Alignment of ICT with business strategy: latest trends and tools

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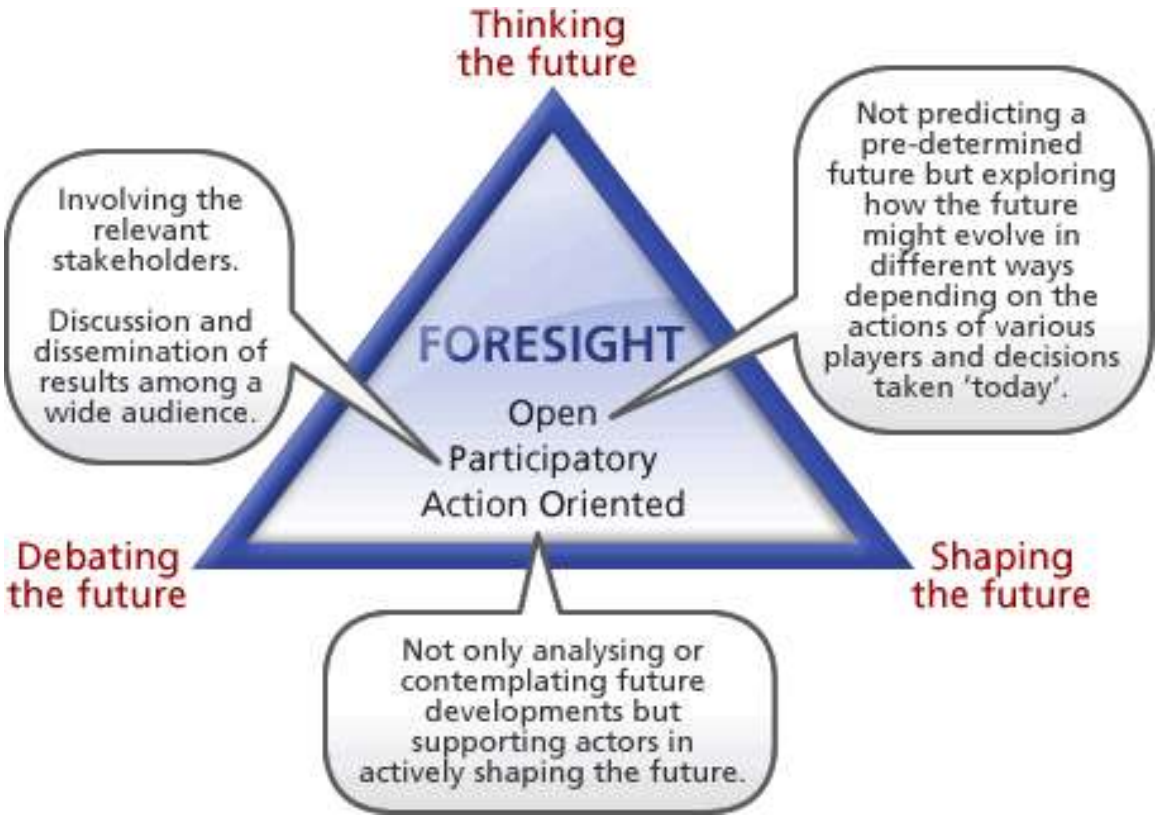
1. New role of ICT
2. Strategic role of Cybersecurity agenda
3. Cybersecurity skills shortages

1. New role of ICT

- IT traditionally been considered as **a tool of strategy implementation**, not involved in company strategic development;
- Due to the changes of business context ICT has to provide **proactive role in ensuring viable business**;
- ICT managers role is changing as well: strategic ICT management;
- ICT activities alignment with business strategies is crucial to increase competitiveness of business;
- Strategic foresight as a tool to ensure anticipatory management;

Strategic foresight: anticipation

… the ability to take a forward view and use of insights gained in organizationally useful ways (Richard Slaughter, Foresight Institute)



The Framework

Framing

Scoping the project; attitude, audience, work environment, rational and purpose, objectives and teams

Scanning

Collecting information; the system, history and context of the issue and how to scan for information regarding the future of the issue

Forecasting

Describing baseline and alternative futures; drivers and uncertainties, tools, diverging and converging approaches and alternatives

Visioning

Choosing a preferred future; implications of the forecast, and envisioning designed outcomes

Planning

Organizing to achieve the vision; strategy, options and plans

Acting

Implementing the plan; communicating the results, developing action agendas and institutionalizing strategic thinking and intelligence systems

Focal Issue

Information

Baseline & Alternative Futures

Preferred Future

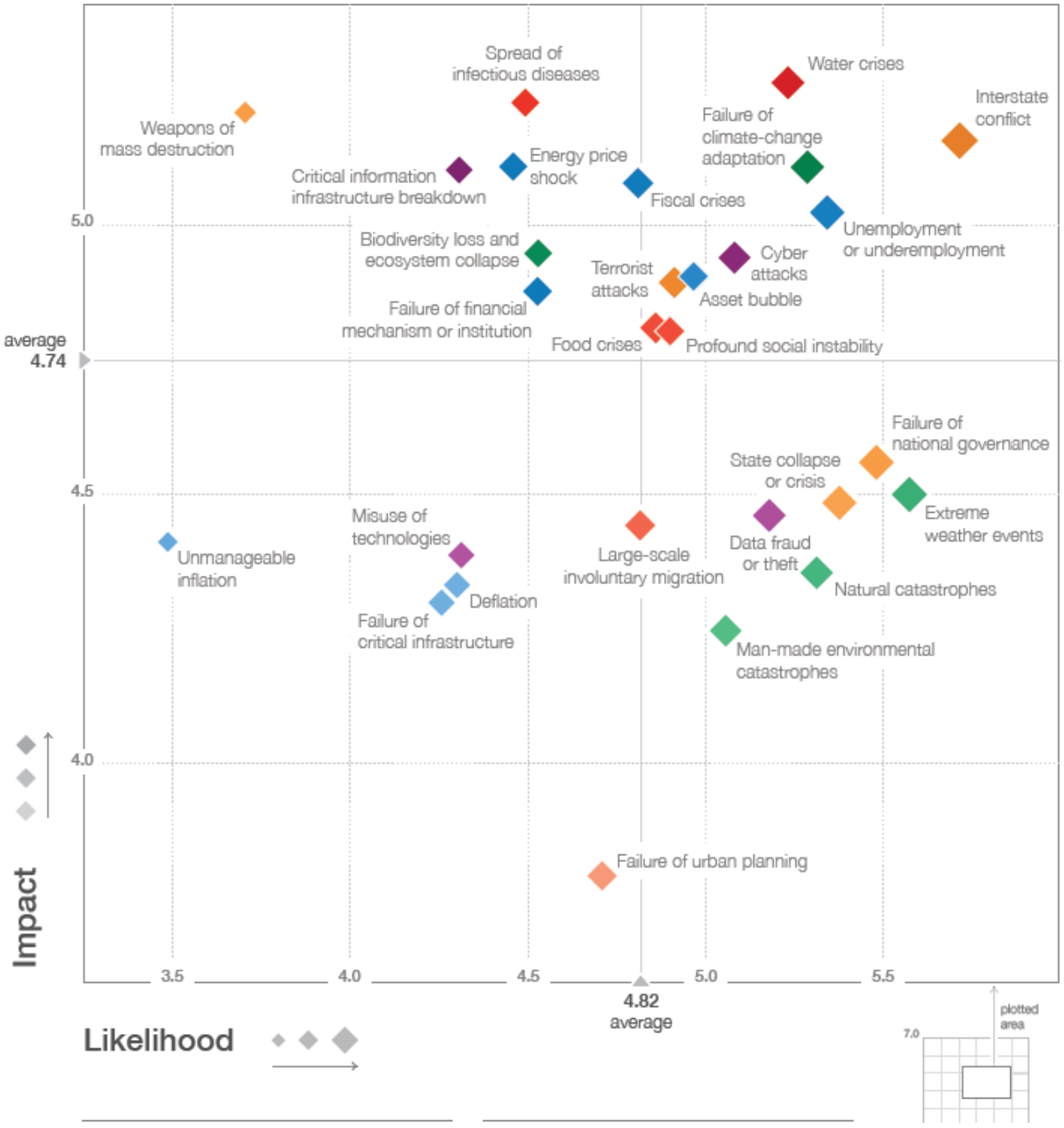
Strategy & Plans

Actions

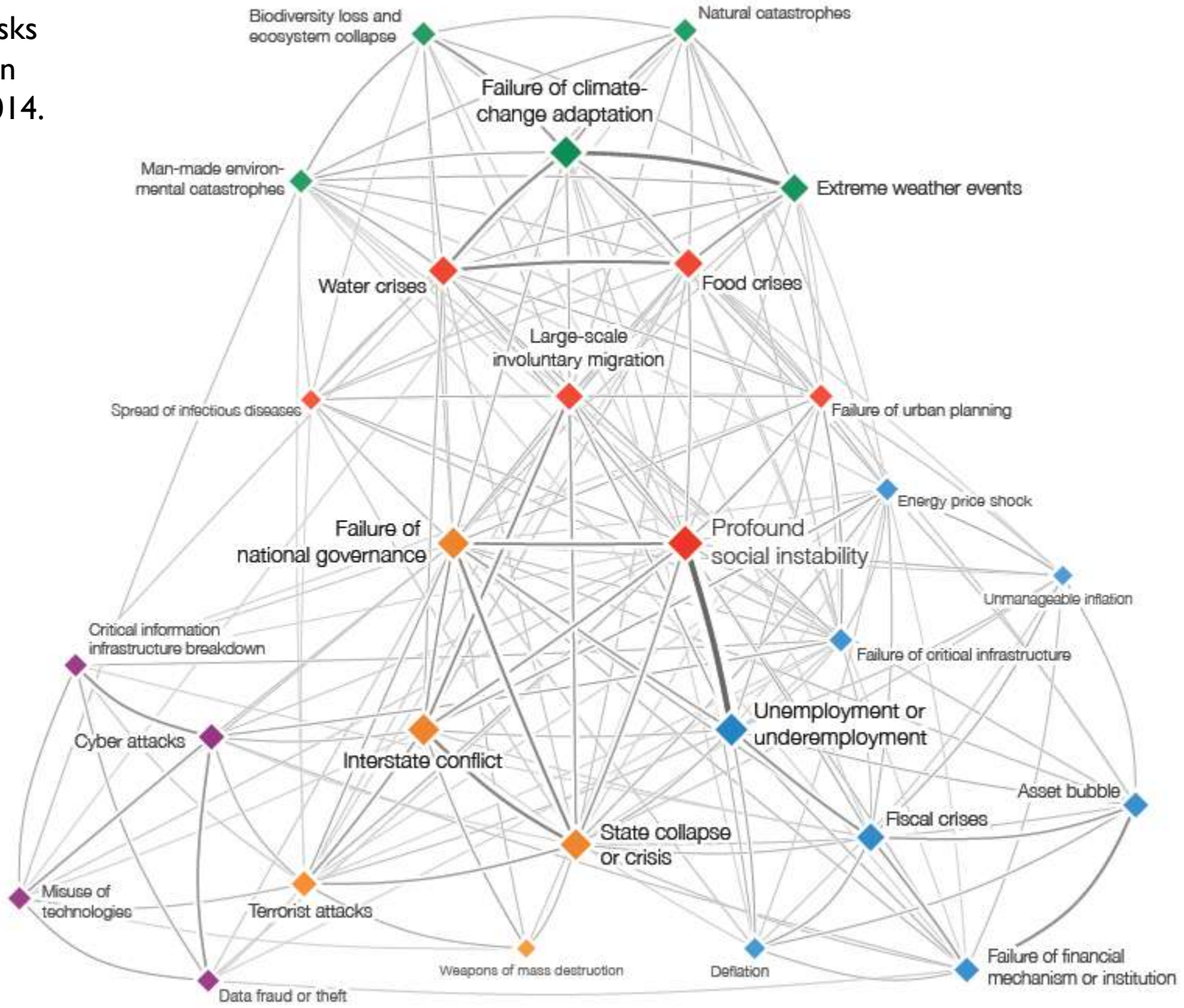
Andy Hines
Houston Foresight Program
August 2014

Source:
Global Risks Perception Survey 2014.

Figure 1: The Global Risks Landscape 2015



Source:
Global Risks Perception Survey 2014.



Source: Global Risks Perception Survey 2014, World Economic Forum.
Note: Respondents were asked to select three global risks that they believe their region is least prepared for. For legibility reasons, the names of the global risks are abbreviated. Please see Appendix A for the full name and description. Oceania is not displayed because of the low number of respondents.

Technology centric VS Business oriented strategies

- Focus ***from technology centric approach*** and on technology products to ***business alignment***;
- Strategic divergence is counter productive leading to complex IT structures that struggles to sustain overlying business operations;
- Alignment ICT and generic business strategies is a key issue;

ICT alignment with business

- The role of ICT function is capturing, processing, storing and distribution information or data;
- The first principle of aligning ICT activities with business – *understanding business itself to achieve desired outcomes;*

In today's highly interconnected and technology-enabled world, organizations are rapidly realizing that their digital presence and ability to protect critical functions and information are as important to their ability to remain competitive as the product or service they produce.

Source: ISACA

2. Strategic role of Cybersecurity agenda

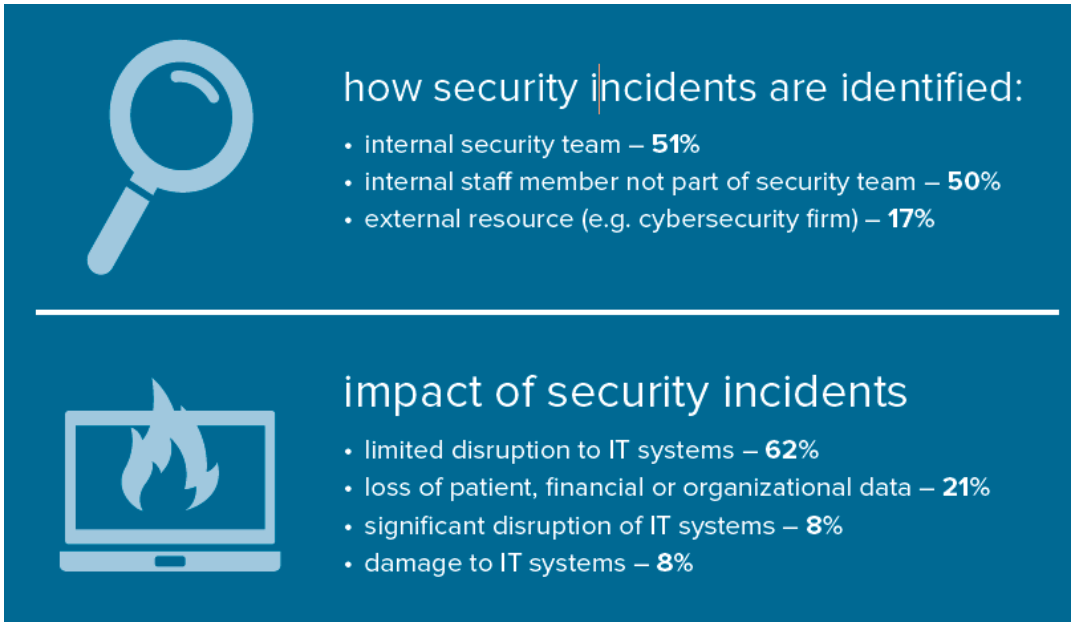
- How much do we need to invest in cybersecurity?

- The answer lies in company SIZE, INDUSTRY, GROWTH AGENDA, INTERNATIONAL PRESENCE AND

COMPANY GENERIC STRATEGIES APPLIED;

How much Cybersecurity do we need?

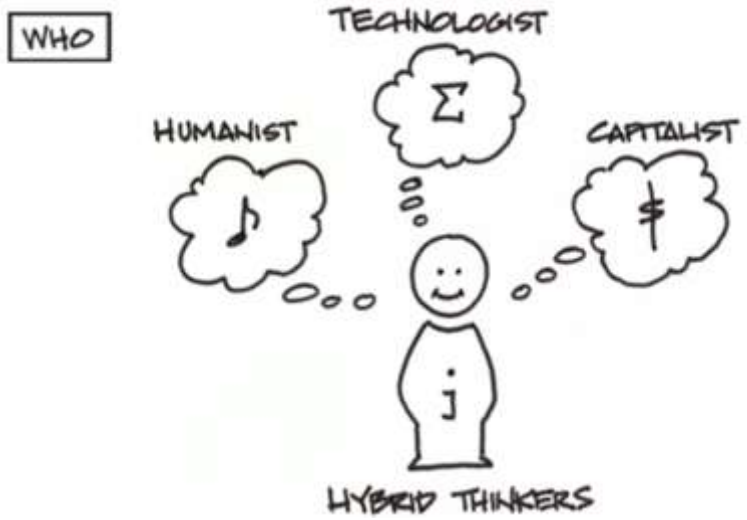
- There are a seemingly endless number of cybersecurity threats, threat sources, and vulnerability that can cause damaging impacts on your business;
- The key to effective Cybersecurity governance is integrating cybersecurity agenda with strategic development directions, policies, processes, structures of company and life cycle of industries ;



Source: 2015 HIMSS Cybersecurity Survey

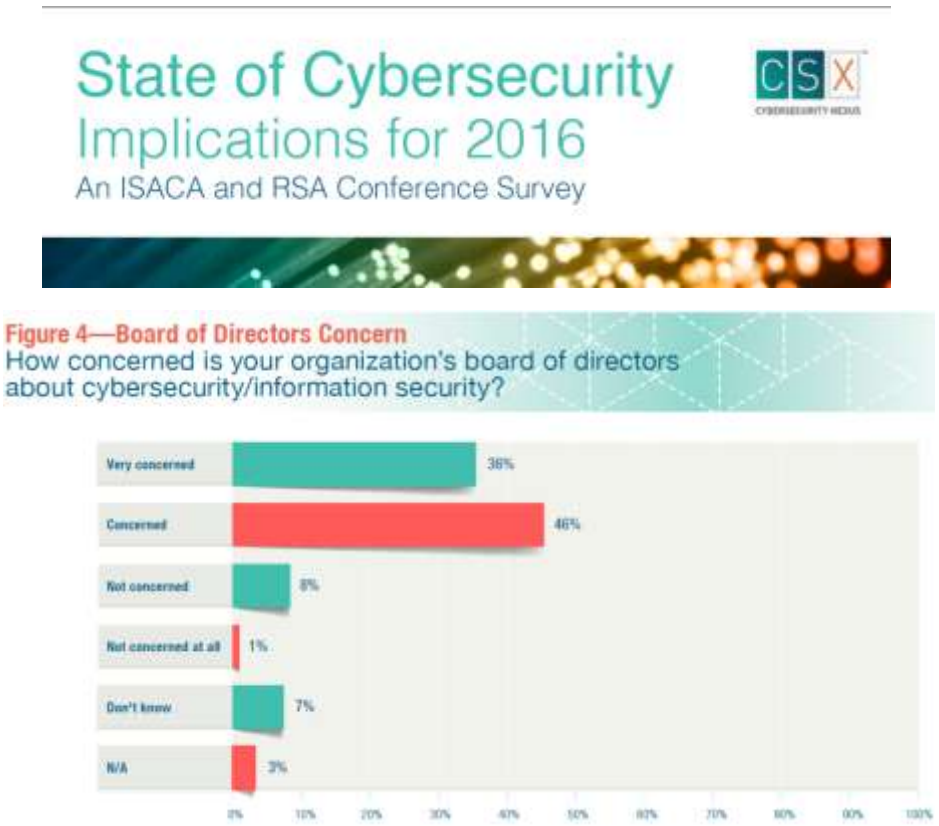
Incorporating cybersecurity into generic business strategies

- Strategy development team has to consider Cybersecurity as an essential part of their thought process and include technical expert (s) to help t guide strategy development from a Cybersecurity perspective;
- Disruptive and Hybrid thinking applies;
- From prevention to proactive detection;



In 2015, ISACA and RSA Conference conducted a global survey of state of Cybersecurity

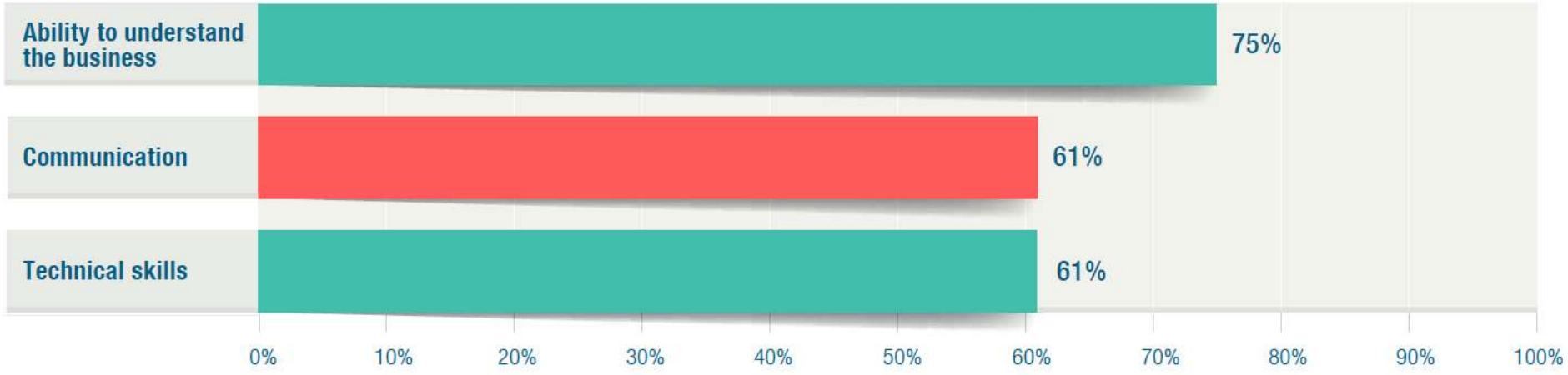
- 461 cybersecurity managers and practitioners confirmed that the number of breaches targeting organizational and individual data continues to go unchecked and the sophistication of attack methodologies is evolving.
- The current state of global cybersecurity remains chaotic, the attacks are not expected to slow down;




Board of Directors and Committees
Legal and Regulatory Framework
Organisational Hierarchy
Monotoring and Internal Control
Transparency and Accountability
Policies and Procedures
Vision
Mission
Strategy
Objectives
Smart Goals
Corporate Governance

ISACA Survey participants overwhelmingly reported that **the largest gap exists in cybersecurity and information security practitioners' ability to understand the business**;
Not having skilled employees certainly impacts an enterprise's ability to identify, contain and mitigate complex security incidents, which results in increased cost to the enterprise.

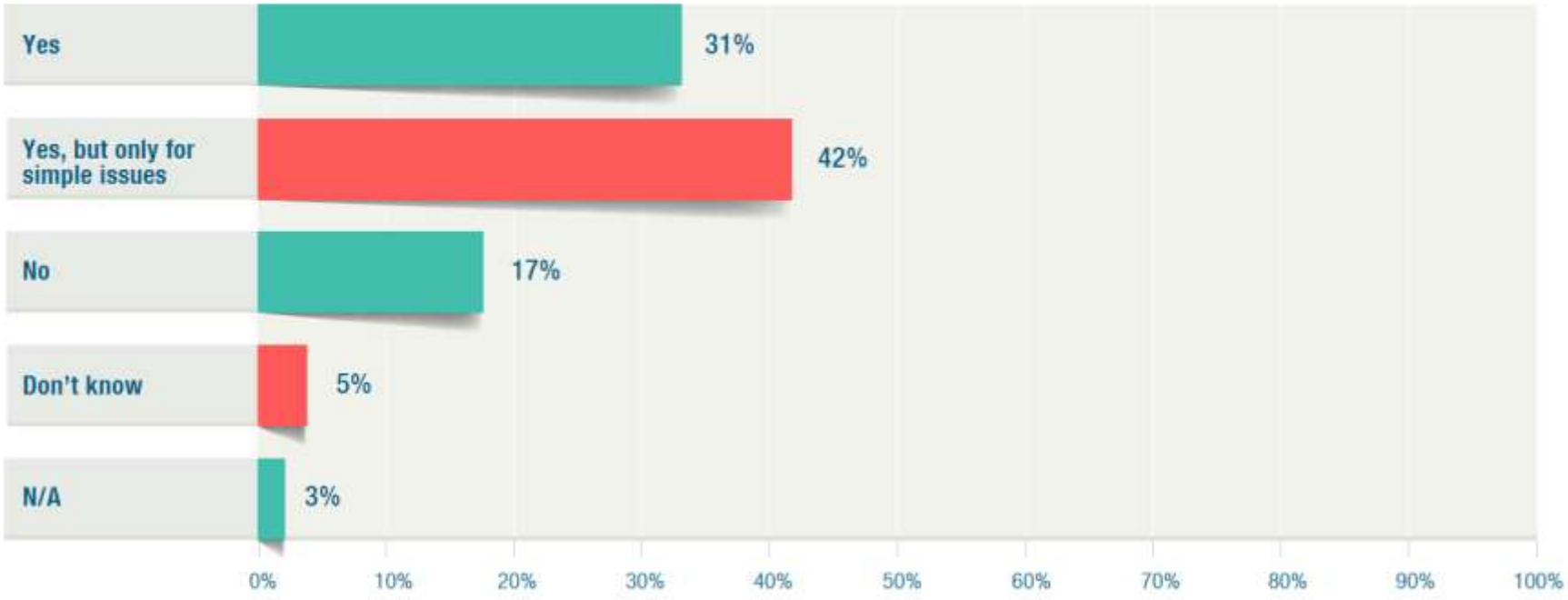
Figure 9—Cybersecurity Skills Shortage
What are the most significant skills gaps you or your organization sees among today's cybersecurity/information security professionals?



In 2015, 75 percent of respondents reported that they are comfortable with their security teams' ability to detect and respond to incidents; Of that 75 percent, 42 percent indicated that their comfort with the team's ability is limited to simple incidents only;

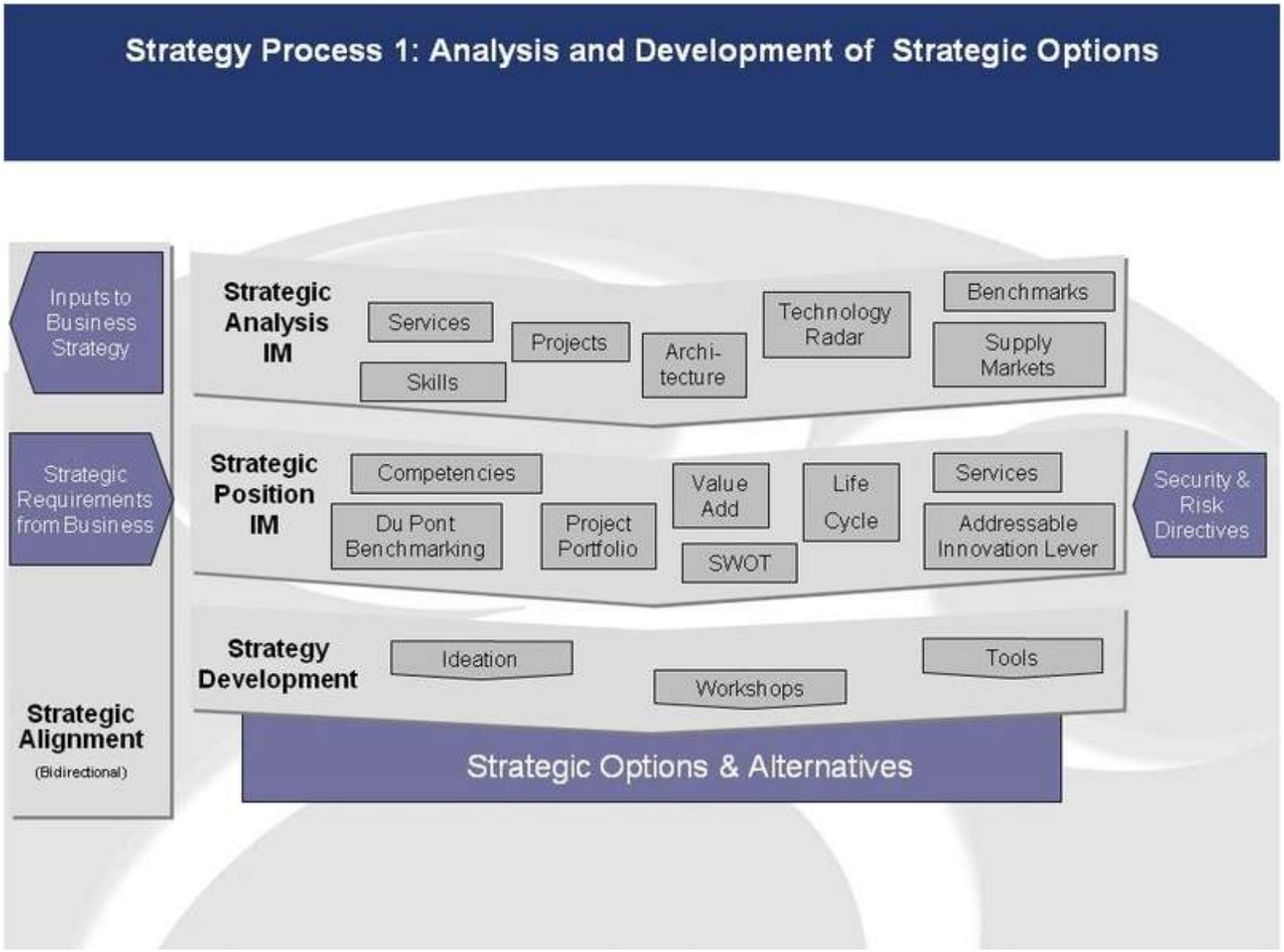
Figure 11—Detection and Response Confidence

Are you comfortable with your cybersecurity/information security team's ability to detect and respond to incidents?



Enterprises are beginning to look at cybersecurity as a serious business issue.

- cybersecurity incidents can lead to significant impact to the business;
- building shared understanding on business and risk management;



Source: Dewey & Partner

Some tips:

- establish a security policy aligned with business objectives and focused on innovation to achieve a strong security posture;
- support CS agenda with necessary budget and programs;
- develop security capabilities that enhance the user experience and productivity.
- measure security effectiveness;

Source: Accenture

A Roadmap for Cybersecurity Research

Homeland Security

November 2009

Best practices on Cybersecurity Research

- Need for Cybersecurity Research Centre in Latvia;

- Best practices: Academic Centre of Excellence for Cyber Security Research (ACE-CSR) (UK); The Research Institute in Science of Cyber Security (RISCS)(UK); *(funded by a £3.8 million grant, is a virtual collaboration between researchers at: Imperial College London working with Queen Mary University of London and Royal Holloway, University of London on Games and Abstraction; Newcastle University working with Northumbria University working on Choice Architecture; Royal Holloway, University of London working on Cyber Security Cartographies; and University College London working on Productive Security);*

Thank you for your attention!

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