

Making the Invisible Visible

Sustaining a Lean Transformation

Lean Transformation Summit 2015
March 4-5, 2014

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THE OHIO STATE UNIVERSITY
FISHER COLLEGE OF BUSINESS



Nationwide[®]
is on your side



We Are a Strong Mutual Company Built To Serve Our Members

15+
MILLION
POLICIES

\$168
BILLION
IN ASSETS

\$25 BILLION IN REVENUE FOR 2014



#1

PROVIDER OF
PUBLIC-SECTOR
RETIREMENT
PLANS

\$25
MILLION
CONTRIBUTED
TO NONPROFITS
AND COMMUNITIES

EARNED **2014 GALLUP GREAT
WORKPLACE AWARD** AS
ENGAGEMENT CLIMBED FOR
SIXTH STRAIGHT YEAR

OVER
\$500M

COMMITTED TO THE
COMMUNITIES WHERE WE
LIVE AND WORK SINCE
2000

FOUNDED IN 1926
BY MEMBERS OF
THE OHIO FARM
BUREAU

#1

WRITER OF
FARMOWNER
INSURANCE

#91
ON THE
FORTUNE 500

Nationwide sits in a position of strength with leadership in products across our diverse portfolio



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Top 10 in multiple
product lines across the portfolio

Financial Services

- Variable & Immediate Annuities
- Retirement Plans
- Individual Life
- Corporate Life

Commercial Lines

- Farm / Agribusiness
- Excess & Surplus
- Standard Commercial

Personal Lines

- Standard Auto and Home
- Pet Insurance

THE OHIO STATE UNIVERSITY



+500,000 LIVING ALUMNI



7^{of} COLLEGES
focus on health sciences,
the most of any university
in the nation

14

699,050
DEGREES
SINCE 1878



OHIO STATE
GRADUATES RANKED **12th**
AS MOST SOUGHT AFTER
— WALL STREET JOURNAL

11 COLLEGES *contributing to* **CANCER RESEARCH**



+1.4 MILLION HOURS
OF STUDENT COMMUNITY SERVICE LOCALLY AND GLOBALLY

12TH STRONGEST BRAND EQUITY
IN THE NATION AND **3RD** AMONG PUBLIC UNIVERSITIES
— GLOBAL BRAND MONITOR



THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER NAMED ONE OF
“AMERICA’S BEST HOSPITALS” FOR 22 CONSECUTIVE YEARS

— U.S. NEWS & WORLD REPORT’S 2014 “AMERICA’S BEST HOSPITALS”

■ 3RD ■
AMONG ALL UNIVERSITIES
FOR INDUSTRY-SPONSORED RESEARCH
— NATIONAL SCIENCE FOUNDATION (2013)



■ 83% ■
OF BAND MEMBERS MAJOR
IN AN AREA OTHER THAN MUSIC—FROM ENGLISH
TO ENGINEERING TO MATHEMATICS TO NURSING



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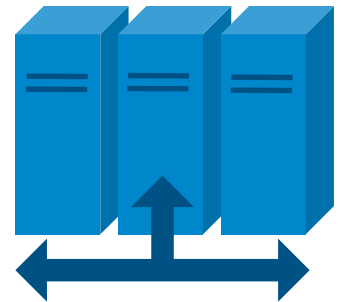
Technology at Nationwide

\$1+

**BILLION
ANNUAL IT
SPEND**



10,000+
SERVERS



35,000+
**PERSONAL
COMPUTERS**

8,500+
**IT WORKFORCE
(PREDOMINANTLY
IN-HOUSE)**

~8 PB
IN STORAGE

Let's Take a Look at Our Lean Journey (Video)



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Our Belief System

The main points...

✓ We are a **PEOPLE** organization

↳ the key to our success

that happens to develop software

NOT JUST

✓ A Lean software development organization leveraging Agile Practices

✓ Operational Excellence is our DNA

↳ which means... A culture of quality, predictable delivery, and continuous improvement.

✓ Competitive **advantage** through process

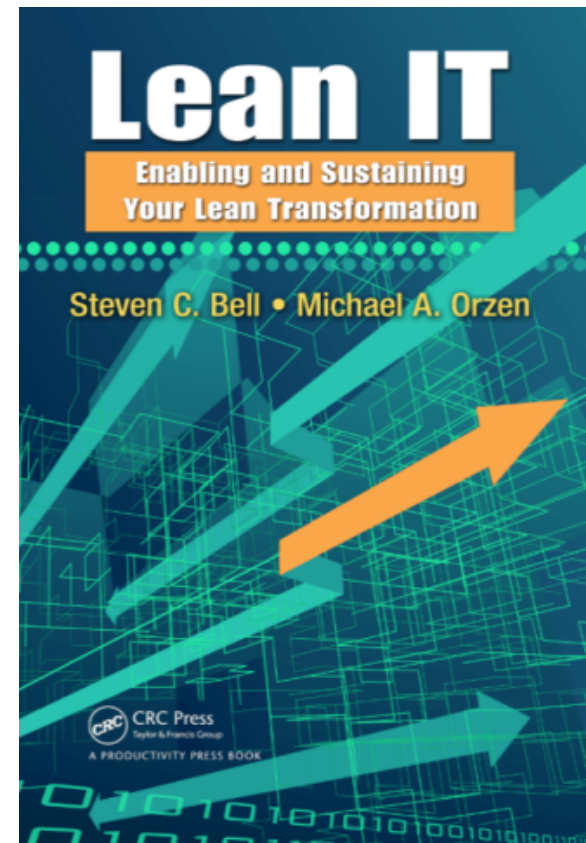
other main points...



What is Lean IT?

Engaging People, Improving Process, Leveraging Technology

- ✓ **Integrate** and **synchronize** IT with the business
- ✓ Provide **quality** information and applications
- ✓ Enabling the flow of **value** to the customer
- ✓ Using systems thinking and **awesome** problem solving

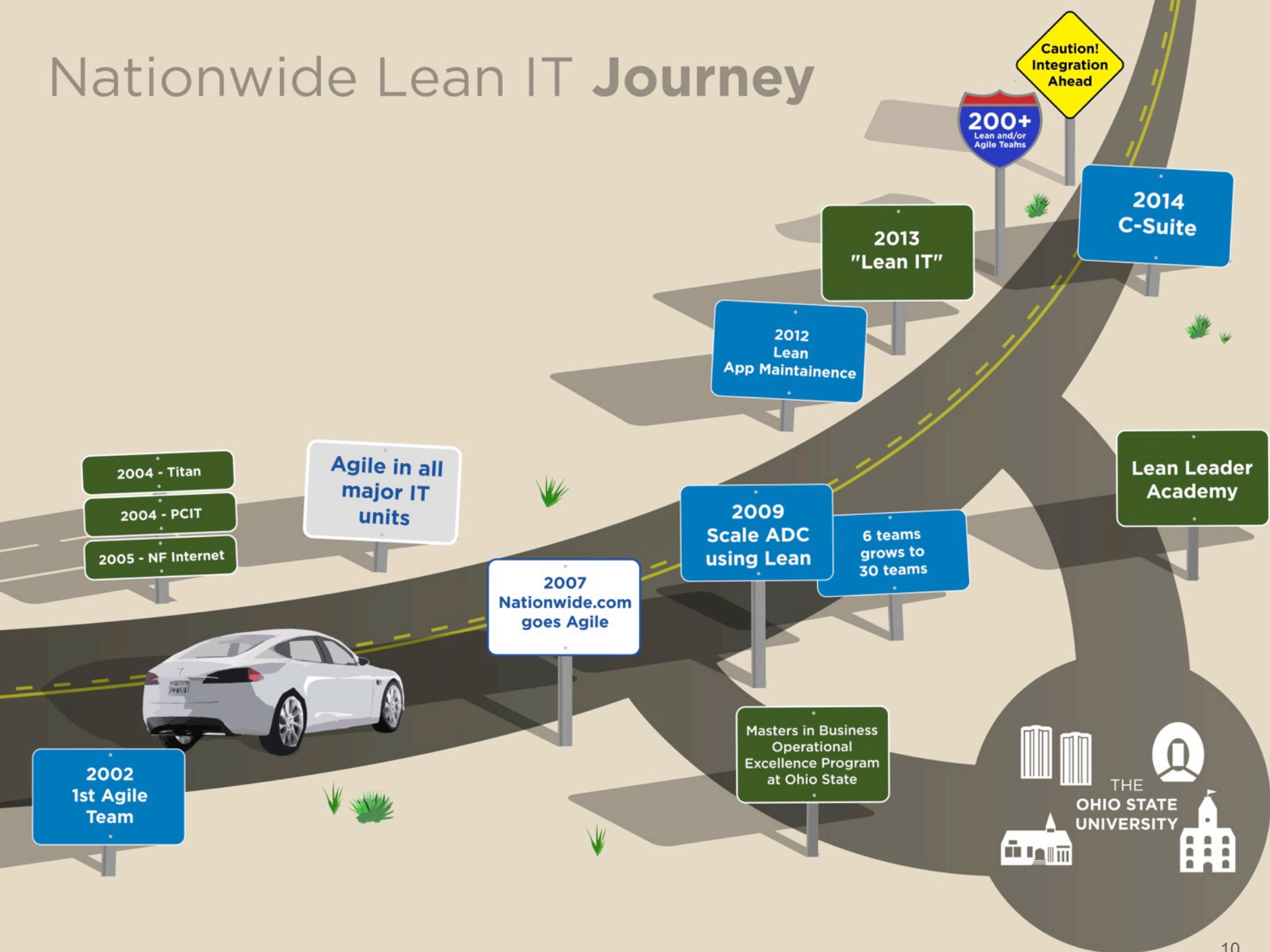




What **Lean IT** Looks Like to Us

Traditional Systems	Lean Systems
Authority	Responsibility
Results Focused	Process Focused
Expert “Staff” Functions	Expert Workers
Jump to Solutions	Root Cause Problem Solving
Corner Office Management	Go See Management
Report Analysis (delayed)	Visual Management (real-time)

Nationwide Lean IT Journey



Multi-faceted Nationwide-OSU Partnership



Nationwide Lean Leader Academy

Combines classroom and Gemba coaching



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Multi-faceted Nationwide-OSU Partnership



Center for Operational Excellence

40 member consortium focused on lean management



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Multi-faceted Nationwide-OSU Partnership



Information Technology Leadership Network

Forum for sharing lean practice among IT leaders
from a consortium of organizations



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MBOE at a Glance

1 year program December to December

8 four-day on-campus sessions

Supplemented by **distance learning**

Students:

- mid-career
- working full time
- come from all over

Year long project with coach



Project and Coaching

Project results from a problem identified jointly by student and student's boss

MBOE assigns coach

Student and workplace team begins **A3 development** with help of coach

Student, boss, coach and faculty participate in **90 day review cycles**



Tom's A3, Circa 2010

Enable Application Development Center to deliver high-quality, cost effective strategic business applications at a predictable pace.

Owner: Tom Paider

Sponsor: Srin Koushik / Tim Lyons

Background

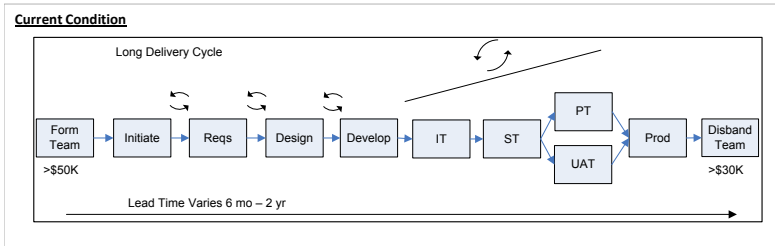
Nationwide is one of the largest insurance and financial services companies in the world, with more than \$135 billion in statutory assets. Nationwide offers products in retirement savings and income, personal protection, and commercial and specialty protection. The company is currently undergoing several transformation initiatives that are increasing demand on IT while at the same time pressing for lower overall costs. The combination of increasing demand and current IT expense pressure is resulting in growing delivery challenges. The business is expecting us to deliver faster with higher quality at lower cost.

The Application Development Center (ADC) was envisioned as a response to these pressures by developing world-class application development capabilities. The vision of the Application Development Center is to create a sustainable model for high-quality, cost-effective software development at a predictable pace that benefits Nationwide and associates. The ADC will:

- Create a competitive advantage through the effective use of technology and a superior model
- Deliver business value faster and on-time every time with near zero defects
- Develop exceptional people and teams focusing on associate-based talent with contract flex staffing
- Enable continuous improvement and employee empowerment through standardized work

Goals

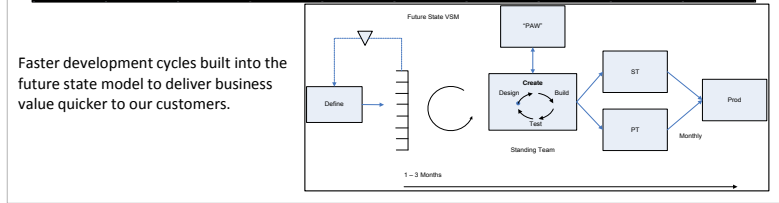
Quality	Near Zero Defects Released into Production - No High or Medium Defects
Delivery	100% On-Time Delivery
Cost	20% Decrease in Delivery Cost
Capability	Learning Organization Dedicated to Continuous Improvement



IT projects are highly entrepreneurial which has led to a lack of reuse and reinvention. Lack of consistently applied development standards has inhibited organizational learning. Former siloed business and IT processes have left a legacy of siloed metrics and no metrics metamodel. Perception of quality, cost, and delivery problems by the business. Nationwide IT overall \$200M more expensive annually than peers. Weakening dollar - outsourcing costs up 10% last 18 months.

Countermeasures

Countermeasure	Description	Benefit
ADC Way	Create the ADC Way, a lean implementation of Nationwide's development methodology and a new lean management system.	Delivery, Quality, Cost
Create a Learning Organization	Create a system that enables continuous improvement by harnessing the collective knowledge of our associates.	Capability
Show the results	Create a suite of metrics, easily accessible, that enable all layers of the organization to see how the ADC teams are performing allowing for immediate feedback.	Delivery
Build Talent	Create an optimized staffing model based on sustainable demand that creates an engaged workforce and retains knowledge within the company.	Cost, Capability



Analysis

No standard work - The federated model of IT development in Nationwide's recent past led to disparate and unevenly applied standards and a lack of reuse across companies, business units, and teams. The model led to an entrepreneurial culture where many teams created the same or similar "innovations", leading to increased cost and delivery time.

No method for enabling continuous improvement - Improvements are isolated and one-offs instead of being incorporated into the larger enterprise, successful methods and techniques are lost with project closure.

No readily available metrics - project and team performance metrics are often buried in disparate internal systems, spreadsheets, and paper documents, preventing the company from determining where improvements need to be made and what is working well at any moment in time.

Captive to external talent - contractor percentage in key roles is too high, leading to increased cost and exposure to loss of specialized knowledge and skill.

ID	Task Name	Start	Finish	Associated Countermeasure	Q1 10				Q2 10				Q3 10				Q4 10			
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	Simple foundational constructs for the ADC Way	2/1/2010	3/30/2010	ADC Way	[Progress Bar]															
2	Define the continuous improvement model	1/4/2010	2/26/2010	Build Talent	[Progress Bar]															
3	Implement Production System Components	2/1/2010	4/1/2010	ADC Way	[Progress Bar]															
4	Define Visual Management System	1/19/2010	3/15/2010	Show the Results	[Progress Bar]															
5	Create tracking system for staffing model progress	1/4/2010	2/26/2010	ADC Way	[Progress Bar]															
6	Visual Management System Pilot	4/5/2010	5/5/2010	Show the Results	[Progress Bar]															
7	Define productivity stats and relation to team attributes	4/1/2010	5/19/2010	Show the Results	[Progress Bar]															
8	Create one page view of learning organization	6/15/2010	6/29/2010	Learning Org	[Progress Bar]															
9	Implement Lean Management System (waves)	4/1/2010	10/1/2010	ADC Way	[Progress Bar]															
10	Create ADC HBR Article	5/17/2010	11/30/2010	All	[Progress Bar]															

Follow Up

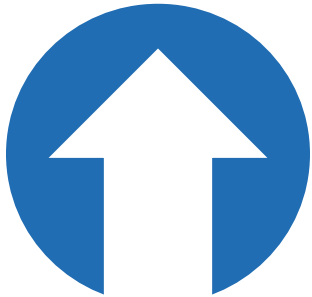
Project Reviews - weekly project reviews with sponsor
 Operations Reviews - review ADC strategy progress monthly
 Retrospectives - biweekly team and project reviews with customers



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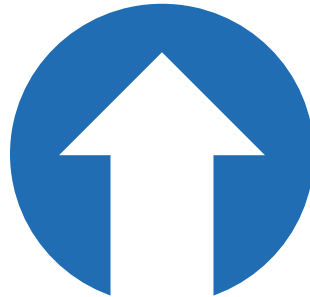
Real Results

Engagement



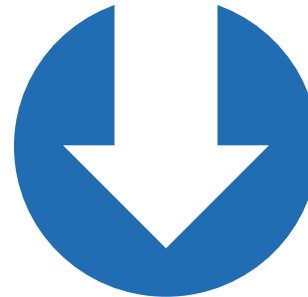
Associate engagement is increasing for teams that have deployed Lean and IT has had **7 years** in a row of **increasing engagement...**

Productivity



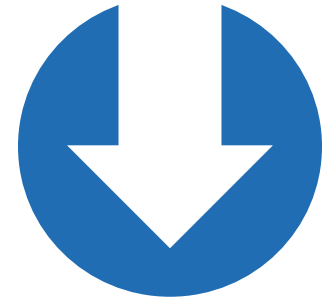
87% of production application releases are **better than industry averages...**

Defects



High and critical defects counts are on a **5-year positive trend** while **96% of releases have ZERO defects...**

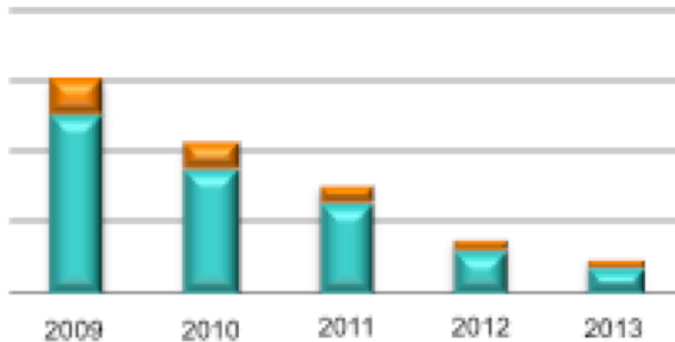
Cost



Costs for application maintenance have been **reduced by 20%...**

Real Results

Critical and High Defects



Nationwide used lean to massively scale agile software development beginning in 2009. Quality results have been staggering in the years since.

At the same time our **lean journey** has made the way we maintain applications more efficient and effective leading to **massive annual savings.**

\$40M
ANNUAL SAVINGS

Information Technology poses many challenges and opportunities for lean



```
public class TriangleTester {
    static private double delta = 0.0001;    // default allowable delta
    . . .
    static private boolean isRightTriangle(double side1, double side2,
        double side3) {
        double s1Squared = side1 * side1;
        double s2Squared = side2 * side2;
        double s3Squared = side3 * side3;

        double x = java.lang.Math.abs(s1Squared + s2Squared - s3Squared);
        if (x <= delta) return true;
        x = java.lang.Math.abs(s1Squared + s3Squared - s2Squared);
        if (x <= delta) return true;
        x = java.lang.Math.abs(s2Squared + s3Squared - s1Squared);
        return (x <= delta);
    }
}
```



The screenshot shows the Nationwide Insurance website. At the top, there is a navigation bar with links for 'For Businesses', 'For Financial Advisors', and 'En Español'. A search bar and '1-877 On Your Side' are also present. The main content area features a large banner with the text 'Why Nationwide for Financial Services?' and a sub-headline 'In the Nation, we've got a history of putting customers first.' Below this is a 'Log In or Sign Up' button. To the right of the banner is a 'Get an Auto Insurance Quote' form with a 'Get a Quote' button. Below the banner is a navigation menu with links for 'Insurance', 'Retirement & Investing', 'Banking', and 'Claims Center'. At the bottom, there is a 'MEMBER SERVICES' section with links for 'Pay Your Bill', 'Manage Your Accounts', and 'Member Resources'. There are also three promotional tiles at the bottom: 'Watch Our Latest Ad', 'Long-term Care Concerns?', and 'Super Bowl Campaign Sneak Peek'.



Let's take a walk at Nationwide's headquarters in Columbus...



Tier I Lean Management System (Video)



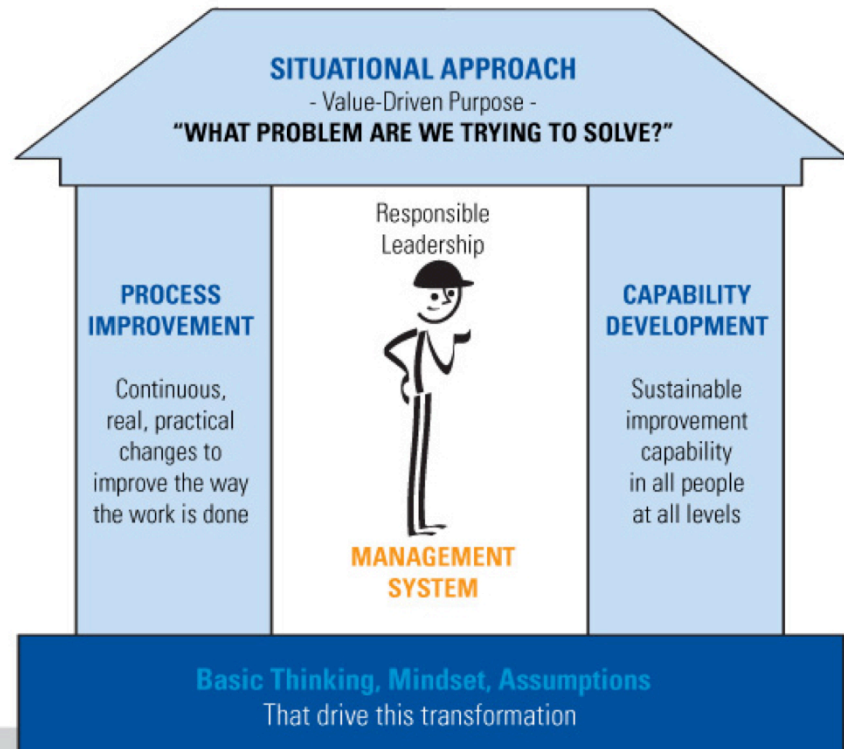
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Frontline Management System (Tier I)

What did you see in Tier I system in terms of the Lean Transformation Model?

Tools?
Principles?
Systems?
Behaviors?

The Lean Transformation Model



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Tier II Lean Management System (Video)



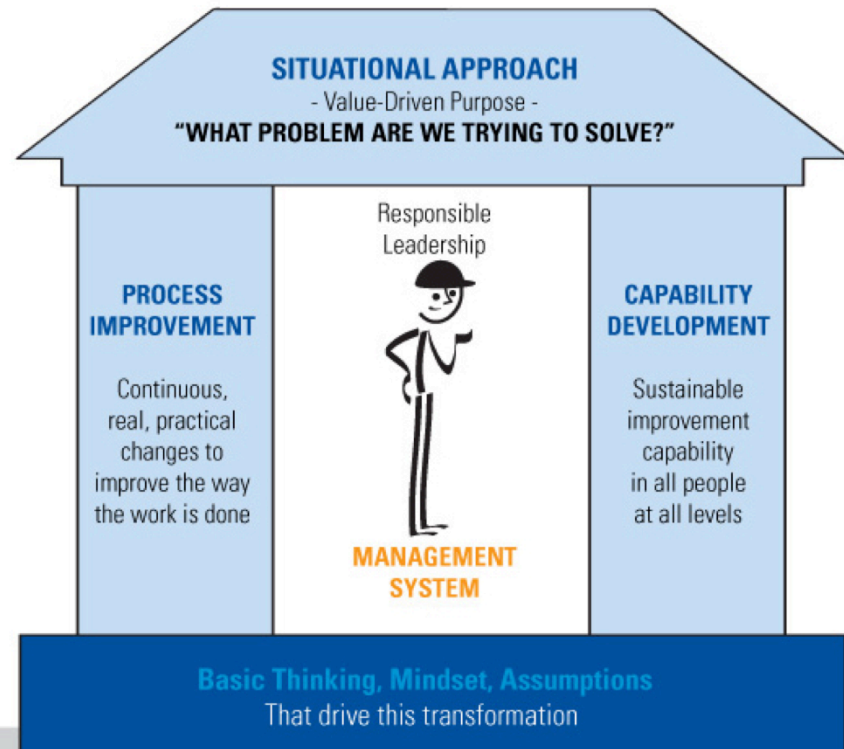
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Director Management System (Tier II)

What common elements did you see between the **Tier I and II management systems?**

What unique elements did you see at **Tier II?**

The Lean Transformation Model



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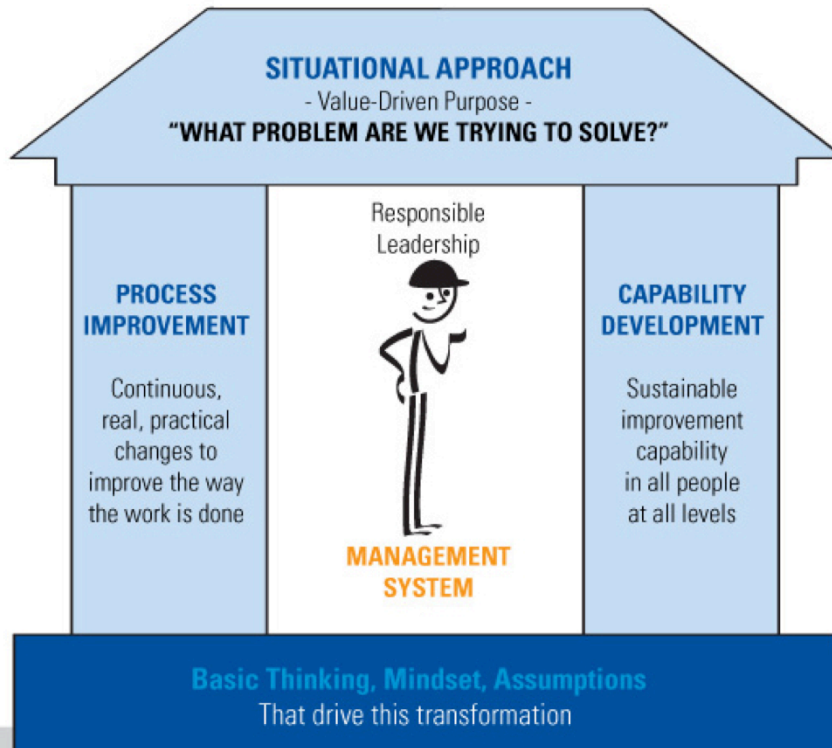
Tier III Lean Management System (Video)



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VP Management System (Tier III)

The Lean Transformation Model



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What is the role of a **lean executive**?

Why is it necessary to involve your executives in the **lean transformation**?

C-Suite Lean

The primary purpose of our lean management system is to **create a connection** between the executive ranks and the value-adding work of the front line employees



Making
Connections

Tier IV Lean Management System (Video)



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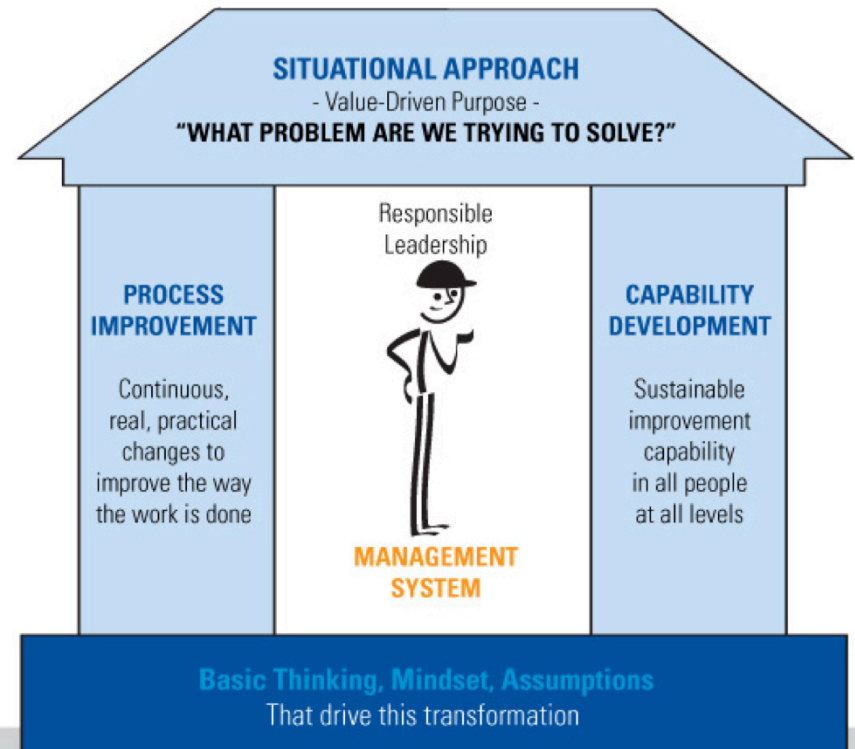
CTO Management System (Tier IV)

What are the elements of the C-Suite lean system?

What challenges are unique to deploying a lean management system to your CxO?

What if your CxO isn't interested in lean?

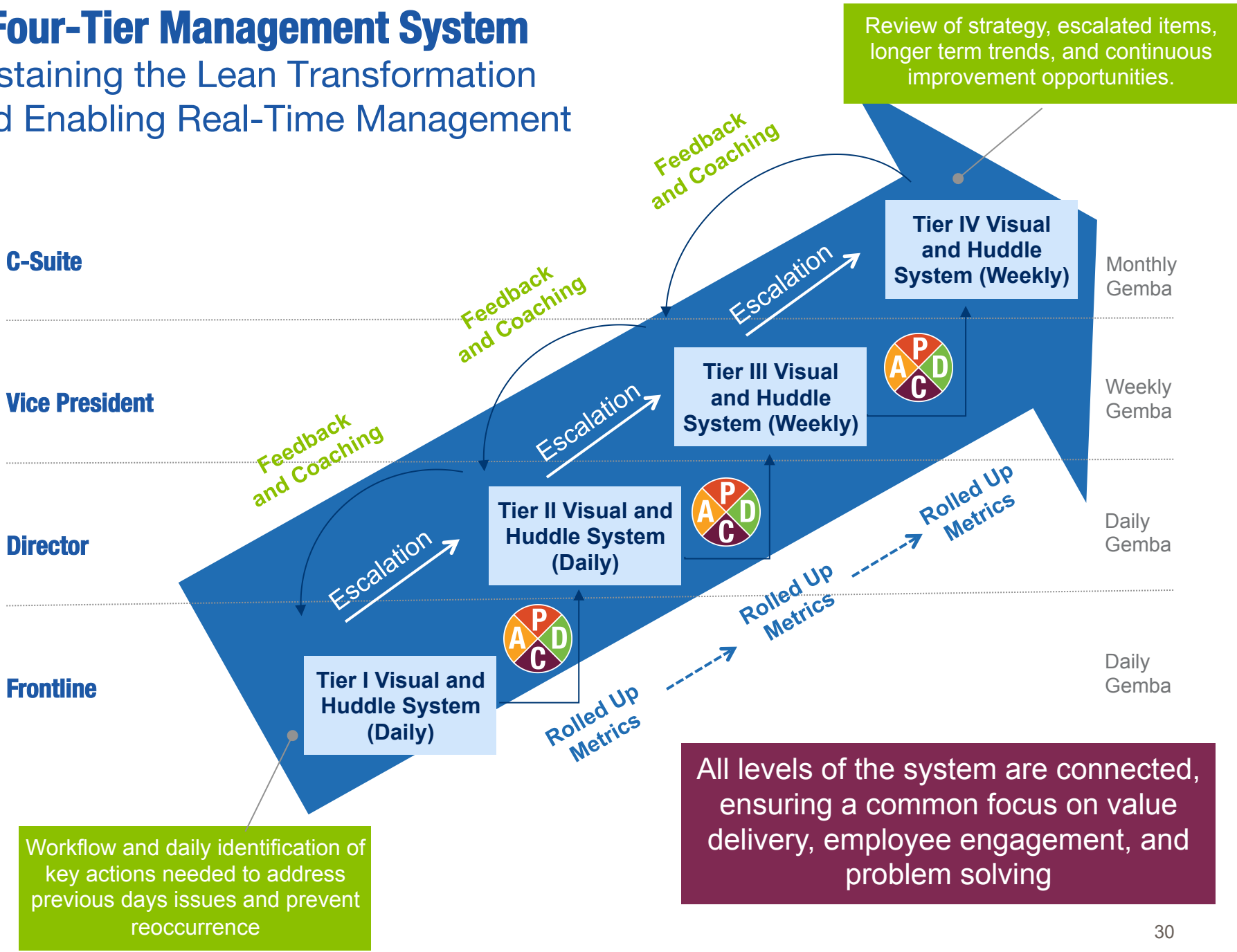
The Lean Transformation Model



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A Four-Tier Management System

Sustaining the Lean Transformation and Enabling Real-Time Management



What's Next?

Continued deployments
at the **C-level**

Ensuring **all** components
are connected

Continue **learning journey**
to create lean leaders

Further integration with
business lean initiatives

Continued Lean IT
deployments

THANK YOU!

TOM PAIDER | Associate Vice President, Build Capability Leader
 @paidert  thomaspaider

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