

# Where Will Quality Be in 5 Years?



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SPECULATIVE THOUGHTS FROM GRACE  
DUFFY, FASQ, CMQ/OE, LSSMBB, CQA, CQIA, SSGB...

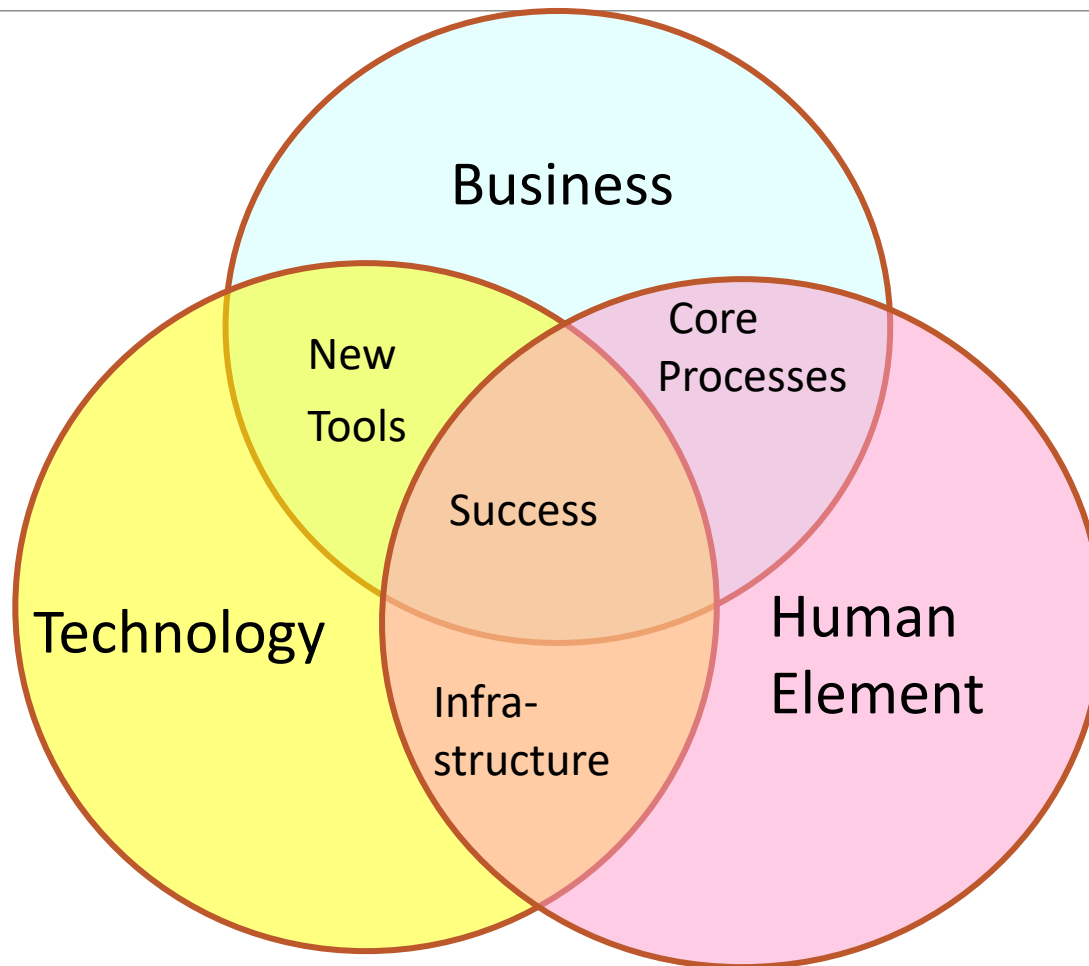
# We integrate quality systems with Technology 4.0 tools

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# Quality must be systematically aligned to the organization

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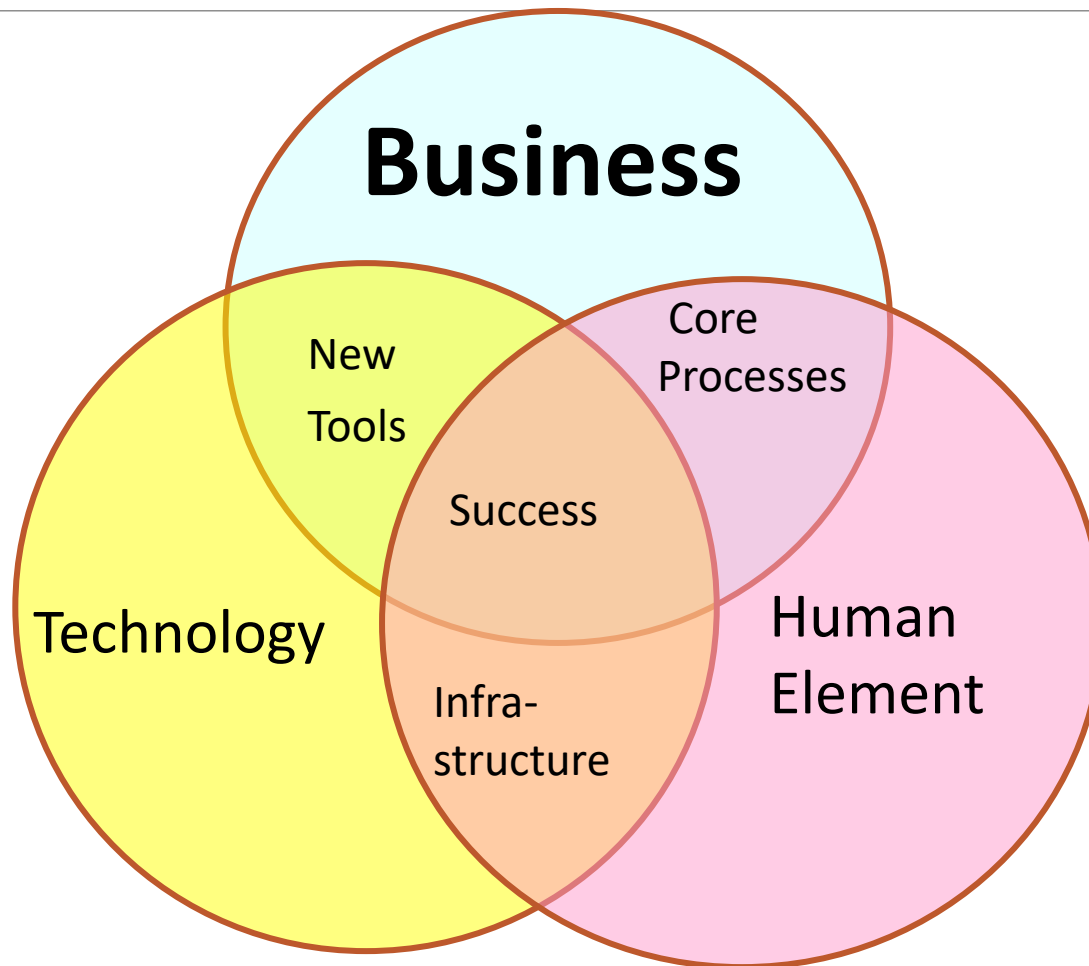
# 5 Bits Of Wisdom For Any Department

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1. Scale services while prioritizing user experience
2. Achieve sustainability goals through collaboration
3. Empower the workforce of the future
4. Modernize cybersecurity
5. Develop ethical data and technology practices

Quality must be systematically aligned to the organization

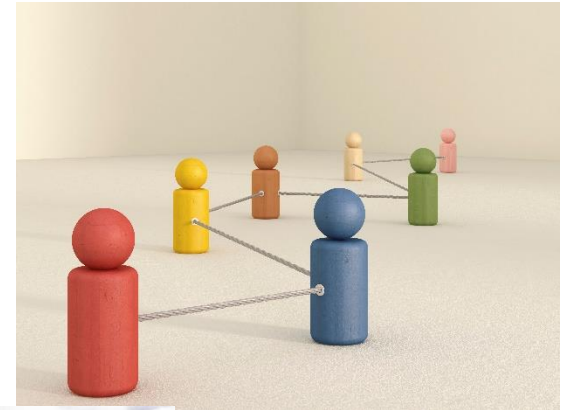
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# Business: Infrastructure



Performance  
of whole  
organization



Quality and auditing  
becomes more network-  
based



Quality  
function as a  
coach and  
guide

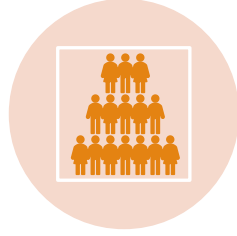
Jane Keathley: ASQ Board  
of Directors 2022 - 2024

# What does this mean for us?

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We must be empowered to communicate openly and often with all areas of the organization.



The quality function must be respected and trusted beyond operations. Seen as a resource for the company.



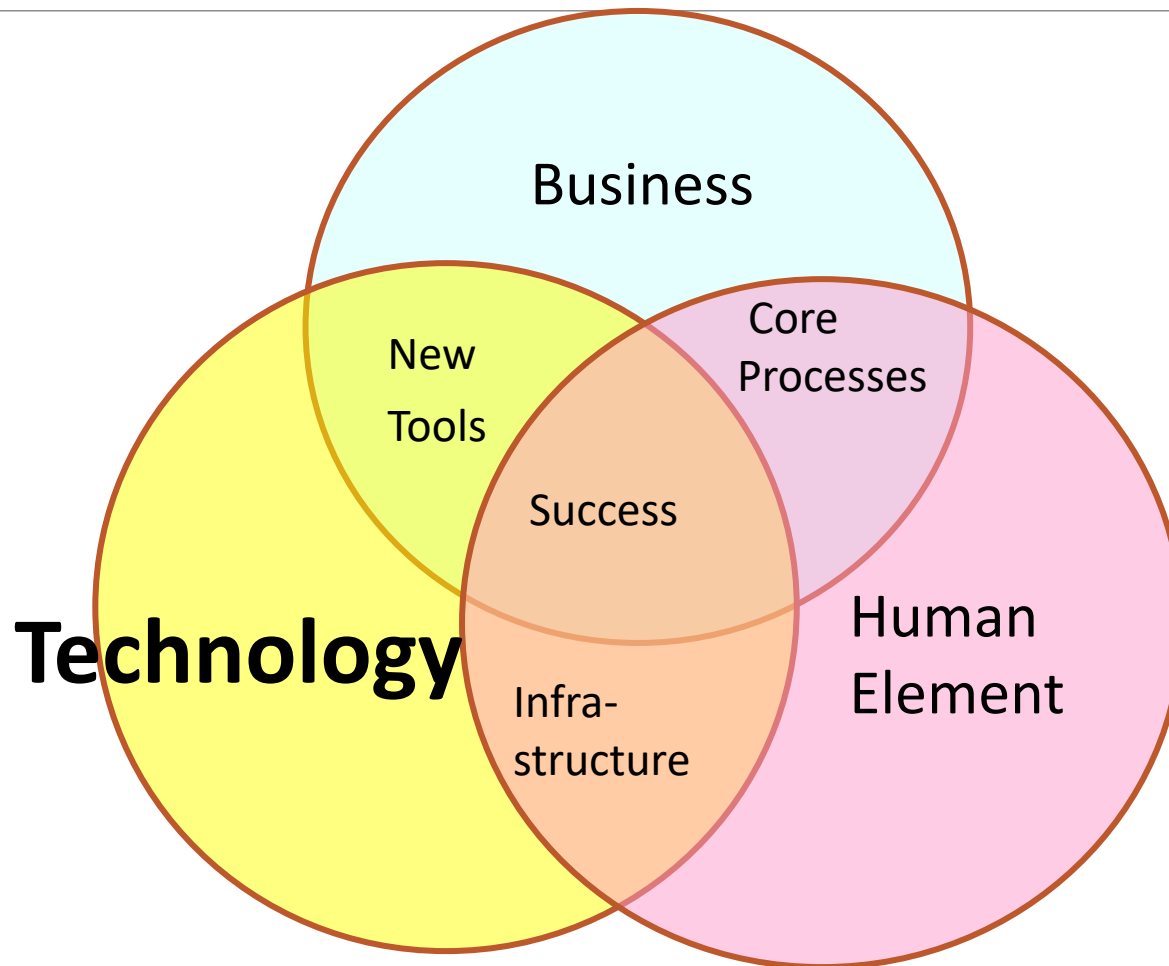
Quality personnel need digital skills to work with new business process management and integrated data gathering/analysis/reporting systems.



Relationship building and long-term partnerships with key functions across the corporate value chain.

# Quality must be systematically aligned to the organization

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# Technology: New tools

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- ❖ By 2025, the WEF estimates that a net 12 million new job roles will be created to accommodate the new division of labor between humans and machines.
- ❖ These “jobs of tomorrow” will likely require new skill sets, which we must begin developing today.
- ❖ Even for workers who remain in their roles, the WEF expects that 40% of core skills will change - and 50% of all employees will need reskilling.“

# Quality Function Opportunities Automation and Cloud Adoption

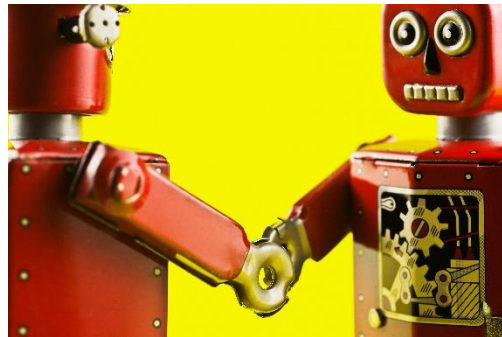
The resilient digital supply chain:  
How intelligent workflows balance  
efficiency and sustainability, IBM  
Institute for Business Value |  
Research Insights April 2022



Leverage data infused technologies



Redesign for sustainability



3 – 5 years: automated workflows

# Mega data and AI present challenges

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- 1) Seize opportunities: reinvent processes by leveraging the newest data-infused technologies. According to a 2022 IBM study on supply chain management, 69% of corporations surveyed are planning to accelerate cloud adoption to enhance real-time data access.
- 2) Optimize processes: 72% of supply chain executives expect most of their processes and workflows to be *automated* in the next 3 to 5 years.
- 3) Embrace sustainability 66% of supply chain leaders say sustainability is a core business value, and they are embedding it into redesigned workflows to shape more circular economies.

“OECD AI Principles overview.” OECD.AI. Accessed March 11, 2022.  
<https://oecd.ai/en/ai-principles> (The Organization for Economic Co-operation and Development)

# What does this mean for us?

Quality 4.0—the application of Industry 4.0’s digital technologies to quality management

Strengthen oversight and governance mechanisms

- Measurement, monitoring, subtle yet structured process adherence

Use interdisciplinary groups to conduct risk assessments

Require responsible engineering practices

Test systems that promote privacy and fairness, possibly including third-party testing for high-risk systems

Create stronger limitations on how data can be used

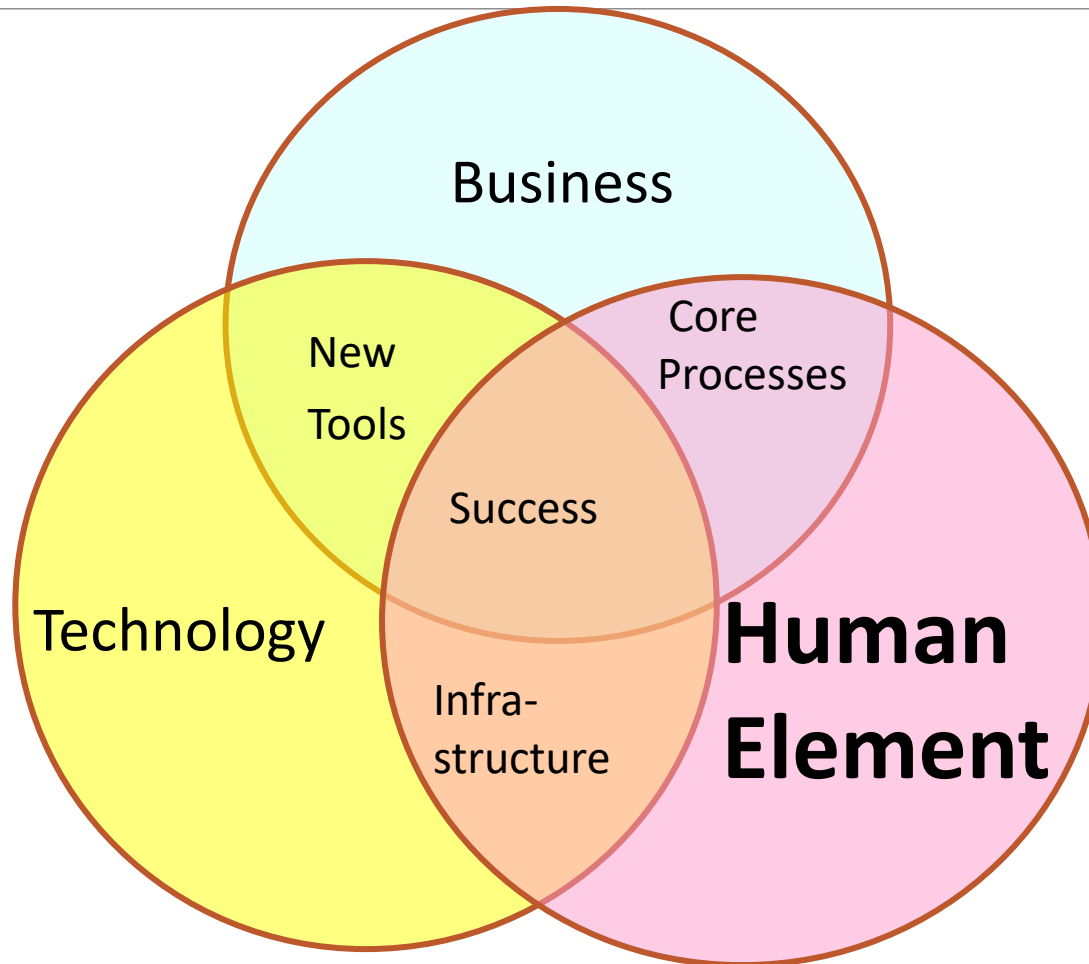
- Security, privacy, based on international standards

“OECD AI Principles overview.” OECD.AI. Accessed March 11, 2022. <https://oecd.ai/en/ai-principles> (The Organization for Economic Co-operation and Development)

The Human Side of Generative AI: Creating a Path to Productivity, McKinsey & Company, [Aaron De Smet](#), Sandra Durth, [Bryan Hancock](#), Marino Mugayar-Baldocchi, and Angelika Reich, 3/18/24

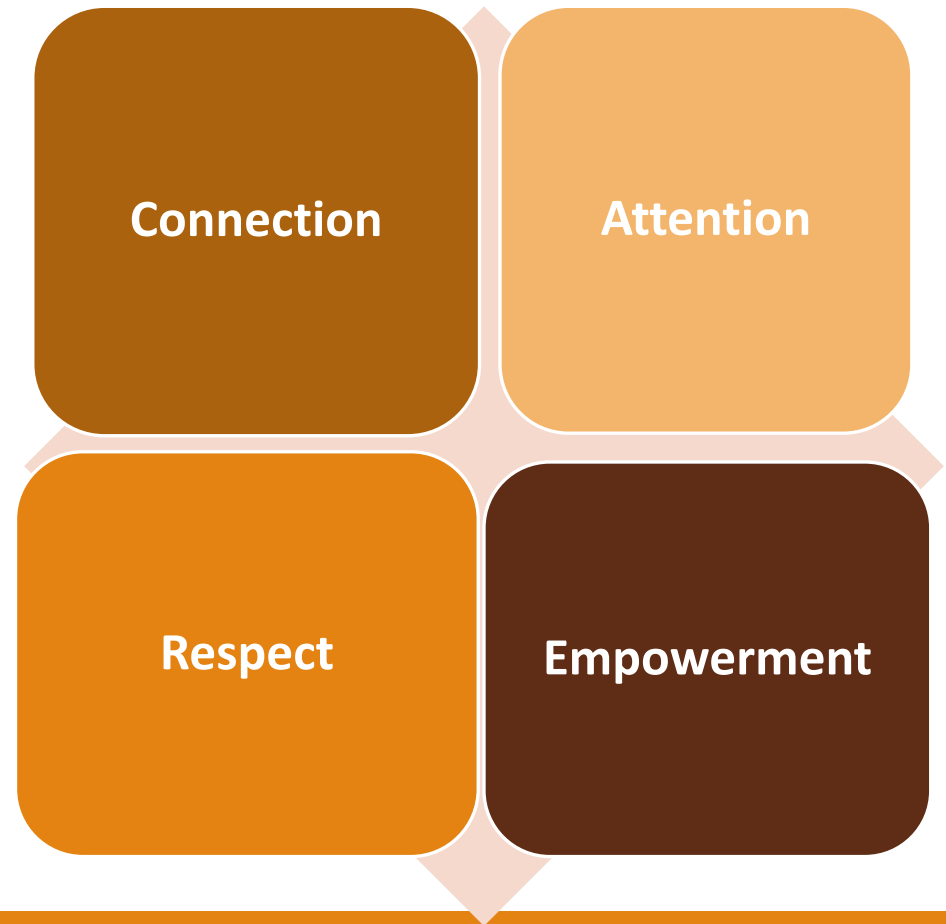
# Quality must be systematically aligned to the organization

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# Priority Characteristics

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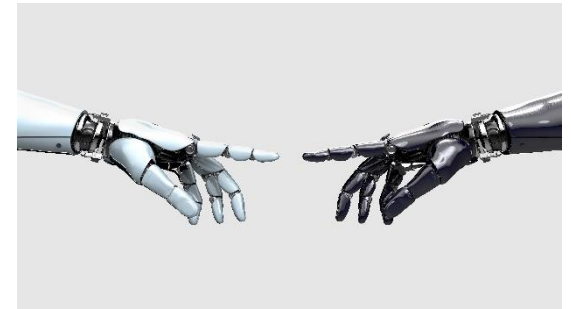


Luciana Paulise: ASQ QMD Webinar,  
Build Trust 4 27 2022, 7 26 2022

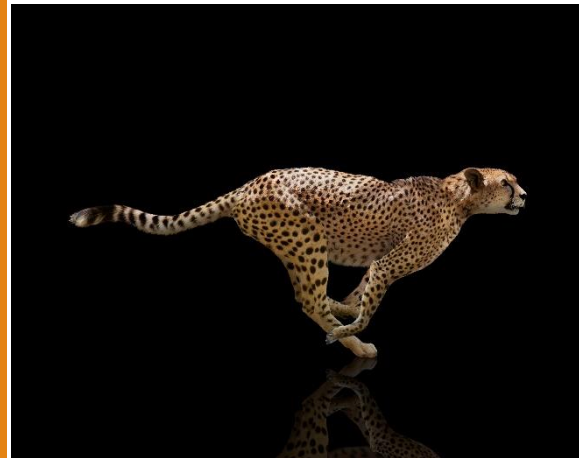
# Make Cultural Change a Priority



Reduce barriers



AI and automation



Value-added agility



Increasing pattern of excellence...

# Human Element: Core Processes

## Transparency and explain-ability

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- ❖ Interacting with and promoting trustworthy AI that respects human rights and democratic values.
  - ❖ Auditing implications
  - ❖ Work on our data acquisition and analysis skills
- ❖ Organizations rolling out AI systems must also enable those who are adversely affected by AI to challenge its outcomes.
- ❖ Quality 4.0 requires us to be proactive, not reactive. The need for positive motivation and internal commitment becomes more crucial.



# What does this mean for us?



Quality professionals may be more valuable in line functions directly related to production and services.



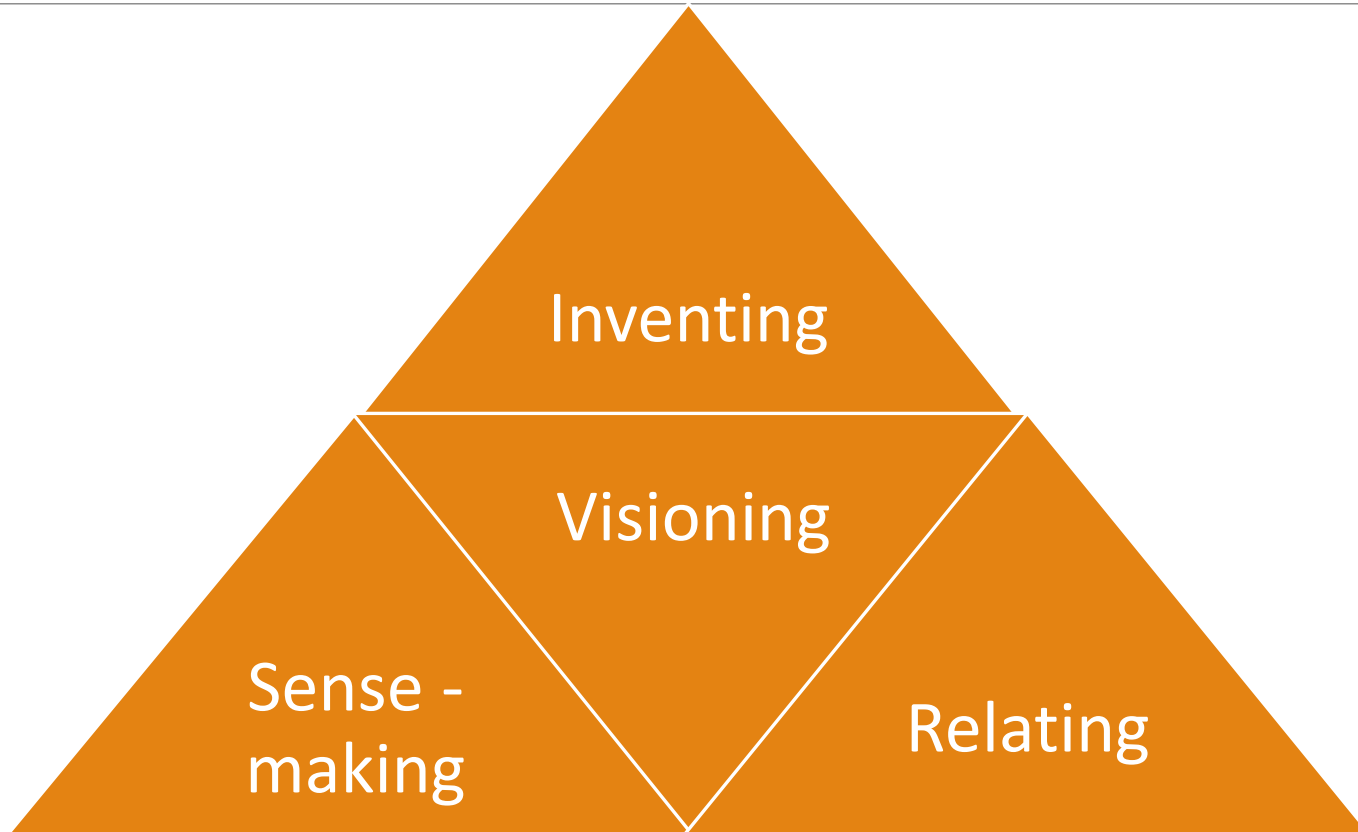
Quality managers can help by better enabling job-to-job transitions, to help workers move from one job to the next with less time out of work.



And we can help with reskilling and upskilling workers to adapt to change.

# A Future of Distributed Quality Leadership

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Meredith Somers, 4/19/2022 Why distributed leadership is the future of management. MIT Sloan School of Management

# Quality Department in 5 Years

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**What do you think?**

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