Business Architecture Skills
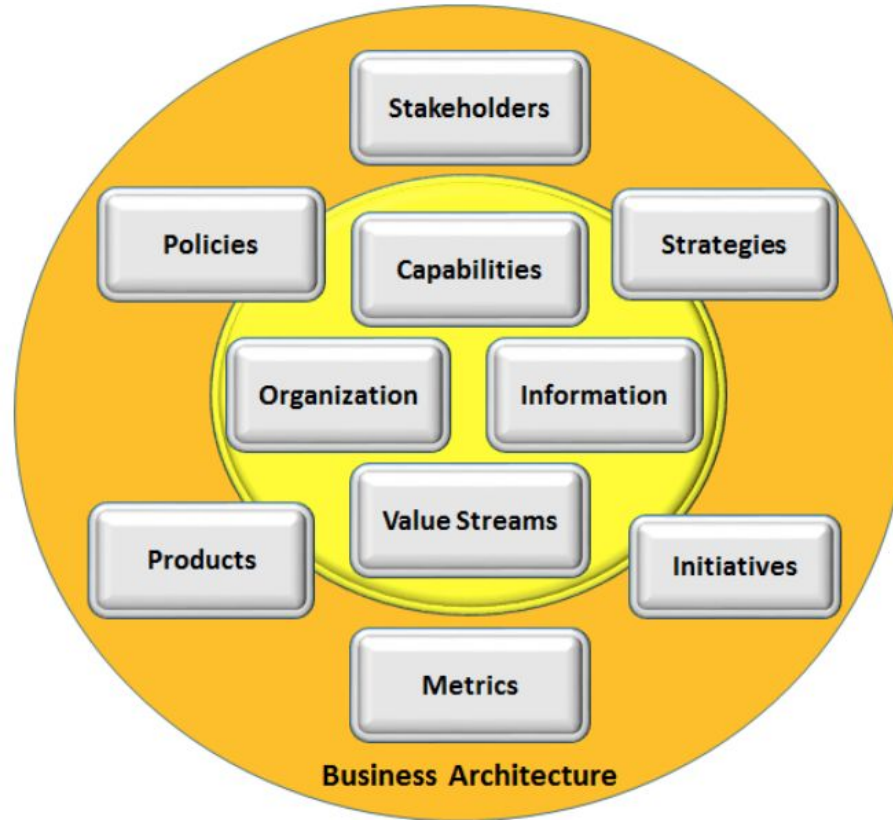
Itana Conference Call
November 15, 2019

What is business architecture about?
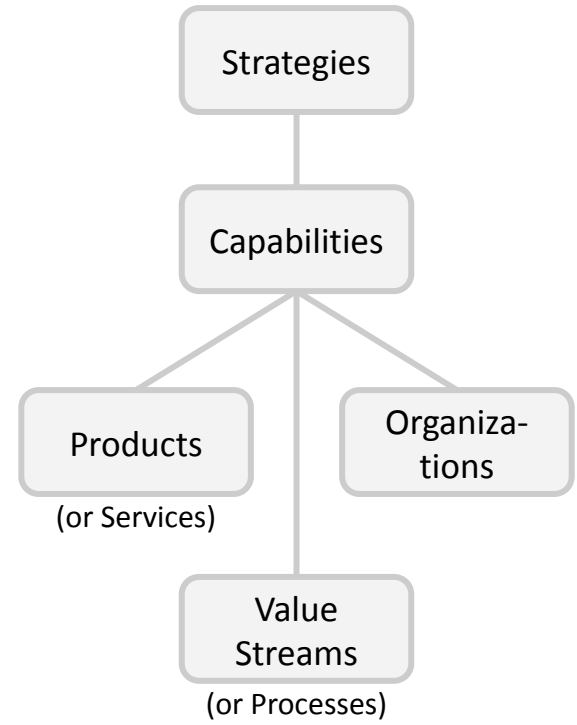
What do business architects really do?

In our last call, we heard from architects at six institutions who:

> Develop and apply **business capability models** to identify gaps, roadmap changes, align initiatives, understand product ownership, etc.

> **Review requests** for projects, changes, technology acquisitions, etc.; participate in advisory boards

> Help teams **define services or projects**

> Develop high level **requirements** for some initiatives

> Collect information across **portfolios** of services, projects, etc.

> Help define new **positions** and start **teams**

> Align and grow **related practices** such as project management, change management, business analysis, etc.

> Understand **technical architecture** trends such as cloud strategy, IAM, etc.

> Do **vendor** management

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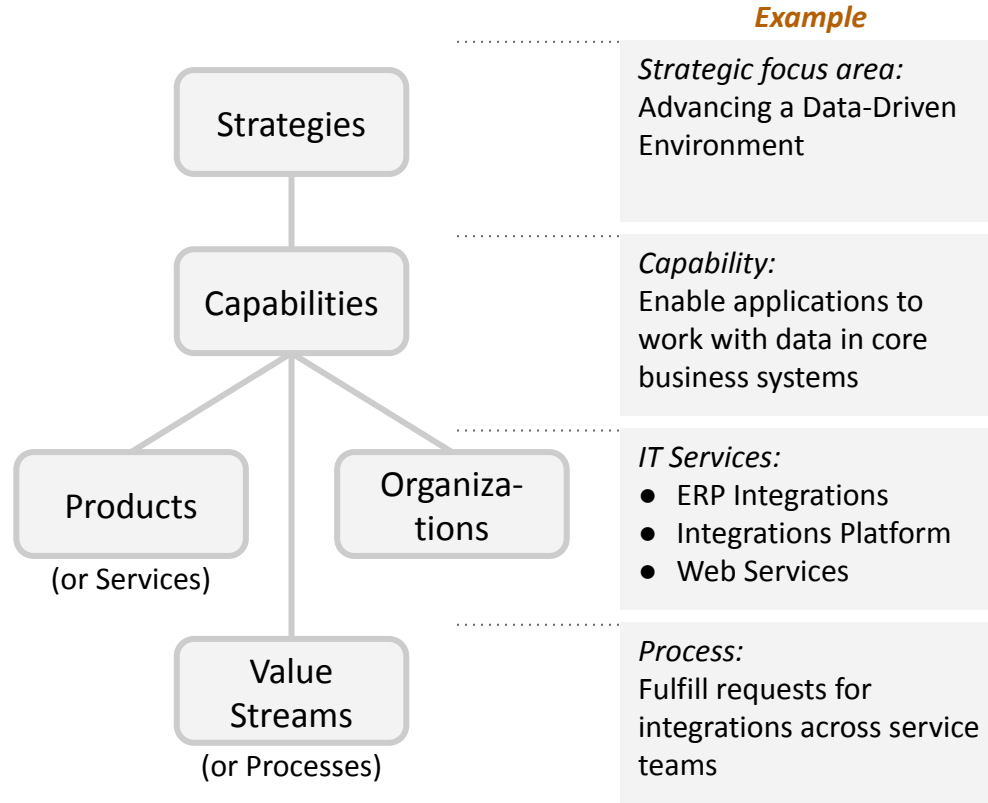# Thinking about business architecture skills

> What kinds of skills are relevant?

— Big picture and systems thinking

— "Hard" methods and "soft" skills

> How do architects build competency?

— Practice … iterative work … peers … training

> How can we help skills grow in the organization?

— Building community around skill development

Example: A "cross section" of business architecture work

Example: Central IT at the University of Washington

Strategies

Capabilities

Products
(or Services)

Organiza-tions

Value Streams
(or Processes)

Strategic focus area:
Advancing a Data-Driven Environment

Capability:
Enable applications to work with data in core business systems

IT Services:
- ERP Integrations
- Integrations Platform
- Web Services

Process:
Fulfill requests for integrations across service teams

The subject of this example is an IT organization, but the same work applies to any kind of organization (or to the whole university).

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Example (continued)

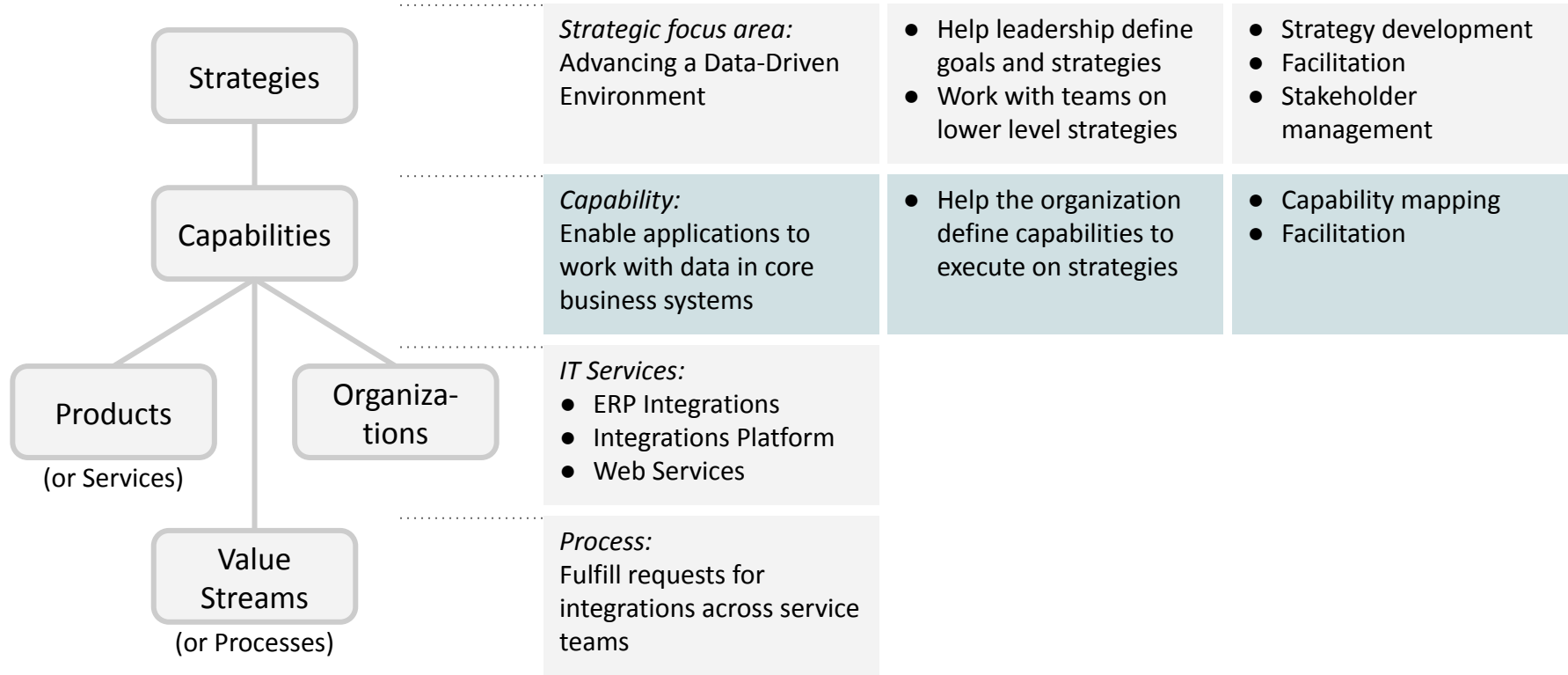|	Example	Activities	Skills
Strategies	*Strategic focus area:* Advancing a Data-Driven Environment	• Help leadership define goals and strategies • Work with teams on lower level strategies	• Strategy development • Facilitation • Stakeholder management
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Products (or Services) / **Organiza-tions**	*IT Services:* • ERP Integrations • Integrations Platform • Web Services		
Value Streams (or Processes)	*Process:* Fulfill requests for integrations across service teams		

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Example: Strategy development

A whole lot of discussion, whiteboarding, and drafting … resulting in one-pagers that managers at each level agree represent their direction.

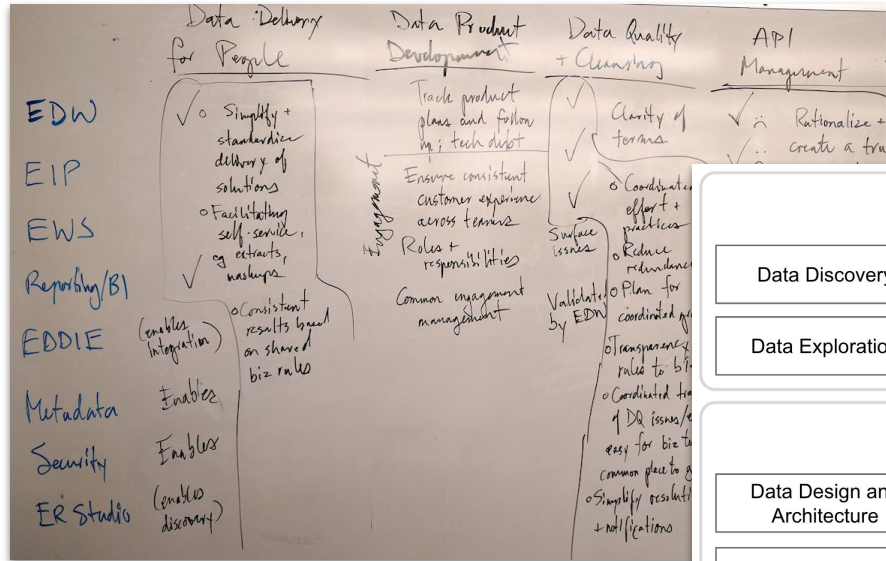| OUR MISSION:	TO ACHIEVE OUR MISSION, WE WILL:	WE WILL FOCUS ON:
Through partnerships we leverage technology and expertise to drive transformation, support innovation and research, enhance student success and enable students, faculty and staff to do their best work.	Enhance Innovative Teaching & Learning Support World-Class Research Modernize Information & Business Systems Enhance Collaboration Provide Access to Excellent Infrastructure Reduce Enterprise Risk Advance Operational Excellence	**Advancing a Data-Driven Environment** The UW has entered an era that is data-driven, where information is at the core of the University's work and IT's ability to deliver services. UW-IT will be a leader in developing University-wide data strategy and serving the UW's data needs through effective, forward-looking data services. **Managing Risk** The UW is challenged by an increasingly complex risk environment, with growth in both information security threats and IT-related regulatory requirements. This poses financial, legal and reputation... **Creating ...**

Strategy Statement: To enable UW administrators to better serve students, faculty, staff, and alumni, UW-IT provides modern, secure, flexible and integrated business information systems for operations, planning, and analysis.

Vision: Enterprise systems seamlessly support business processes, and data and analytics fully enable operations, decision-making, and compliance. Information and systems are applied to make administrative processes as effective as possible, helping to maximize UW resources for teaching, learning, and research.

Change Drivers	Initiatives	Outcomes
Outdated, legacy systems no longer support current business operations.	Complete configuration, testing, and launch of the new HR/Payroll system. Launch the new Integrated Service Center to improve HR/Payroll support for employees and units. Create the leadership, organization and governance for a successful program to implement a new financial system Create an Enterprise Finance Portfolio to provide an overview of current financial systems, initiatives and workplans.	Standardized HR/Payroll business processes are supported with automated workflows and reporting in a well-integrated modern HR/Payroll system. Reduced scope of campus shadow systems improves efficiency and reduces security risk.
Decreased funding and increased competition for talent in higher education requires a new emphasis on data-driven decision making.	Add new data to the Enterprise Data Warehouse to support key enterprise metrics. Continue rollout of Tableau and produce more institutional dashboards, reports, and cubes (UW Profiles expansion).	Decision-makers and analysts have easier access to higher quality, better understood, and more consistent data.
The UW has Increased needs to make business systems more interoperable and seamless, across a complex systems landscape in which the core systems for HR/Payroll and Finance are being replaced over the next decade.	Deliver Enterprise Integration Platform Phase I to support HR/Payroll Modernization. Complete a proof of concept using OAuth to improve API management.	
Sustainable, thoughtful use of resources replaces paper-based legacy administrative processes.	Deliver enterprise document management and e-signature capabilities to departments and administrative units.	

Strategy Statement: Data & Analytics provides leadership and support to UW academic and administrative units in delivering institutional data for decision making.

Vision: Satisfied and Empowered Customers; Reliable, Integrated, Well-Defined Data for the University.

Drivers	Initiatives	Outcomes
Increasing demand at all levels of UW for timely, accurate and consistent information for decision making and operational efficiency.	Current: Develop education, training, and outreach to put users in control of data assets; implement Knowledge Navigator (KN) to increase understanding of data assets. Planned: API Management; data lineage; canonical data model Future: Data mashup tools; self-service BI	Easy-to-find, easy-to-access, easy-to-understand data enable more effective, and serendipitous use of data assets. Users have access to more enterprise data sets they need to make better decisions.
Demand for short turnaround times. Demand for fast performance, modern user experience, and increased self-service.	Current: Improve capacity planning; develop clear processes for "adopt or not"; implement high speed search; automate testing & deployment Planned: Support new Data Governance model; implement API Management; master data management; Future: Self-service BI	Test & deployment automation, along with reuse of common technology patterns, practices, and services, speed solution delivery. Re-established data governance removes roadblocks to availability of data assets.
Increasing and changing threats to data security, and changes to the compliance landscape.	Current: Increase data security plans Planned: Create culture of data security; new Data Governance model; canonical and master data; Future: Develop next-generation data access tools	Data privacy and security are built into solutions.
Growing number and diversity of enterprise data sources. University buy-over-build approach requires new approaches to data acquisition and integration.	Current: Enterprise Integration Platform (EIP); adapt to source changes (on-going); event notification Planned: Reassess DAC/SMAT; Future: Data mashup tools; orchestration of business processes;	Management of data assets keeps pace with the growth of data sources.
Growth in technology to support predictive analytics. Ability and willingness of customers to "roll their own"	Current: Extend and operationalize data science capabilities; Planned: API Management; OAuth; Future: Implement data mashups;	Best-of-breed vendor solutions and emerging technology increasingly replace existing local solutions and amplify use of data assets.
Re-allocation of resources to large ERP efforts impacts delivery of data and analytics capability.	Future: Analyze options for new funding models.	Funding model for data and analytics matches demand.

Example (continued)

	Example	Activities	Skills
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Products (or Services) / **Organiza-tions**	*IT Services:* • ERP Integrations • Integrations Platform • Web Services		
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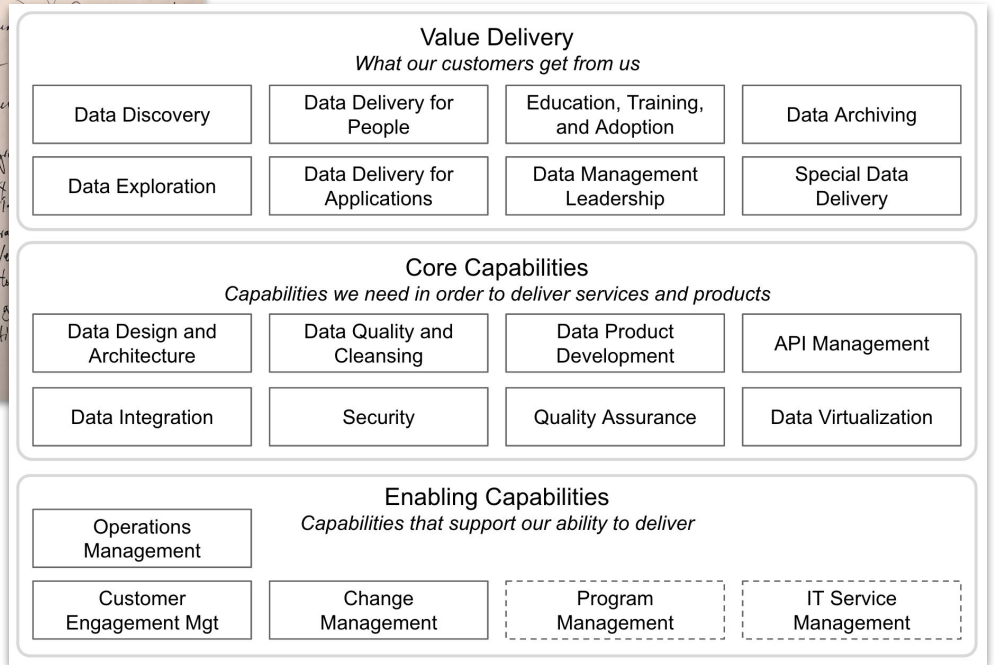
Example: Capability mapping

A whole lot of discussion, whiteboarding, and drafting … resulting in a map that the stakeholders agree represents what they do.

Value Delivery
What our customers get from us

| Data Discovery | Data Delivery for People | Education, Training, and Adoption | Data Archiving |
| Data Exploration | Data Delivery for Applications | Data Management Leadership | Special Data Delivery |

Core Capabilities
Capabilities we need in order to deliver services and products

| Data Design and Architecture | Data Quality and Cleansing | Data Product Development | API Management |
| Data Integration | Security | Quality Assurance | Data Virtualization |

Enabling Capabilities
Capabilities that support our ability to deliver

| Operations Management | | | |
| Customer Engagement Mgt | Change Management | Program Management | IT Service Management |

Example (continued)

Diagram (left):
- Strategies
- Capabilities
- Products (or Services)
- Organiza-tions
- Value Streams (or Processes)

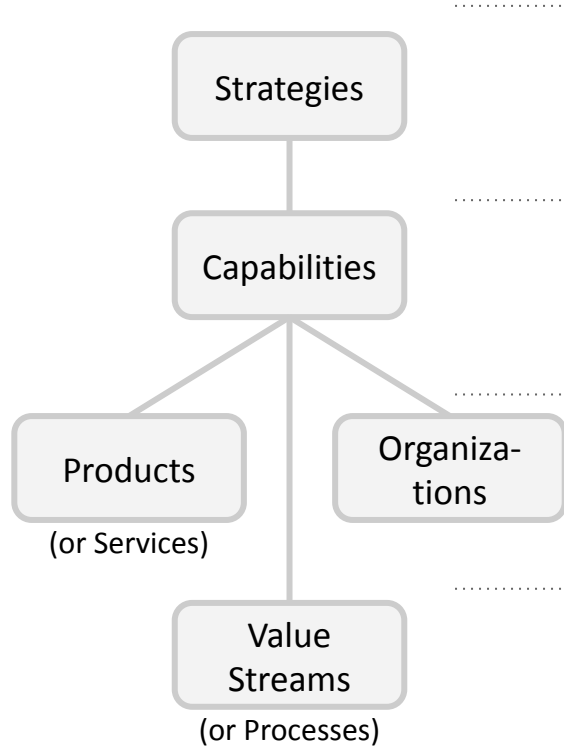|	Example	Activities	Skills
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Process	*Process:* Fulfill requests for integrations across service teams		

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Example: Service design

Service Model Canvas

Key Partners	Key Activities	Value Proposition	Customer Relationships	Customer Segments
	Key Resources		**Channels**	

Cost Structure	Funding Sources

Example (continued)

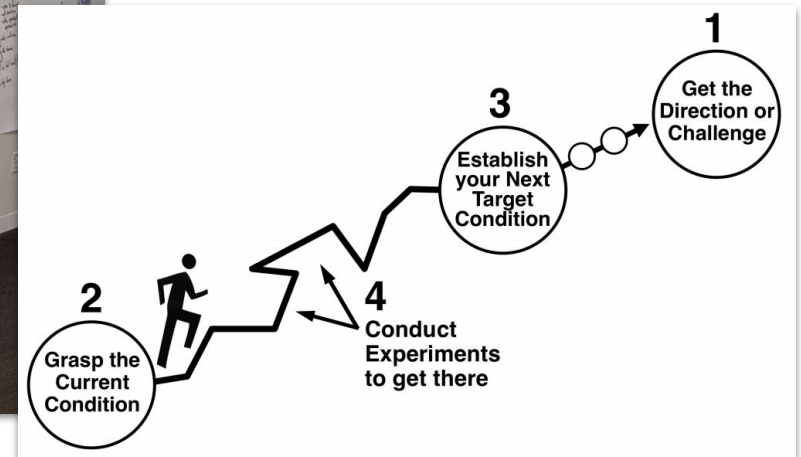|	Example	Activities	Skills
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Value Streams (or Processes)	*Process:* Fulfill requests for integrations across service teams	• Help teams improve processes to enable services	• Process mapping • Facilitation • Continuous improvement

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Example: Process mapping and continuous improvement

A whole lot of discussion and whiteboarding … resulting in goals for continuous improvement.

Source: Rother, The Improvement Kata

Recap

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Caveats: These didn't happen neatly in order! And we built skills as we went along.

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How do business architects build competency?

> Practice!
  — Try it
  — Get feedback; reflect
  — Try again
> See what works for other architects
  — In your organization
  — Through Itana calls, working groups, resources, and events
  — Through publications and professional organizations
  — Online videos and training
> Academic programs/certifications

How can we help grow skills in the organization?

> Facilitating groups = teaching a method while doing

> Engage in projects to demonstrate methods

> Foster communities of practice

— Including related disciplines such as business analysis, project management, change management, etc.

> Sponsor training

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Questions? Discussion!

> What skills are key in your practice?

> How did you learn?

> …

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