big Ideas, Questions

+ - What **went well** today? What did you like?

Δ - What could have been **improved**?

! - What “**Big Idea**” or “**Aha! Moment**” did you have?

? - Any “**Big Questions**” strike you during the day?



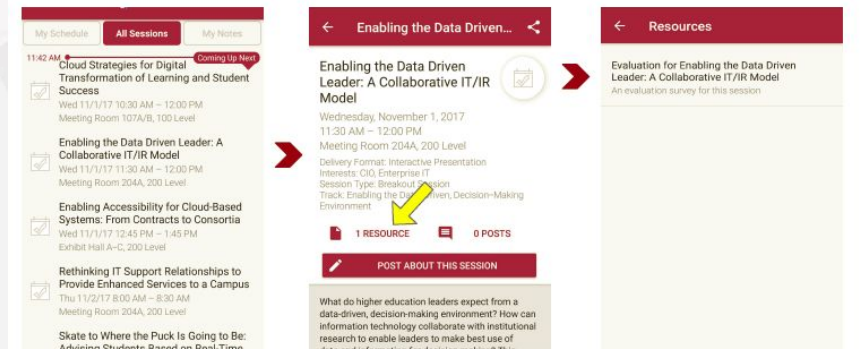
Session Evaluations

There are two ways to access the session and presenter evaluations:

1 In the online agenda, click on the “Evaluate Session” link



2 From the mobile app, click on the session you want from the schedule > then scroll down or click on the associated resources > and the **evaluation** will pop up in the list



Thank you!

New to EA: re/Launching your Enterprise Architecture Practice

Itana Face2Face 2019

[EDUCAUSE Pre-Conference Session](#)

Meeting Room W179a - 8AM to 4PM

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Future of Higher Education: Summary of Drivers & Responses

Digital Transformation (DX)	Shifting Skills	Employment & Income Challenges	Higher Ed Financial Crisis
<p><i>Drivers (DX)</i></p> <ul style="list-style-type: none"> • New technologies that impact all aspects of society • Unknown “winners and losers” 	<p><i>Drivers (Workforce)</i></p> <ul style="list-style-type: none"> • New classes of jobs, skills, and competencies • Shifting emphasis on “above the line” competencies 	<p><i>Drivers</i></p> <ul style="list-style-type: none"> • Increasing numbers of existing jobs displaced • Rising tuition, while many students & households are financially challenged 	<p><i>Drivers</i></p> <ul style="list-style-type: none"> • Growing number of institutions closing or merging • Many institutions likely to enter bankruptcy
<p><i>Suggested Responses</i></p> <ul style="list-style-type: none"> • Build adaptability into your organization. • Educate leadership and campus about the DX Story • Create a futurology practice • Build a DX Change Management Office or Practice to engage all of campus in the DX change • Develop pedagogy and content for to help students understand the DX 	<p><i>Suggested Responses</i></p> <ul style="list-style-type: none"> • Create a strategic investment fund for reskilling our workforce • Build a Strategic Workforce Development Center that focuses on continuous development • Create a continuous learning and improvement culture among all staff • Actively manage Human Resource debt 	<p><i>Suggested Responses</i></p> <ul style="list-style-type: none"> • Create more graceful entry and exit points for students / lifelong learners • Leverage DX technologies to make sure the student receives the best, most efficient experience • Drive down administrative costs through automation, autonomous systems, etc. • Look for partnerships to offset student tuition 	<p><i>Suggested Responses</i></p> <ul style="list-style-type: none"> • Look for merger opportunities to build footprint, brand or find efficiencies • Build up endowments / reserves to buffer against continued financial risks • Find alternate funding sources (partnerships) to offset tuition and lost government revenue • Eliminate or collapse departments

Future Higher Education Institution

Data Driven Foremost	Digital Experience is Central	Automation for student experience	Lifelong learners, working learners are common
<ul style="list-style-type: none"> • Need to automate to drive efficiencies • Measure effectiveness of experience • Measure outcomes • Drive hyper-personalization 	<ul style="list-style-type: none"> • Multiple experience designs support diverse learners • Hyper-personalization is the norm 	<ul style="list-style-type: none"> • Automation matches students to courses, peer groups, co-curricular activities, advisors and mentors, supporting services like transportation, food, etc. 	<ul style="list-style-type: none"> • Multimodal education supports lifelong learners, when and where they learn • Multiple graceful entry/exit points deliver learning achievements from microcredentials to degrees
Automate Everything	Workforce Development is strategic	Innovation and Reinvention are core	Mergers and Partnerships extend the experience
<ul style="list-style-type: none"> • Match researchers to grants & pre-populate applications • Match student applicants with best fit and experience • Drive efficiencies in facilities and administrative tasks 	<ul style="list-style-type: none"> • Constant workforce development focused on reskilling and realigning roles • Matrixed organization is focused on the digital experience 	<ul style="list-style-type: none"> • Constant feedback and measure drives innovation and reinvention of the experience and drives efficiency • New technologies and changes in society require innovation and reinvention to be core to the culture 	<ul style="list-style-type: none"> • Learners can attend a partner campus close to work/home • 3rd party partners extend the experience to transport, housing, food, etc.

INFORMATION TECHNOLOGY

