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# Operational Risk Management + Six Sigma = Success

Presenter: Roberta Pek  
Director of Operational Risk  
Freddie Mac

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# Learning Outcomes

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Provide practical ideas & tools your organization can use to:

- Create a workforce focused on identifying & managing operational risk
- Teach employees to operate as risk managers
- Foster a culture of accountability & transparency

Lean/Six Sigma techniques support these efforts.



# Freddie Mac: Making Home Possible

- **Provide liquidity, stability & affordability to the housing market**
- **Support the nation's housing recovery**
  - Provide access to affordable homeownership and rental housing
  - Help borrowers avoid foreclosure and stabilize communities
  - Freddie Mac provided Foreclosure Alternatives to nearly 525,000 Families since the start of 2009
- **Foster responsible lending & servicing practices, while minimizing exposure to risk**



# Operational Risk Awareness: Make It Real

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## Risk is

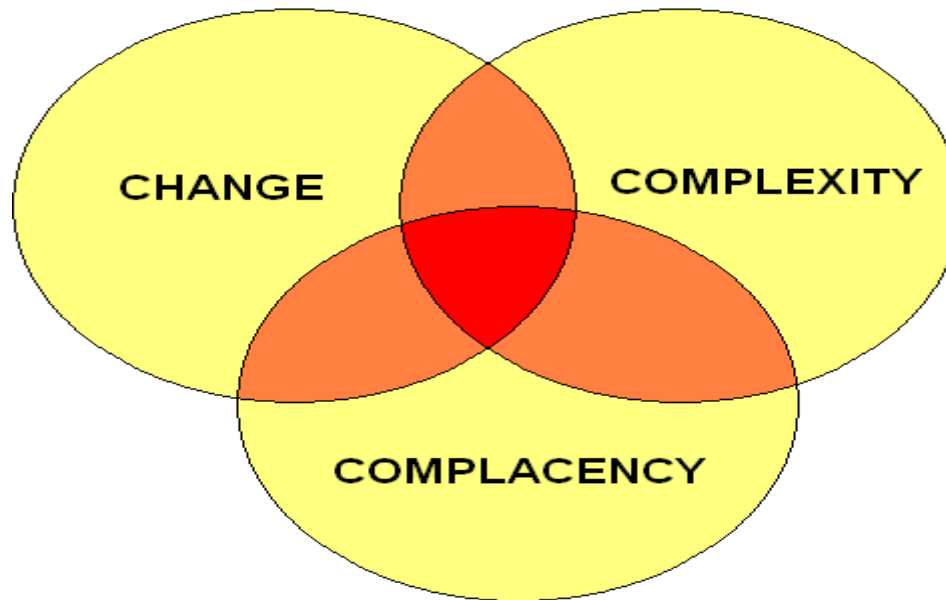
- “squishy”
- an abstract concept for many employees but they act the first lines of defense to identify, assess & manage it.
- the uncertainty around some future event

## **Operational Risk focuses on issues related people, process, technology and external events**

- What can go wrong?
- How bad could it be if it goes wrong?
- How likely is it to go wrong?
- What should I do about it?



# The 3 Cs: Drivers of Operational Risk



Each driver indicates a potential operational risk.  
When layered, risk rises rapidly.

**What processes in your organization  
coalesce in the red zone?**

# Linking Operational Risk & Lean Six Sigma

Operational Risk	Lean /Six Sigma	Tools
What can go wrong?	Define	<ul style="list-style-type: none"><li>▪ Stakeholder Analysis</li><li>▪ Voice of the Customer</li><li>▪ Affinity Diagrams</li><li>▪ SIPOC</li><li>▪ Risk &amp; Control Self Assessment</li></ul>
How bad can it be?	Measure	<ul style="list-style-type: none"><li>▪ Data sampling &amp; collection</li><li>▪ Failure Modes &amp; Effects Analysis</li></ul>
How likely is it to go wrong?	Analyze	<ul style="list-style-type: none"><li>▪ Process Mapping</li><li>▪ Loss event data analysis</li><li>▪ Root Cause Analysis (5 Whys)</li><li>▪ Hypothesis Testing</li></ul>
What should we do about it?	Improve/Control	<ul style="list-style-type: none"><li>▪ Pilot a process</li><li>▪ Control Charts</li><li>▪ Standardize for Repeatability</li></ul>

# Tools to Help Identify Operational Risk: Risk and Control Self Assessments

## “What can go wrong?”

<h3>People</h3> <ul style="list-style-type: none"><li>•Employee Fraud and Theft</li><li>• Workplace Safety</li><li>•Compensation</li><li>•Staffing Expertise and Adequacy</li></ul>	<h3>Process</h3> <ul style="list-style-type: none"><li>•Data Quality</li><li>•Process Execution</li><li>•Process Management</li><li>•Sourcing and Counterparties</li><li>•Vendors and Suppliers</li></ul>
<h3>Technology</h3> <ul style="list-style-type: none"><li>•Planning and Organization</li><li>•Acquisition and Implementation</li><li>•Delivery and Support</li><li>•Monitoring and Evaluation</li></ul>	<h3>External Events</h3> <ul style="list-style-type: none"><li>•Business Continuity</li><li>•Damage to Physical Assets</li><li>•External Fraud and Theft</li><li>•Information Privacy</li></ul>



# The Heat Map: A Tool to Quantify “Squishy”

<b>SEVERITY</b>	Largest Plausible Loss	>\$\$\$	<b>HIGH</b>	<b>LH</b>	<b>MH</b>	<b>HH</b>
		\$\$ to \$\$\$	<b>MODERATE</b>	<b>LM</b>	<b>MM</b>	<b>HM</b>
		<\$	<b>LOW</b>	<b>LL</b>	<b>ML</b>	<b>HL</b>
				<b>LOW</b>	<b>MODERATE</b>	<b>HIGH</b>
				<b>An event can be reasonably expected</b>		
				Between 10 Years and 100 Years	Between 1 Year to 10 Years	Within 1 Year
				1% to 10% chance of occurrence	10% to 50% chance of occurrence	> 50% chance of occurrence
				<b>LIKELIHOOD</b>		

“How bad can it be?”

“How likely it is to go wrong?”





# Controls: “What should I do about it?”

**Controls are activities that help to reduce the likelihood of a negative (bad) outcome from some future event.**

- Risk and controls are linked –you need to look at both sides of the issue.

Controls apply to the:

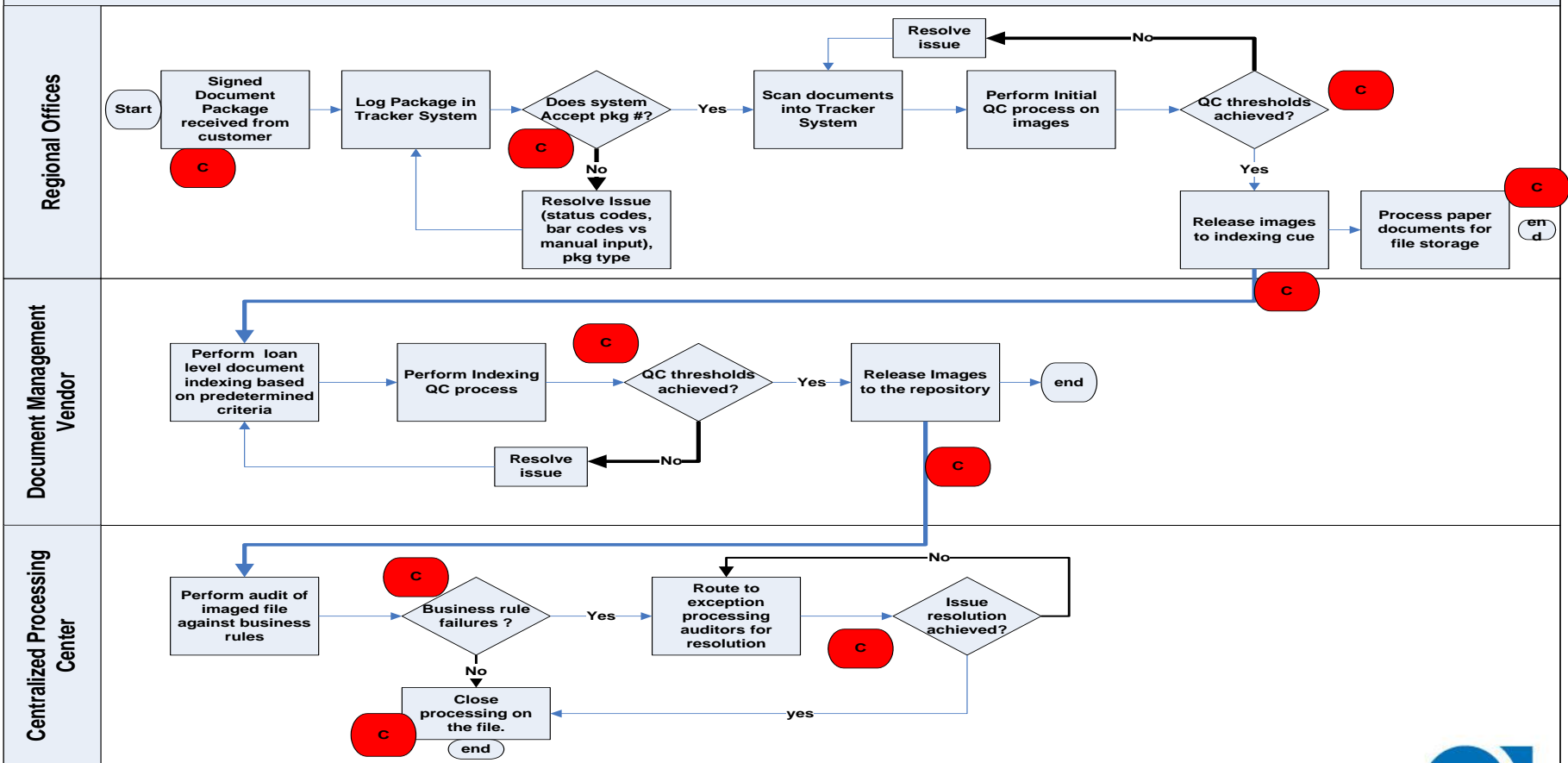
- Appropriate use, handling and physical safeguarding of corporate assets and records such as laptops, computers, file room data
- Processing of transactions from initiation to recording in the general ledger.
- Use of standard operating procedures to reduce variability (also known as noise) allowing for a repeatable process.

Mapping the end to end processes provides a roadmap to risk and control self assessment.



# Process Mapping: Draw the Picture

## Document Management: Imaging with Rules Based Auditing



The Sticky Note Method: Place key stakeholders in a room with sticky notes & craft paper. Walk the widget through the process



# Putting It Together at the Business Line

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## Risk

“What can go wrong?” “How bad can it be?” “How likely is it to go wrong?”

Transactions are processed incorrectly by less seasoned staff resulting in rework.

Drive

## Control Objective

Process the transaction correctly the first time every time.

Satisfied by

## Control Activities

Standard operating procedures, job aids, partnering new hires with more experienced staff, feedback on error rates, & targeted retraining.

# Employee Accountability: Becoming Risk-Aware Starts on Day One

- New Hire Orientation drives the message that as a member for the Freddie Mac team, you are a manager of risk, regardless of the job title.
- Every employee, from individual contributors to executive management, has a risk accountability objective which they are measured against in their performance review.
  - Conducting business in a risk-aware manner
  - Identifying, assessing, and managing the risks within the context of the specific job position
  - Reviewing existing controls to identify any gaps, ineffective, poorly designed or unnecessary controls
  - Escalating an issue quickly to management



# Employee Accountability: Becoming Risk-Aware Starts on Day One

For **people managers**, the risk management objective covers key areas:

- Setting the tone for risk accountability in the workgroup
- Building risk management into operating plans
- Reviewing opportunities to simplify controls
- Conducting business in a risk aware manner
- Encouraging employees to escalate issues quickly
- Ensuring all employees effectively identify, assess and manage risk



# Fostering Accountability & Transparency: Each Level Has a Role

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# Becoming Risk Aware.....

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- Starts on day one for each employee
- The tone is set at the top levels of the organization with clear roles and responsibilities
- Drive the right behaviors and accountability via performance goals around risk mitigation
- Make it real for the employee.....everyone has the responsibility to identify, assess and manage risk
- Provide tools empower the employee. They are the front lines of risk mitigation





We make home possible<sup>SM</sup>

