



# Leadership, Governance and Risk in the Digital Era



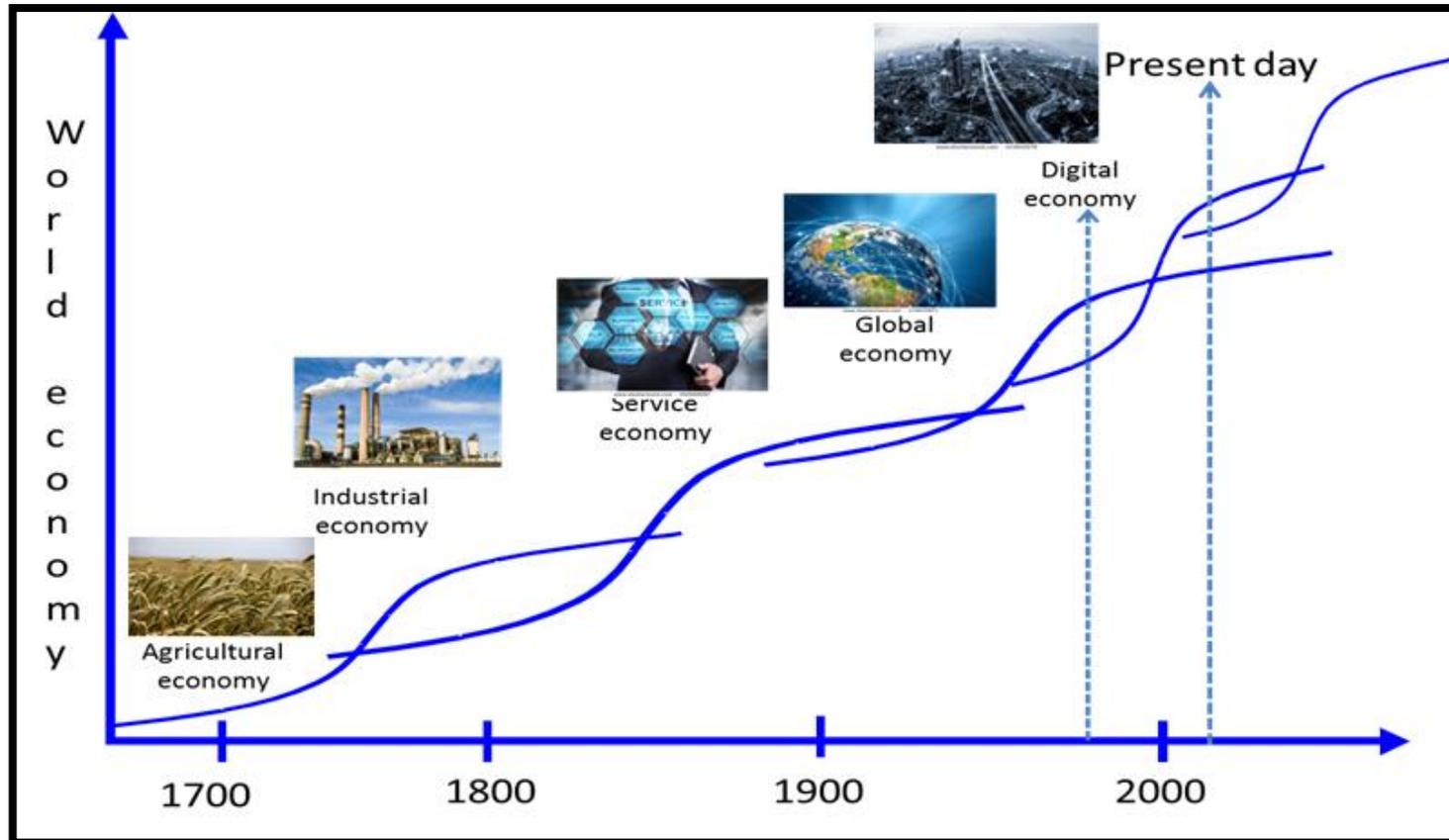
# What is the Digital Era?

# The changing economies

1. The world shifts from activities dominated by analogue technologies to activities dominated by digital technologies.
2. An abundance of electronic devices (smart phones, tablets, computers, servers) and communication networks (fixed and mobile, voice and broadband, 3G, 4G, 5G and LTE).
3. In the late 20<sup>th</sup> century we talk about knowledge-based economy or knowledge-intensive economy.
4. In the 21<sup>st</sup> century Digital economy is where digital technologies are a primary source of economic activity for the production of goods or services.
5. IT professionals, IT users and consumers encounter complexity which includes uncertainty, unpredictability and discontinuity.



# Evolution of the digital era





# Rise of digital technologies

1. Digital technologies are transforming all economic sectors we see trends towards digital marketing, online banking, online shopping, online tourism, smart cities, smart power grids, driverless vehicles, advanced e-health technologies, mobile internet, etc.
2. Rise of the Internet of Things (IoT) applications adding further complexity to connectivity of electronic devices.
3. For IT professionals the risks arise as new technologies replace older technologies as the battle to integrate new technologies into the work place.
4. Digital skills are required to create digital infrastructure and create value through over-the-top (OTT) innovations.
5. Digital services enable organisations to do more services in an online environment.
6. Enterprises will look to the IT division and CIO for leadership in the Digital Era.



# Rise of digital technologies

1. The Internet and the World Wide Web have given rise to the digital economy, putting pressure on enterprises to re-engineer the way they operate.
2. The fundamental difference between the digital economy and previous economies is that the consumer is now the primary focus, able to make his/her demands known instantaneously, through mobile messages, websites, or social media.
3. Consumers are demanding variety and have more personal choice.
4. Given the rapid development in global logistics, goods can be at your doorstep within a few days of ordering online.
5. Enterprises have to adapt to these demands, or they will be left behind as other competitors adapt faster to consumer needs and demands.
6. Globalisation of knowledge and finance, technologies and the new digital economy create change and uncertainty.

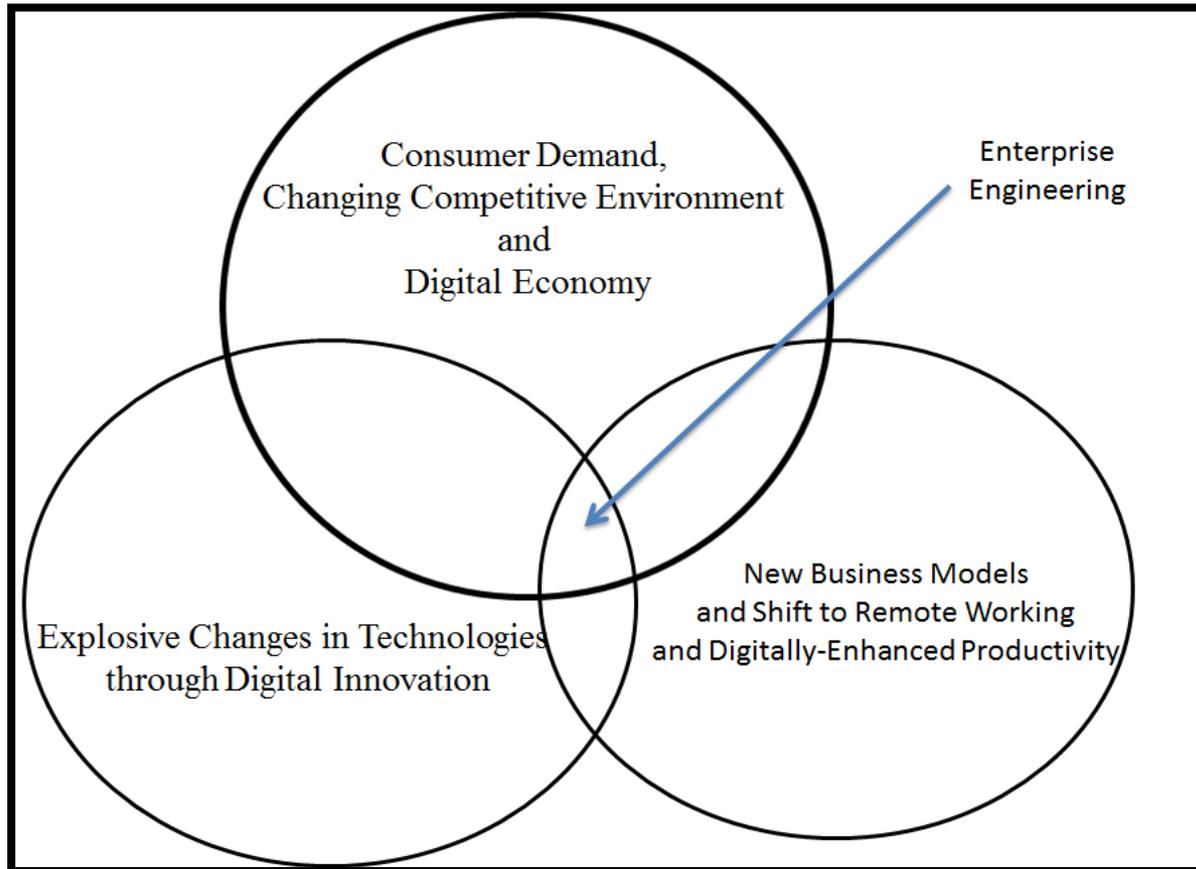


# Rise of digital technologies

1. Historical ways of doing business have become obsolete and the rules of global competition and local service delivery are changing at what some people perceive as a bewildering rate.
2. Innovations in digital technologies have enabled people to work more productively, to work remotely, from home, or from customer or supplier sites, or from other countries.
3. IT has given rise to new ways of working where people collaborate as virtual teams, resulting in massive productivity gains



# The digitally-engineered enterprise



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# Leadership of the IT function and the role of the CIO in the Digital Era



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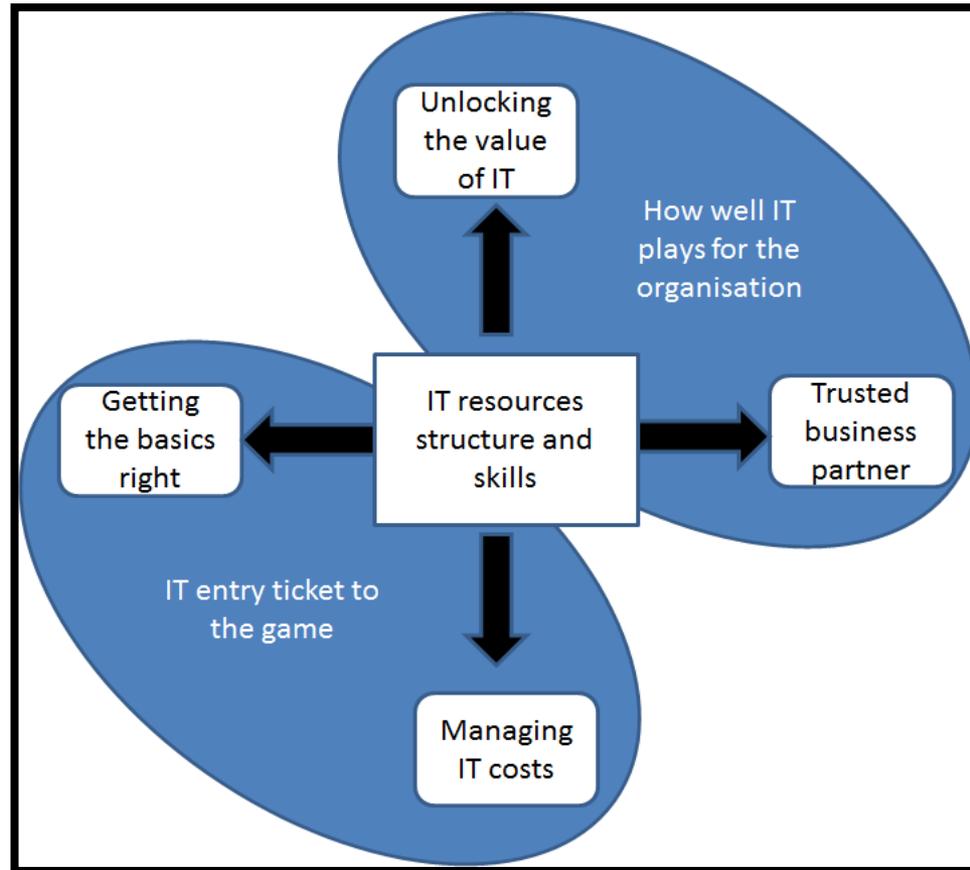
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# From IT to BT

1. In the Digital era there is a strong move from IT to business enabled technology (BT).
2. BT is an approach to IT management, this is a shift towards technology-decision-making being business lead.
3. The IT division and CIO are responsible for advising, coaching and guiding the business in technology investments and implementation, the business is responsible to technology-decision-making, implementation and adoption.
4. The path from IT to BT requires an enterprise-wide shift in enterprise culture and climate.
5. The IT division does not get a free ticket to be an adviser, coach and guide, this has to be earned.
6. The IT division has to earn the credibility and trust of the business.

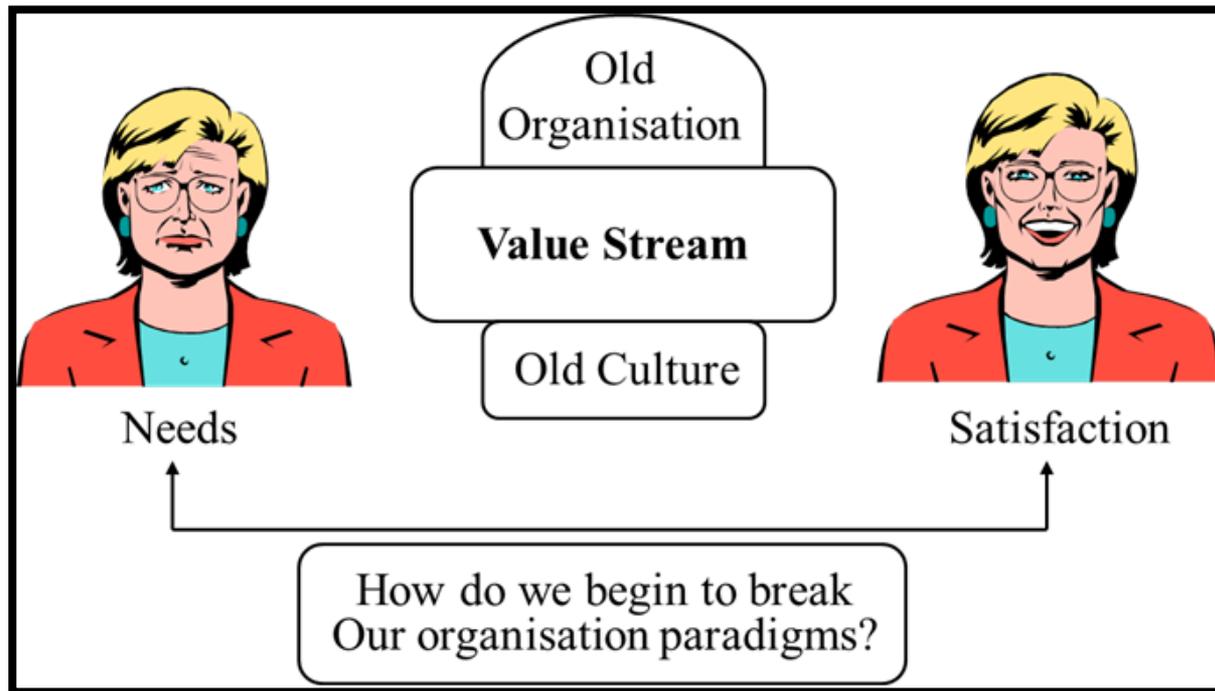


# Steps to becoming an IT business partner





# Organizational paradigm shift





# Governance and Risk?



# Self defeating systems and risks

1. Systems that act against themselves.
2. Self defeating systems succeed in achieving an immediate objective or aim but fail to satisfy long-term goals.
3. An example is a firm that over-sells, and as a result, over commits or an economy which encounters a balance of payments crises because it is too anxious to trade with certain foreign countries.
4. The IT to BT approach maybe heading in the direction of a self defeating system.
5. Current research indicates as we move towards a BT approach the role of the CIO will move towards an advisor, coach and guide.
6. Is this really true, in short-term probably in the long-term we probably have to see.
7. To advise, coach and guide, one must have been there done it before, so an advisor, coach and guide over time will not be the one who has done it before.

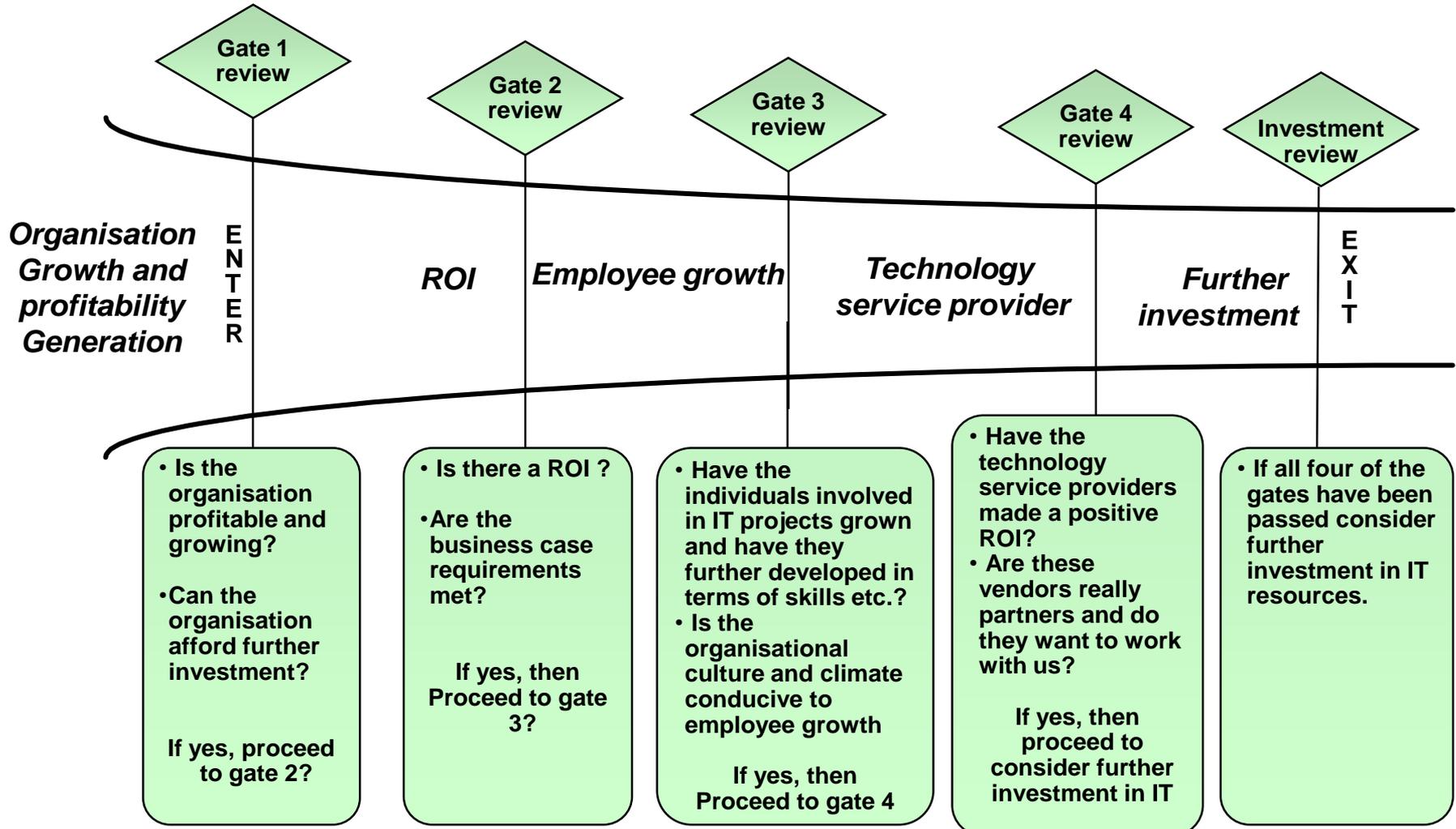


# Top IT management concerns CIONET 2016 report - Potential areas of risk

1. Business (Enterprise) and IT alignment – Enterprise and IT alignment have been in the spotlight for more than 30 years, despite this focus it still requires further attention. Technology must be leveraged for business benefit.
2. Business (Enterprise) agility and flexibility – Enterprise agility and speed to market are essential for creating competitive advantages.
3. Business process management – Aligning IT to optimise business processes will continue to be a focus area.
4. Innovation from using newer technologies can greatly benefit the enterprise and lead to competitive advantages.
5. Business (Enterprise) continuity – the ability to continue business operations at pre-defined levels following a disruptive incident is fundamental to good governance and will receive more attention in the digital era.



# Stage gate process to sustain growth and minimize risk



# Interdependencies for governance and risk

Interdependencies between the organization and the IT division for successful digital transformation include the following:

1. A business strategic visioning process
2. Business strategic intent
3. A business plan and operating model
4. A business roadmap for the next 3 to 5 years

The IT division, on the other hand, must support the organization by having the following components in place:

1. BT strategy aligned with the business strategic visioning process
2. BT strategic intent aligned to the business strategic intent
3. BT operating model in support of the business plan and operating model
4. A BT roadmap for the next 3 to 5 years aligned to the business roadmap

# Some remaining questions and potential risks

1. Given these industry trends and IT investment areas, the question remains how can we use technology to create business value which will assist the enterprises we work in to outsmart its competitors?
2. Do IT professionals and CIOs have the capabilities to advise, coach and guide business? And is it sustainable?
3. Do our organizations have IT-savvy leaders who can lead the technology-decision-making process? And is it sustainable?



# Innovation, Governance and Risk



## Some definitions

1. Invention the action of finding discovery.
2. Technology the practice or application of any of the applied sciences for practical value or industrial usage.
3. Innovation to change into something new, the introduction of novelties.
4. Evolution the process of disengaging from an existing envelope.

Therefore

5. Innovation = Invention + Commercialization

Source: Grulke (2001)

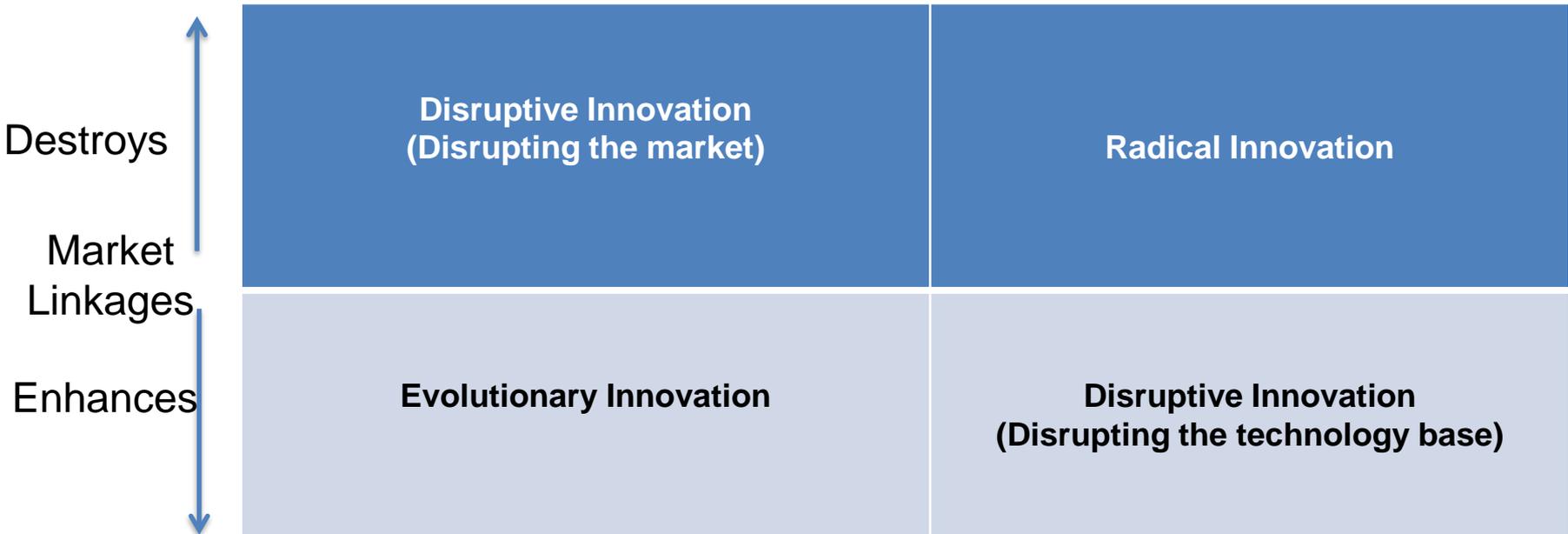


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# What is Innovation?



Source: Grulke (2001)



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# Innovation, Governance and Risk

1. Do not hide behind the definition of innovation to bypass proper governance and risk management.
2. Everything is not innovation.
3. If you are not doing something that is fundamentally different you are doing what others are doing there is no differentiation.
4. The BT model needs to give rise to differentiation so the enterprise can develop competitive advantages so it can outsmart its competitors.
5. In the BT model IT needs to take the lead and demonstrate innovative capabilities which lead to bottom line benefit.
6. Some enterprises are already moving towards creating Chief Digital Officers (CDO), who are responsible for the end to end digital value chain.
7. CDOs are responsible to ensure digital technologies are embedded across the enterprises value chain from order to cash.
8. If the IT leadership does not rise to deliver business value others will do it and the role of the IT division and the CIO will be different.



## Question and Answers

