ITMT-430 Systems Integration

WEEK 03 DEVOPS HANDBOOK CHAPTER 05-06

Objectives

- Understand how to determine a business value stream
- Understand how to identify the important business processes in the value stream
- Understand how to apply value stream processes to your project
- Understand current industry tooling for creating work visibility

outcomes

- At the conclusion of this lab and lecture you will be able to properly understand your class projects value stream and begin to identify the processes your project will entail.

Value Stream

Selecting your Value Stream

- Choosing and understanding your value stream involves multiple considerations:
- Transformation processes in DevOps are important
- If your company is going under you only get one shot
- Therefore choose carefully and protect that change process
- Let me tell you a story about Nordstrom

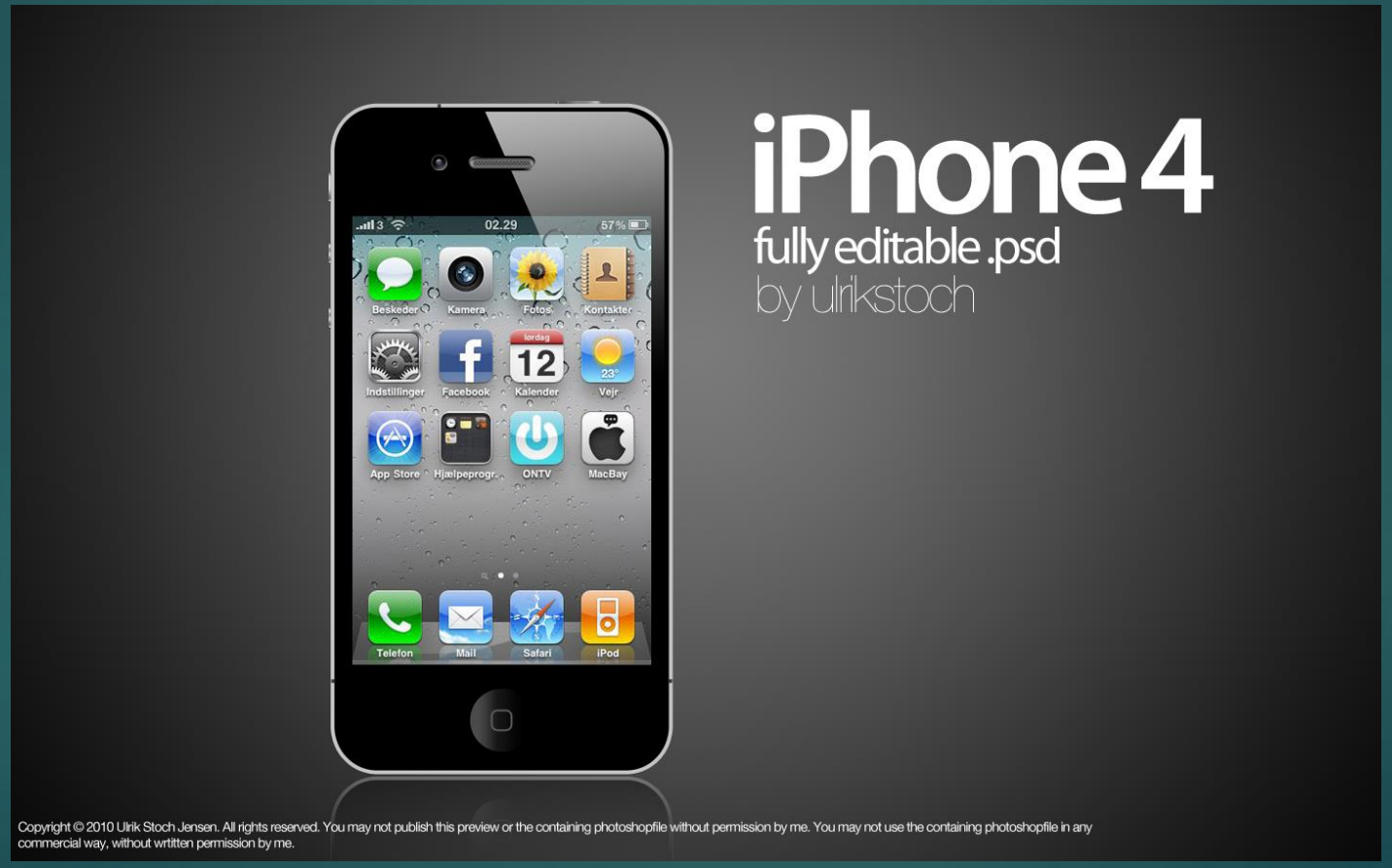
Courtney Kissler

VP of Ecommerce & Store Tech- Nordstrom

Nordstrom was founded in 1901

- Leading fashion retailer
- Focuses on radical customer service experience
- In 2015 revenue of $13.5 billion
- 2013 - She was Director of System Delivery & Selling Technology
- In 2011 Nordstrom realized the lack and need for online sales growth
- Why 2011?

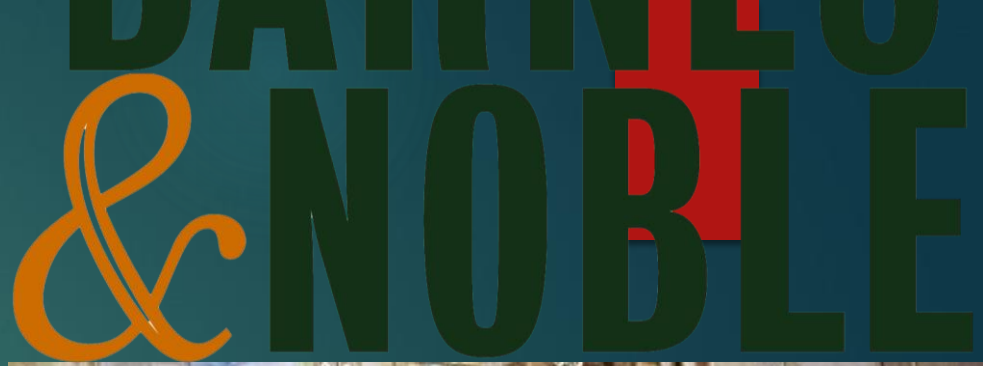
2011 – these things came around

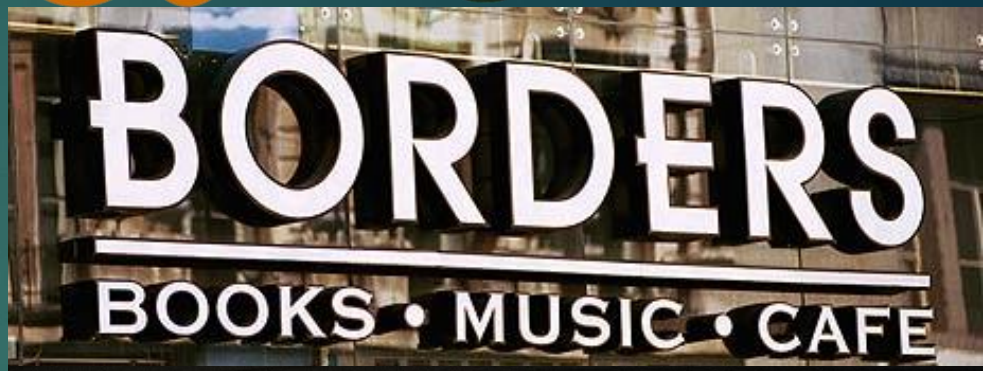


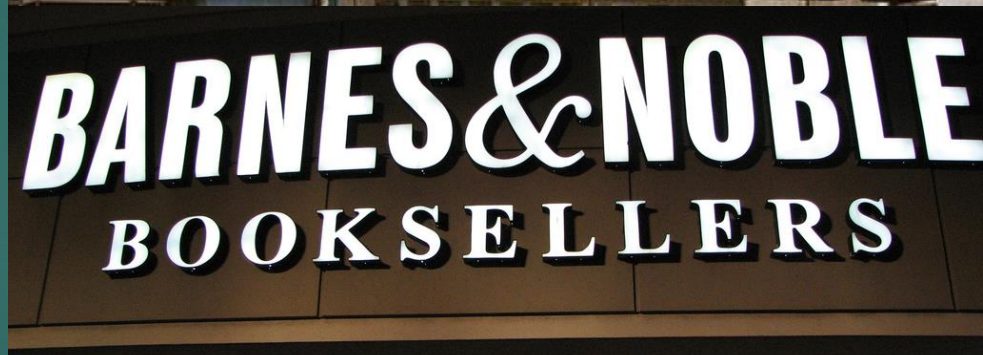
What else was happening?

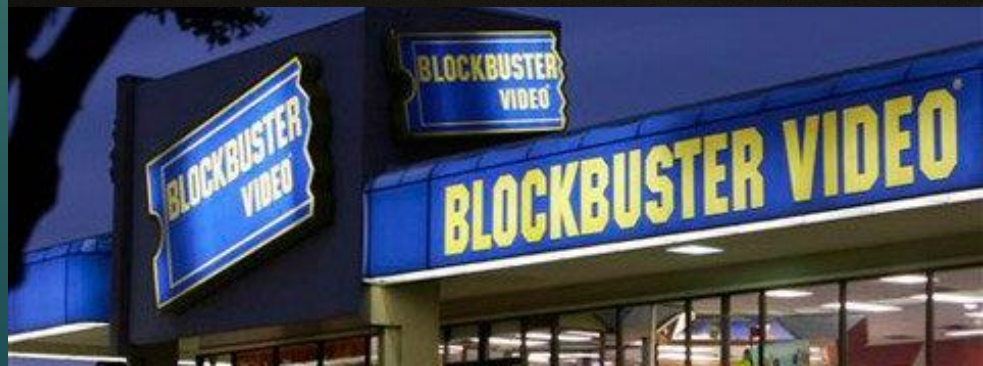
- Remember and of these companies?
- What happened to them in 2011 when they couldn't innovate online quick enough?
- Which companies replaced them or supplemented their industry lead?

Nordstrom could have been in this list…





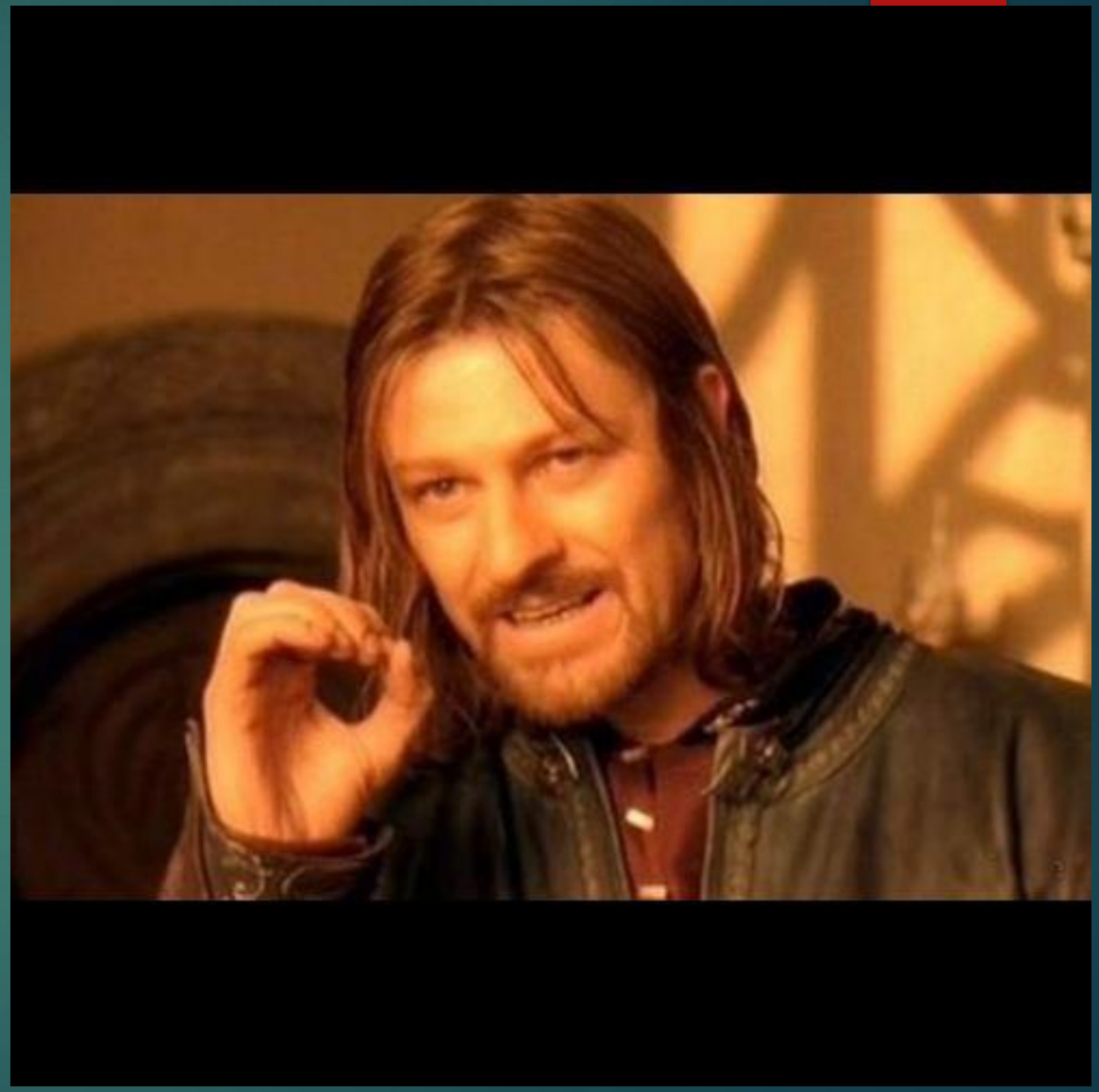




Responsibility

- Kissler was responsible for instore systems and online e-commerce
- She knew that she was under the gun to increase profits and reduce costs – quickly or else many people (and herself) would lose their jobs
- But this is easier said then done…

What would you do?



Background

- 2011 – Most of their IT and Operations was outsourced
- 5 year outsourcing contracts
- Huge annual planning batches. Waterfall anyone?
- 97% target hit rate on delivery dates – but this meant that their development plan was optimized for cost – NOT SPEED
- For a company that prided itself on customer service – their mobile apps were terrible and hard to use
- Very un-Nordstrom

IT Gets Worse

- Nordstrom could only deploy code twice a year
- Incapable of providing service to their customers via mobile app and web
- What would you do in this case?

Kissler Takes Control

- She “in-sourced” a majority of development and operations
- Created a single team that had a single purpose to continually develop and deploy the code
- Gone was the large batch (bi-annually)
- Removed the conflict of chasing bug fixes vs adding new software features
- Able to do this without adding additional personnel to the team
- Was able to reduce code deployment lead time by 60%
- Reduce bugs and other delays by 60% to 90%

Kissler for the Win

- Changed the Value Stream of Nordstrom
- Changed their capabilities
- Results – she was promoted to VP of E-Commerce and Store Technologies
- What has she done since?
- Embarked on a crusade to reduce all cycle times for every processes by 20%

Greenfield vs Brownfield

- When you enter a project you have new projects or greenfield
- And you have existing projects referred to brownfield
- DevOps and value streaming can be applied to brownfields as well as greenfields
- CSG Billing is an example
- $747 million a year in revenue with 3,500 people
- They provide paper billing services to a large number of video, cable, and ticketing services.
- Their brownfield that printed bills was run on a COBOL Mainframe with 20+ supporting applications

Value Stream

- They were able to rearchitect their system to allow developers to deploy to a **test production-like environment**
- Now deployments moved from 2 times a year to 4 times a year.
- Developer lead time for deployment went down from 2 weeks to 1 day
- All because they could see their value stream and identify bottlenecks and process starvation

Trap of BI-Modal IT

- Two types of systems
- Systems of Record and Systems of Engagement
- Systems of record deal with the HR records, customer databases, MRP, ERP and so forth
- Systems of engagement are the user facing systems (web and e-commerce systems)
- Can fall into a trap of Bi-Modal where you have one manual way of handling systems and a DevOps way for the other system
- DevOps has the ability to embed doing it fast and doing it right
- Can be done if you have the technical excellence
- Where do you get the technical excellence?

Adrian Cockcroft

"We can't copy Netflix because it has all those superstar engineers, we don't have the people"

Fortune 100 CTO after a Netflix presentation - 2013

"We hired them from you, and got out of their way…"

Adrian Cockcroft - in response

How To…

- Find the most sympathetic group to adopt it with you
- Find innovators and early adopters
- Build critical mass and a silent majority
- Last identify holdouts and engage them

Chapter 6 Understanding the work in our value stream

- When you understand the value stream you gain insights into your problems
- Back to Nordstrom and Courtney Kissler
- She had a problem with the Cosmetic Business Office Application
- Was written in COBOL running on a mainframe
- This process was painful, a source of the butt of jokes, and always a candidate for replacement
- But ripping out a entire system (of any kind) is generally the last resort.
- First step was to examine what the workflow of this system was in order to see if it was the Mainframe or it was something else?

CBO App

- Department managers used this application to:
- Register new sales people for product lines
- Track sales, commissions, enable vendor rebates, and so forth
- What was the problem?
- Department managers had to submit a document called “product line assignment request form”
- This form needed an employee number (not commonly used but form required it)
- Now the manager needed to leave the floor, go back or up to the office, look up the employee number on a PC and then come back to the floor…

Updated processes

- Kissler's team began to experiment about what would happen if they removed this required field
- What happened?
- Shaved 4 days off of the processing time. But the ID was still needed to be entered downstream by another person in another department – better but not best.
- Second phase was to implement an iPad app that was kept on the floor that had all information available inside of the application
- Now form processing time was down to mere seconds.
- Turns out the COBOL and mainframe system was just fine—it was the process.

Conclusion and Point of Action

- Your group needs to create a value stream
- List the processes of how you will take changes and map their flow through your system and into production
- Include this in your Github repository