Dynamic Risk and Governance

Philip Stiles, Eleanor Toye Scott and Pradeep Debata

Cambridge Judge Business School
University of Cambridge
14tth June 2022

Three themes for our agenda

Automation is the future but people frame it differently

Culture doesn't always eat strategy (and structure) for breakfast

Stop talking about risk to make risk management better

Research methodology

Literature review on technology and the future of work and technology and risk

- Examination of current literature on technology, organisations, motivation, culture
- Expanding to examine risk and risk measurement

Project on technology and the future of work

- Technology key informants
- From industry, academia,, and consulting background
- Key trends and dimensions of the debates identified

Project on technology and risk

- Interviews with risk and technology professionals (e.g. CROs and CFOs)
- Range of organisations from start-ups to major corporations. Also firms which design and sell systems, to firms which purchase systems

Case studies on technology, risk and organisation

- Case studies on selected firms
- Range of industries, from banking, construction, energy, insurance, logistics

Our research case studies

Three themes for our agenda

Automation is the future but people frame it differently

Culture doesn't always eat strategy (and structure) for breakfast

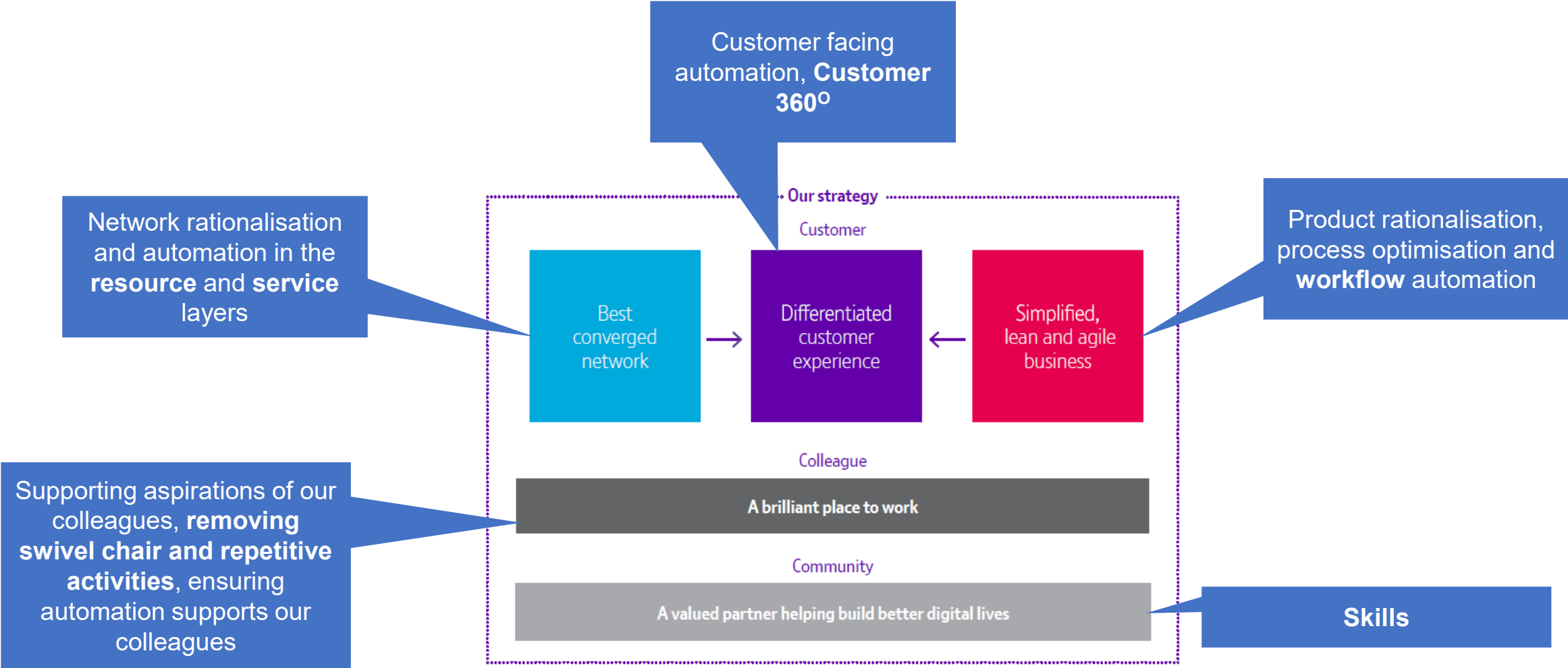Stop talking about risk to make risk management better

Automation evokes contrasting views

"Automation is good in parts, we shouldn't automate all of (the core network) – otherwise we will lose ownership"

"Automation is the right way – but automation in critical national infrastructure is not well accepted"

Source: Spotlight Event, BT Adastral Park, May 2022

Automation and the BT Strategy

Customer facing automation, **Customer 360º**

Network rationalisation and automation in the **resource** and **service** layers

Product rationalisation, process optimisation and **workflow** automation

Supporting aspirations of our colleagues, **removing swivel chair and repetitive activities**, ensuring automation supports our colleagues

Our strategy

Customer

Best converged network

Differentiated customer experience

Simplified, lean and agile business

Colleague

A brilliant place to work

Community

A valued partner helping build better digital lives

Skills

Source: Azahar Machwe, 2021

NG·CDI
NEXT GENERATION · CONVERGED DIGITAL INFRASTRUCTURE

We have to set automation in the context of negotiations between strategy, finance, and service

Choices about the business are at the heart of risk and governance: how financial resources are allocated, what strategy is chosen, and the level and quality of service the firm is prepared to provide.
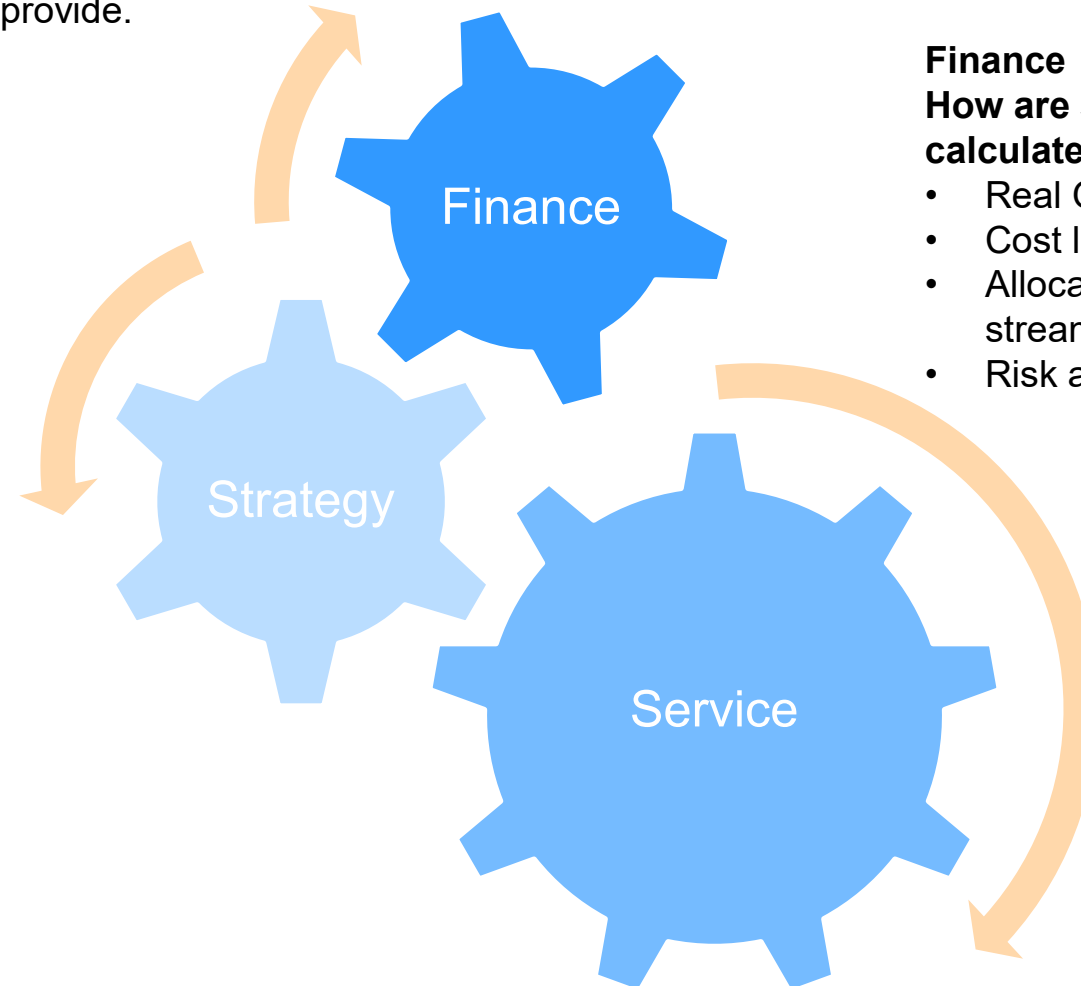
Corporate Strategy
Strategic Intent – what business are we in; what is our purpose and mission?
- Portfolio planning
- Scenario planning
- PESTEL

Business Strategy
Business Intent – how to compete and collaborate with others to create and deliver value?
- Scenario planning
- Business intelligence
- Understanding customer intent

Finance
How are strategic investments calculated and rate of return decided?
- Real Options
- Cost levels
- Allocation of money to different value streams
- Risk appetite

Service
What levels of service design and quality are enshrined?
- Build / run ratio
- Business value of on-going services

Automation presents great benefits as well as constraints

	Upside risk	External risk	Downside risk
Definition	• **Risks that offer benefits** • **Risks significant to the company's ability to execute its strategy and achieve its objectives**	• Risks that offer positive or negative possibilities beyond the company's control	• Risks that offer negative impacts • Risks that a company is intent on eliminating or mitigating or transferring in a cost-effective manner
Automation of the BT network	• **A digital company** • **Stability and scalability** • **Culture of experiment** • **Review practices** • **Customer responsiveness** • **Delivery of new service offerings**	• Changes in tech demand system change • Competitive landscape now requires major investment • Customer habits and taste radically altering	• Identity change within the firm • Increasing expectations • Big bet in a rapidly changing landscape • Misalignment between system and reality

NG·CDI
NEXT GENERATION • CONVERGED DIGITAL INFRASTRUCTURE

EY's top 5 risks in telecoms

1. Failure to ensure infrastructure reach and resilience

2. Underestimating changing imperatives in privacy, security and trust

3. Failure to redesign workforce structure and skill sets

4. Failure to mitigate supply chain disruption

5. Poor management of the sustainability agenda

Source: EY, Top risks in Telcos, 2021

How is the narrative of automation being framed within and outside BT?

"Automation can bring scalability and better service offerings"

"We have to address customers who are nervous about automation"

"We have to get beyond the narrative of cost minimisation, and of automation as a means of getting rid of people"

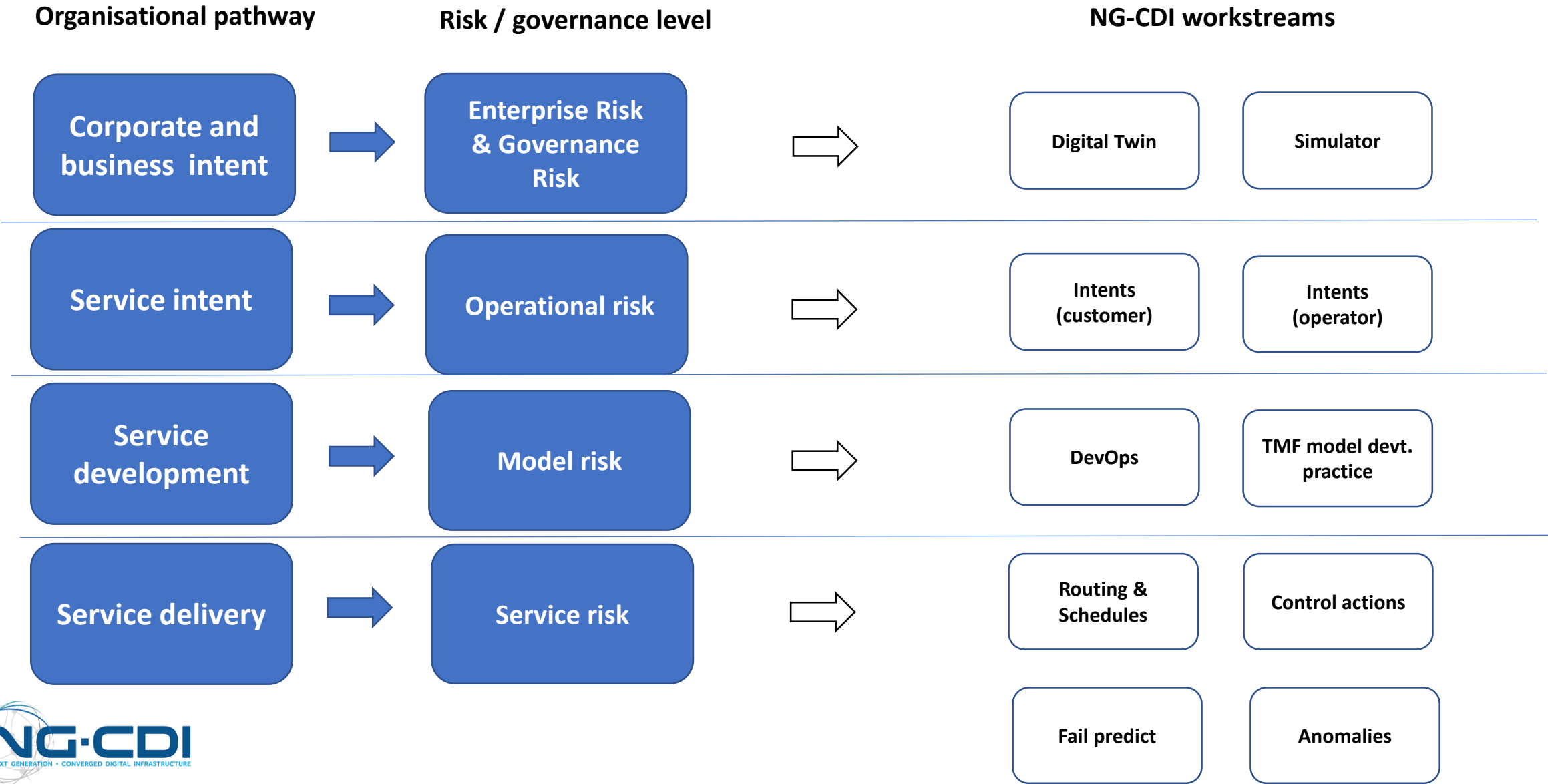Source: Spotlight Event, BT Adastral Park, May 2022

NG·CDI
NEXT GENERATION · CONVERGED DIGITAL INFRASTRUCTURE

Agenda

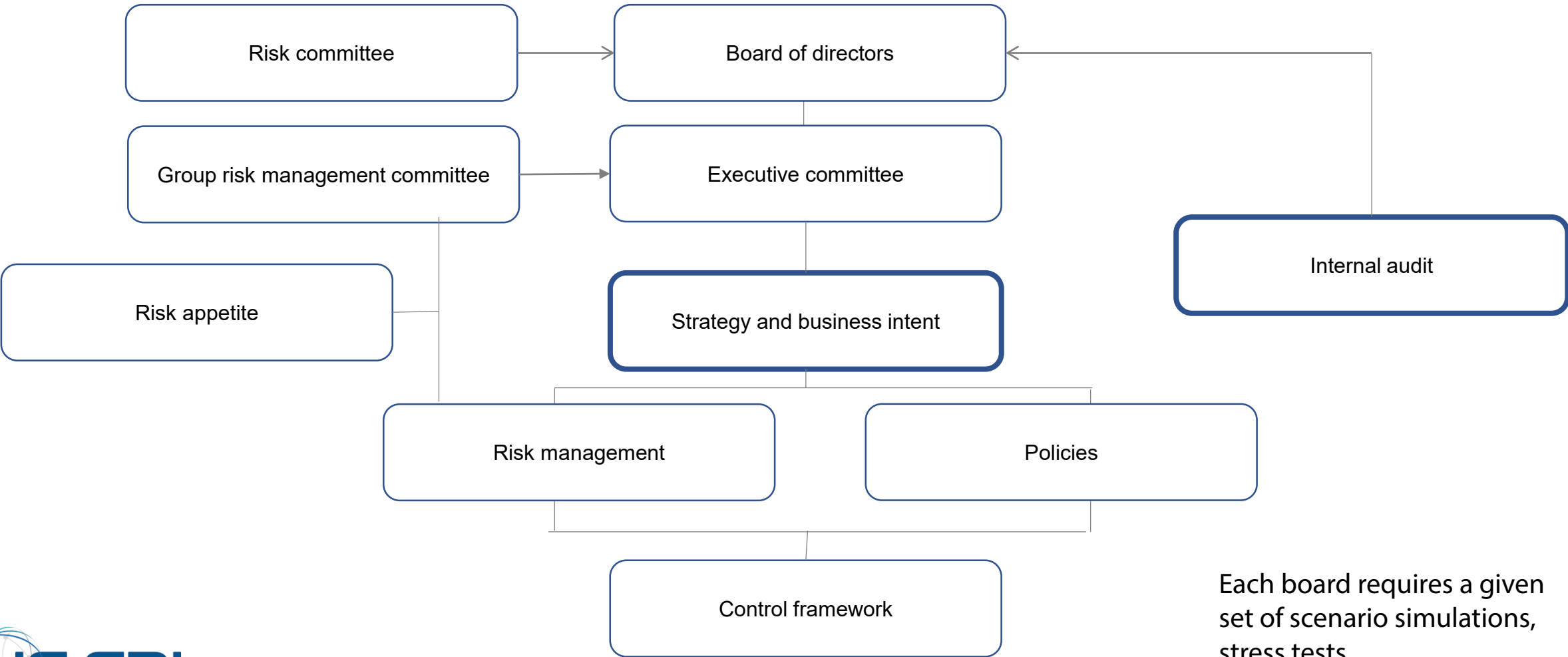Automation is the future but people frame it differently

Culture doesn't always eat strategy (and structure) for breakfast

Stop talking about risk to make risk management better

Structure has to align intent, delivery, risk, and controls: the work of NG-CDI

Organisational pathway	Risk / governance level	NG-CDI workstreams	
Corporate and business intent →	Enterprise Risk & Governance Risk ⇒	Digital Twin	Simulator
Service intent →	Operational risk ⇒	Intents (customer)	Intents (operator)
Service development →	Model risk ⇒	DevOps	TMF model devt. practice
Service delivery →	Service risk ⇒	Routing & Schedules	Control actions
		Fail predict	Anomalies

NG·CDI
NEXT GENERATION · CONVERGED DIGITAL INFRASTRUCTURE

There are governance structures to deal with this (e.g. financial services)

Risk committee → Board of directors ← Internal audit

Group risk management committee → Executive committee

Risk appetite

Strategy and business intent

Risk management

Policies

Control framework

Each board requires a given set of scenario simulations, stress tests…

NG·CDI
NEXT GENERATION · CONVERGED DIGITAL INFRASTRUCTURE

But for the future, telcos need different structures or the bridging of structures

Enable business functions to operate as an internal ecosystem (eg., internal business partnership)	80%
Implement more agile decision-making processes	53%
Create smaller, more autonomous organizational units	33%
Implement an organizational structure with less hierarchy	33%
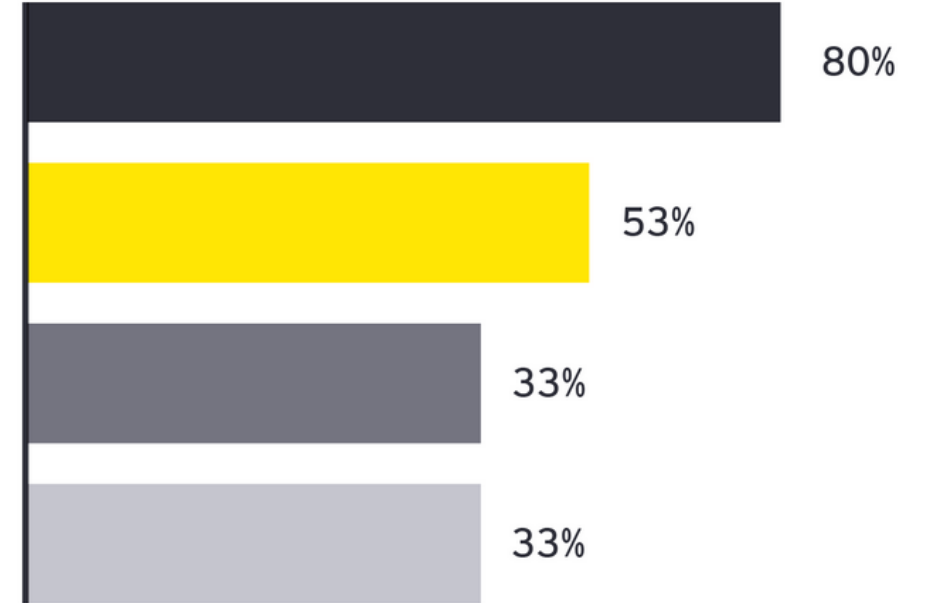
Source: EY, CEO Imperative Study, 2021

Risk has to be embedded in everyday decision-making - lessons from HROs

High reliability organisations are those which have:

Preoccupation with failure – small failures must be noticed

Reluctance to simplify – distinctiveness retained rather than lost in a category

Sensitivity to operations – notice nuances that portend failure

Commitment to resilience – ability to bounce back by locating pathways to recovery

Deference to expertise – empowerment of individuals "to implement those pathways

Source: Weick and Sutcliffe, 2007

Shifting between hierarchy and network

Under disturbance conditions, organisations changed from hierarchical approach to collaborative network style. Three distinct modes of operation:

- Routine
- High-tempo
- Emergency

Routine operations = traditional military chain-of-command .

When in modes two or three operational management adjusted to situation-specific, expert-lead, problem identification and decision-making roles with equal authority for critical decisions resting across ranks, from enlisted specialist aircraft handlers up to very senior officers

Source: La Porte and Consolini, 1998

# The need for boundary spanning in building risk engagement

Leader level
Elevation of and engagement with the front line for the purpose of building strategic capability (e.g. Aircraft carriers, air traffic control)

Inter-group level
"Facilitators" charged with instilling and reinforcing the risk approach by means of auditing, coaching, diffusing practices, and brokering cross-functional connections. The work of facilitators helped front line personnel voice their concerns earlier and more fully (e.g. Novo Nordisk).
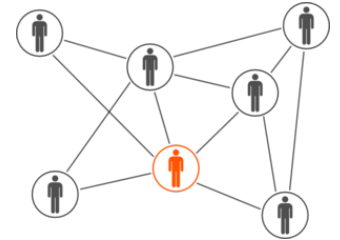
Professional level
Reliability professionals play a crucial role in creating and sustaining organizational reliability by balancing attention to weak signals while maintaining capabilities for quick response when unexpected events occur (e.g. major IT company)
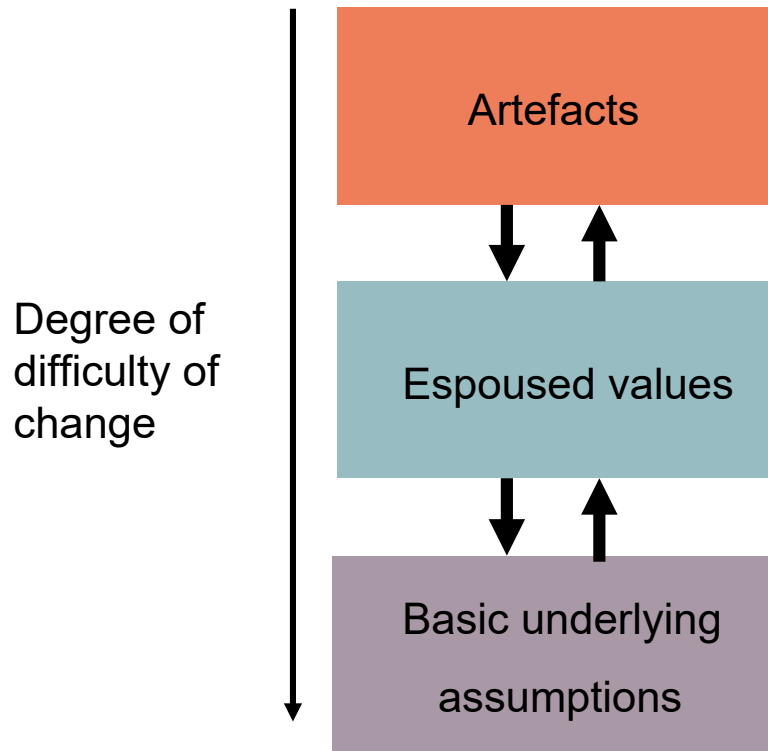
Object level
Boundary objects (e.g. maps, dashboards) that can be interpreted by many groups from differing backgrounds to coalesce on the risk issue (e.g. CASM)

We can align structure and culture through these approaches – see the model of culture

Degree of difficulty of change

Artefacts

Espoused values

Basic underlying assumptions

Source: Edgar Schein Organisational Culture,

Embedding risk will depend on changing the underlying assumptions. These are the source of values in a culture and what causes actions within the organisation.

Organisational assumptions are usually "known," but are not discussed, nor are they written or easily found. They are comprised of unconscious thoughts, beliefs, perceptions, and feelings

How is the narrative of culture being framed within BT?

"Automation will bring upskilling, and some people will relish the chance to adopt more roles"

"Culture varies across the firm – raising risks can be a different experience depending on where you are"

"We work in a mesh, then an issue goes up the tree – we don't necessarily have the resources to get people to fix problems"

Source: Spotlight Event, BT Adastral Park, May 2022

Agenda

Automation is the future but people frame it differently

Culture doesn't always eat strategy (and structure) for breakfast

Stop talking about risk to make risk management better

The language around risk has to change

- Risk (like governance) is seen as a negative concept

- Risk is usually associated with blame (often with good reason)

- In firms that have risk professionals in formal positions, people defer risk problems to them and reduce the responsibility they have for the issues, thus making the overall risk context more vulnerable.

- There is thus a language issue around risk which we have to fix

How is the narrative of risk being framed within BT?

""We need more real time risk and the right people owning the risk"

"'How do I raise a risk' is the wrong question – 'how do I deal with thing, and do the right thing' is what is needed"

"New joiners need to be told about this – what is a near miss, how can we develop our awareness?"

NG·CDI
NEXT GENERATION · CONVERGED DIGITAL INFRASTRUCTURE

Takeaways

1. Automation is the future but people frame it differently

Framing the automation narrative in an holistic way

2. Culture doesn't always eat strategy (and structure) for breakfast

Making risk about behaviours and to align with the structures. Socialisation for culture and agility for structure

3. Stop talking about risk to make risk management better

Simplify risk and build into decision making rather than relying on reporting