

ISO 5600 Series

(International Standards in Innovation Management)

International Innovation Management

ACPA7003

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What is Innovation Management?

- “An organization’s ability to innovate is recognized as a key factor for sustained growth, economic viability, increased well-being and the development of society.” (ISO 56000:2020, 2020)
- “The innovation capabilities of an organization include the ability to understand and respond to changing conditions of its context, to pursue new opportunities and to leverage the knowledge and creativity of people within the organization in collaboration with external interested parties.” (ISO 56000:2020, 2020)

Aim of ISO 56000 Series

- To aid organisations with the following areas:
 - Establishment
 - Implementation
 - CI (Continuous Improvement)
 - Innovation management systems

Aim of ISO 56000 Series

- Communication
- Awareness of innovation activities
 - Internally – within the organisation
 - Externally – across different organisations

Types of Innovation

- Incremental Innovation
- Disruptive Innovation
- Architectural Innovation
- Radical Innovation

Rationale for Engaging in Innovation Activities

- “The environment in which an organization operates today is characterized by accelerated change, globalization of markets, emergence of new technologies and competitors, new regulatory requirements and ever more demanding users and citizens.” (ISO 56000:2020, 2020)

Rationale for Engaging in Innovation Activities

- Innovation is key to the success of most organisations
- Organisations look to increase revenue and improve on value through new, or changed/improved:
 - Products
 - Services
 - Processes
 - Models
 - Methods, other etc.

Rationale for Engaging in Innovation Activities

- Reason for organisations to be innovative:
 - Increase revenue
 - Growth
 - Profitability
 - Reduce costs
 - Increase satisfaction of end user/customer/citizen

Rationale for Engaging in Innovation Activities

- Create new markets
- Protect current market foothold
- Comply with regulations
- Attract new partners
- Attract funding
- Reduction of waste

Rationale for Engaging in Innovation Activities

- Enhance the organisation's reputation
- Create a social benefit
- Gain competitive advantage
- Renew the portfolio of offerings
- Efficient use of resources
- Motivate employees

Innovation Activities in Organisations

- Innovating is one aspect of development and change in organizations besides other activities to realize value, such as improvements, sales, marketing, communication, partnering and acquisitions. (ISO 56000:2020, 2020)

Innovation Activities in Organisations

- Where can innovation occur within an organisation?
 - All parts of an organisation:
 - Within and between departments & units
 - Sales
 - Marketing
 - R&D or R&T
 - Services
 - All operational activities etc.

Innovation Activities in Organisations

- Wider parts of an organisation
 - Supply chain
 - Partners
 - Network ecosystems
 - Contractors
 - Public authorities

Innovation Activities in Organisations

- When can innovation occur within an organisation?
 - Marketing & Research
 - Business development
 - Design
 - Manufacturing
 - Maintenance
 - All life cycle stages

Innovation Activities in Organisations

- How can innovation occur within an organisation?
 - Value realisation models:
 - User experience
 - Partner relationship
 - Value proposition
 - Revenue model

Innovation Impact

- Innovation can be transformative for organisations
- Can be achieved gradually and incrementally in order to grow the organisation over time in a sustainable manner
 - Process, cutting waste, continuous improvements etc.
- Combined with 'step change'
 - New concepts, products, services etc.

Innovation Impact

- Some parties can be negatively impacted
 - Taking market share from competitor(s)
 - Forcing a change in the service or product expectation
 - Effecting competitors profit margins by reducing cost
 - Improving quality thereby damaging competitor's perceived quality
 - Putting a competitor out of business

Blockbuster (1985 - 2010)

- Blockbuster filed for bankruptcy in 2010 due to failure to adapt to the changing market of media rental.
- Media piracy and downloads became popular.
- Netflix (who were posting DVDs) reacted by providing a media streaming approach.



Toys “R” Us (1948 - 2017)

- In 2000 the organisation signed an agreement with Amazon to sell toys.
- Other organisations developed by expanding to an online platform.
- By the time Toys “R” Us broke into the market, competitors were established and the organisation failed due to financial difficulty.



Compaq (1982 - 2002)

- One of the most successful computer and laptop organisations during the 1980's & 1990's.
- Failed due to online competition of Dell.
- The organisation was purchased by HP in 2002 to retain the brand name, and was ultimately discontinued in 2013.



Tasks

The 3 previous examples focus on an organisation's failure to adapt to the online market, where competitors took advantage of the climate at the time, consider factors other than online competition to determine:

- 1) How an organisation has failed due to the innovative actions of other businesses or competitor.
- 2) What could be learned from the failure of the chosen organisation in terms of preventing a reoccurrence?

Relationships with Innovation - Improvement

- Improvement may result in enhanced performance of:
 - Product
 - Process
 - Service
- Innovation and improvement both involve change that adds value
- Improvement is often restricted as it is linked to an existing entity

Relationships with Innovation - Invention

- An invention is characterised as not having existed previously
- Innovation can be something new or a changed entity such as a product, service, process etc.
- Innovation should be considerate to add value
- An innovation does not need to contain an invention

Relationships with Innovation - Creativity

- *“Creativity is seeing what everyone else has seen, and thinking what no one else has thought”* (Albert Einstein, n.d.)
- Creativity may be described as a concept or solution to a problem
- Creativity is part of innovation in terms of the innovation process, activities and culture.
- For innovation, creativity must also be managed with validation, development and deployment.

Relationships with Innovation - Research

- Research is investigative and can be both qualitative & quantitative
- Research is used to acquire knowledge and new information
- The connection between research and innovation is that research is important to determine: user behaviours; user trends; new technologies etc.
- Knowledge gained through research can be transferred to aid innovation

Relationships with Innovation - Development

- Development consists of improving existing and new:
 - Products
 - Services
 - Technologies
 - Methods & processes
- Development processes may result in innovation if a radical change is established through the development process

Innovation Management

- An innovation management system can aid with:
 - Effectively achieve successful innovations
 - Accelerate the speed of innovations
 - Managing challenges and risks
 - Sustained success
 - Pursuing opportunities more effectively

Innovation Management

- Alignment of innovation activities across the organisation
- Resource allocation
- Flexibility to adapt to exploring new opportunities as well as managing current activities
- Promotion of a culture that compliments innovation
- Remove barriers and provide support to innovation activities

Innovation Management - Fundamentals

- Context of the organisation
- Leadership
- Planning
- Support
- Operations
- Performance evaluation
- Improvement

Innovation Management - The 8 Principles

- To outline the effective management of innovation
- Provide rationale of the principles
- Associated benefits of the principles
- How to improve performance
- The principles are guidelines and should be adapted for the organisation to suit its needs

Principles 1 - Realization of Value

- Value can be in terms of financial or non-financial
- This is fundamental to the sustainability of an organisation
- Provides a competitive advantage against competitors
- Sustainable growth
- Improved reputation of the organisation
- Setting objectives and a criteria for measuring performance

Principles 2 - Future Focussed Leaders

- Buy in needs to be at all levels to enable success
- Inspire and encourage everyone to improve and be involved
- Challenge the 'norm' – *“this is how we’ve always don it”* and *“if it isn’t broke, don’t fix it”* attitude – there is always room for improvement in a constant pursuit for perfection.
- A clear long term vision should be communicated & established
- Provide support for people at all levels
- Benefit from focus and working towards a common goal

Principles 3 - Strategic Direction

- Every department will have their own agenda and it is important to align for a common target that everyone can support
- The strategic direction can help establish the required resource
- Shared knowledge through collaboration across the organisation
- Shared vision
- Review and update the vision as the organisation evolves

Principles 4 - Culture

- Respect for opinions, beliefs, behaviours and strategy
- Due to the creative nature of innovation it is not necessarily compatible with a rigid traditional management method
- Benefits include sharing of knowledge and support from peers
- Encourage trust and collaboration
- Promoting exploration and encouraging people to challenge their comfort zones
- Encourage creativity and allowing learning through failure

Principles 5 - Exploiting Insights

- Build knowledge through sources both internal & external
- Diverse sources of knowledge should be used
- Increased innovation effectiveness by identifying importance
- Improves prioritization of innovations
- Reduces uncertainty and helps with risk management

Principles 6 - Managing Uncertainty

- Failure to manage a risk can be catastrophic for a project
- Managing risks potentially increases realisation of value by making the organisation more resilient
- Reduces uncertainty
- Actively encourage identification of risk so that it may be managed effectively
- Risk managing is not the same as risk evasion as risk taking may help with growth through exploration

Principles 7 - Adaptability

- The ability to adapt to change is important
- The innovation process needs to be agile to foster creativity
- New ideas often require a change in structure and approach
- Shorter learning cycles to adapt to changes
- Manage a change in work capacity through flexible resources and through running parallel activities

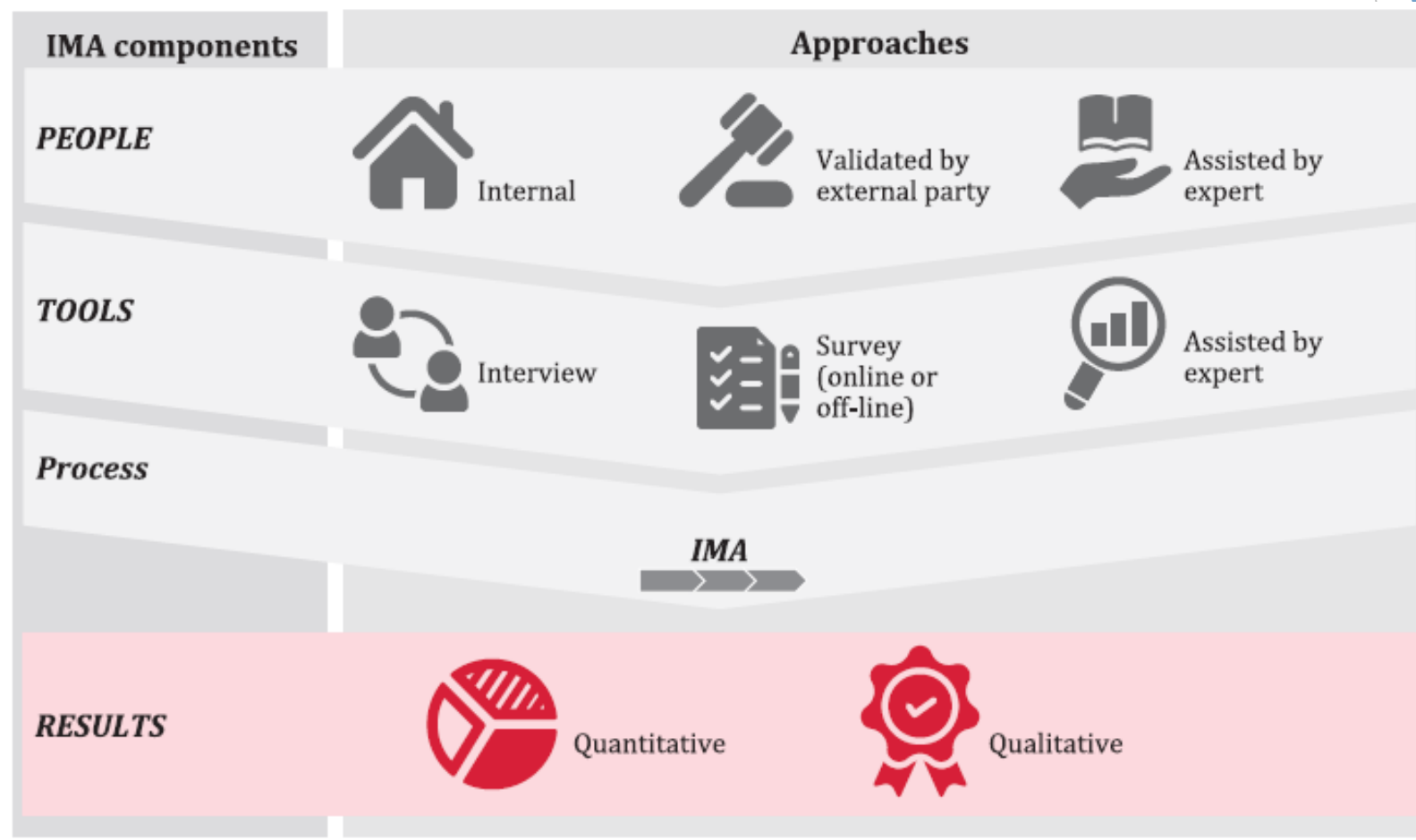
Principles 8 - Systems Approach

- An example of a systems approach is the innovation management framework
- Promotion of regular evaluation and measurement of innovations
- Improvement for organisational efficiency, effectiveness and learning
- Ability to solve complex problems using a determined methodology
- Determine innovation indicators to measure innovation

Innovation Management - Assessment

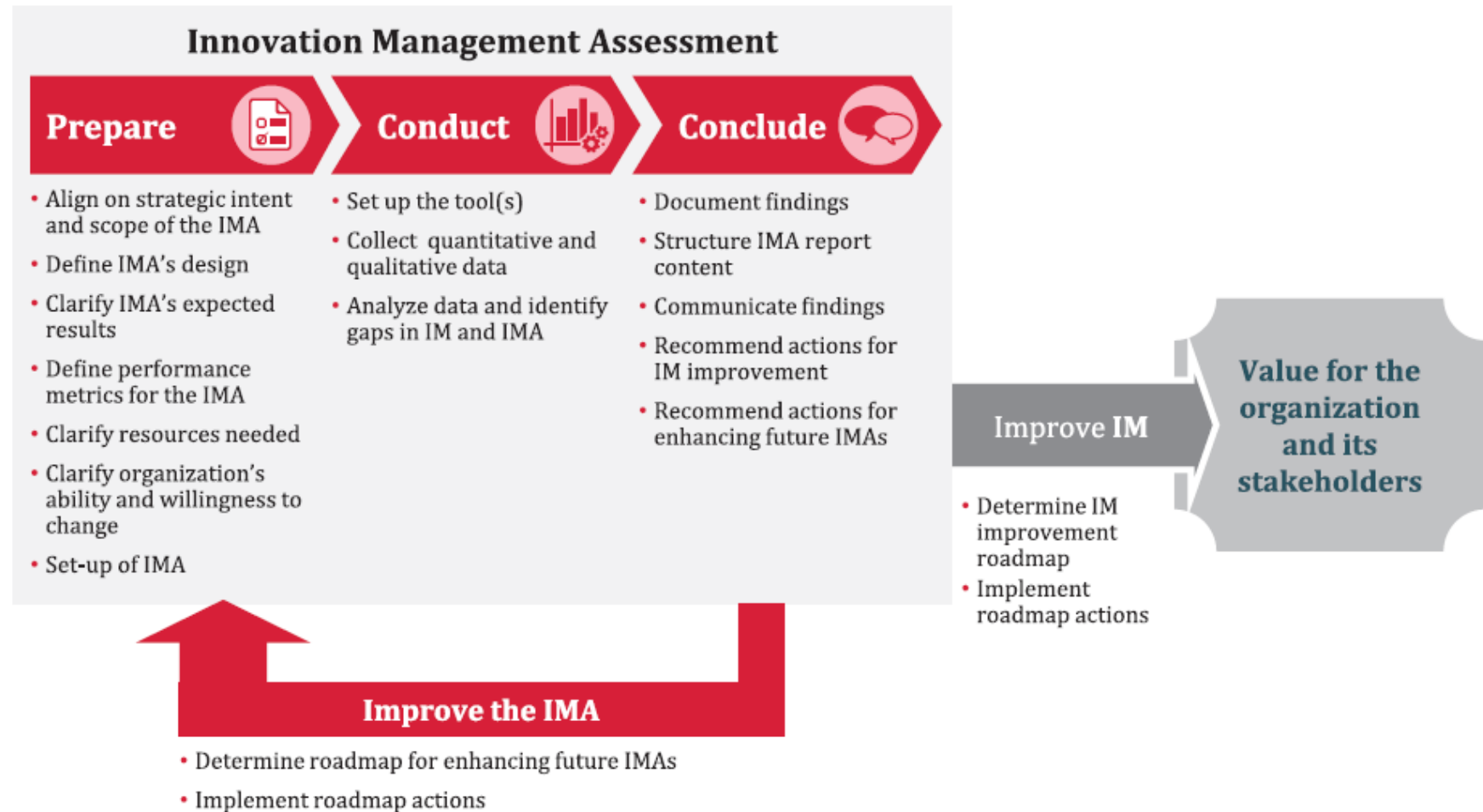
- IMA (Innovations Management Assessment) is a high level scan of the performance of innovation within an organisation
- The measure can be quantitative and qualitative in nature
- For larger organisations with several different work units it is advisable to have several different IMAs in place at those units
- IMA may be conducted by a dedicated team of people within the organisation and may or may not include individuals from different units
- This can be conducted using an array of resources such as surveys or even interviews

Innovation Management - Assessment



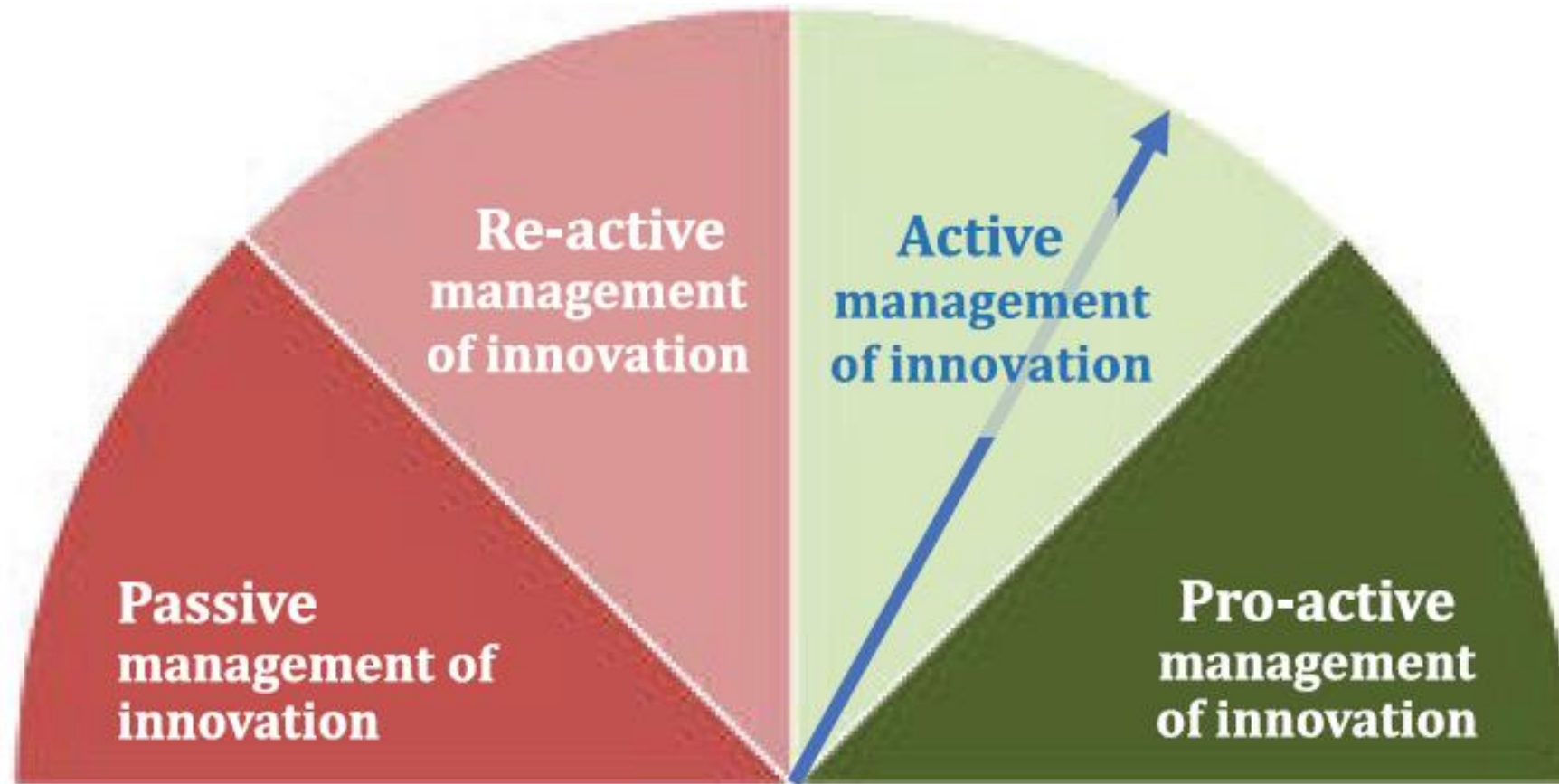
Key Components of, and approaches of Innovation Management Diagram (ISO 56004, 2019)

Innovation Management - Assessment



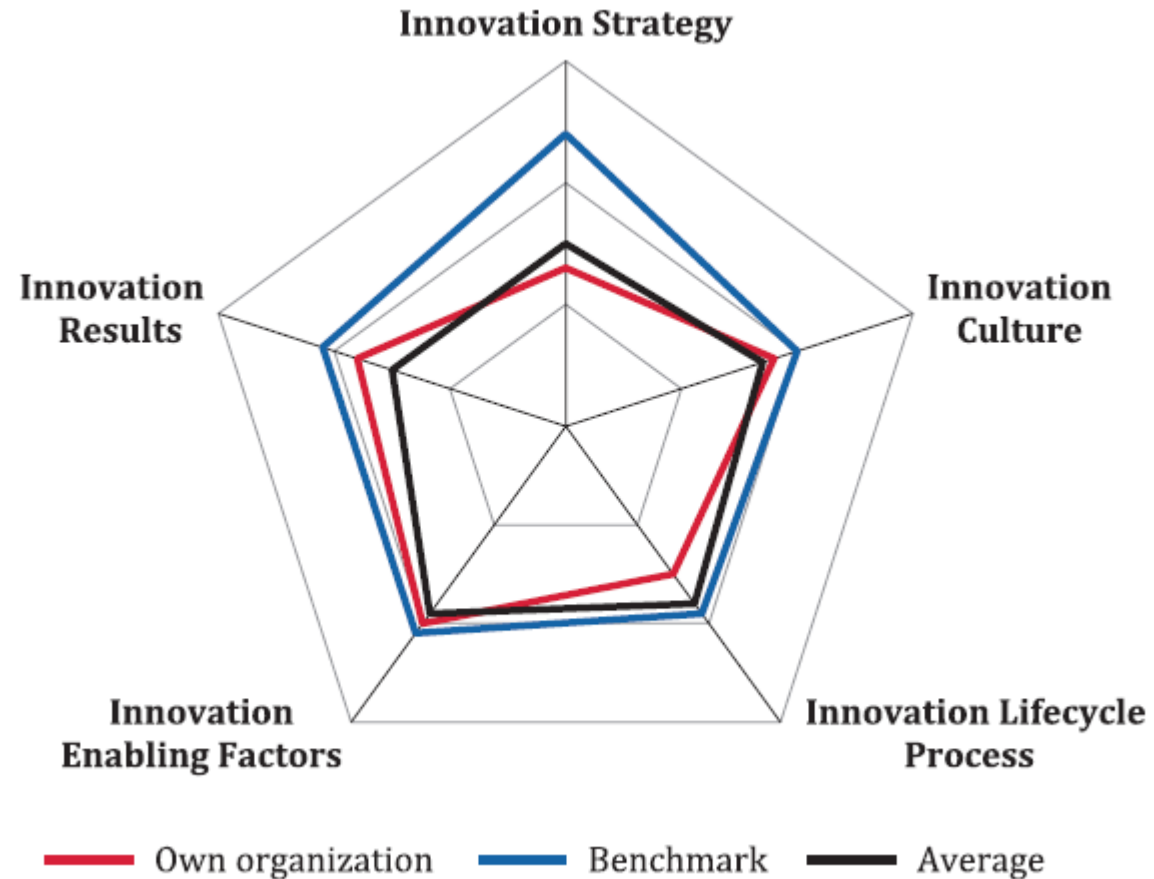
IMA Diagram (ISO 56004, 2019)

Key Performance Indicators - Example 1



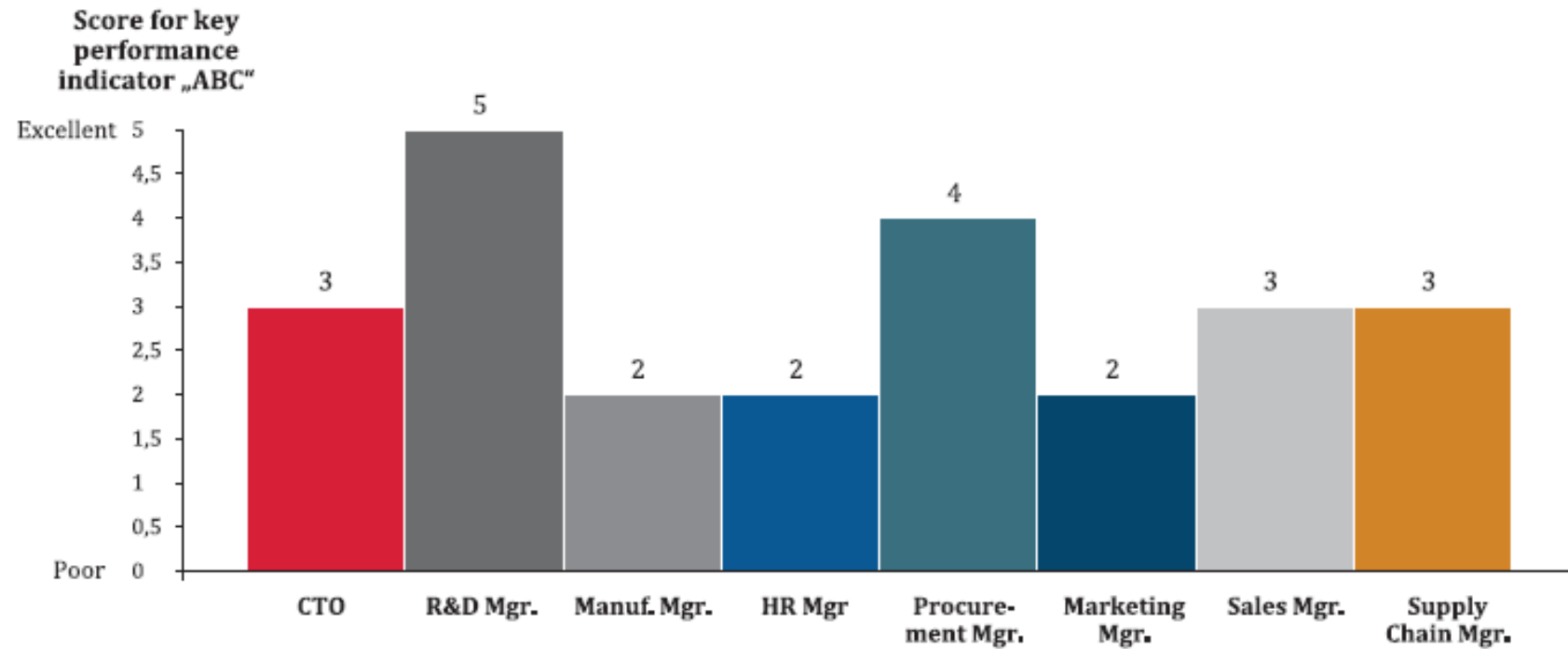
Qualitative Dashboard (ISO 56004, 2019)

Key Performance Indicators - Example 2



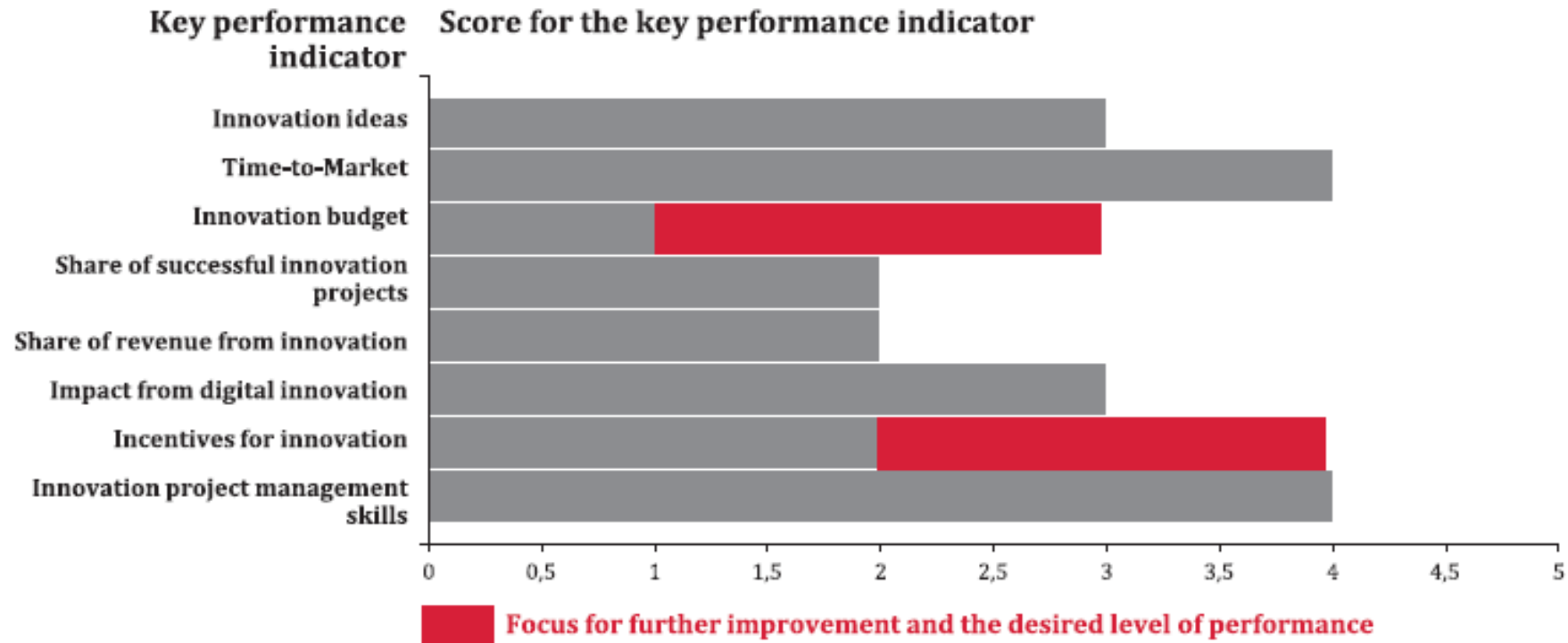
Radar Diagram of Performance (ISO 56004, 2019)

Key Performance Indicators - Example 3



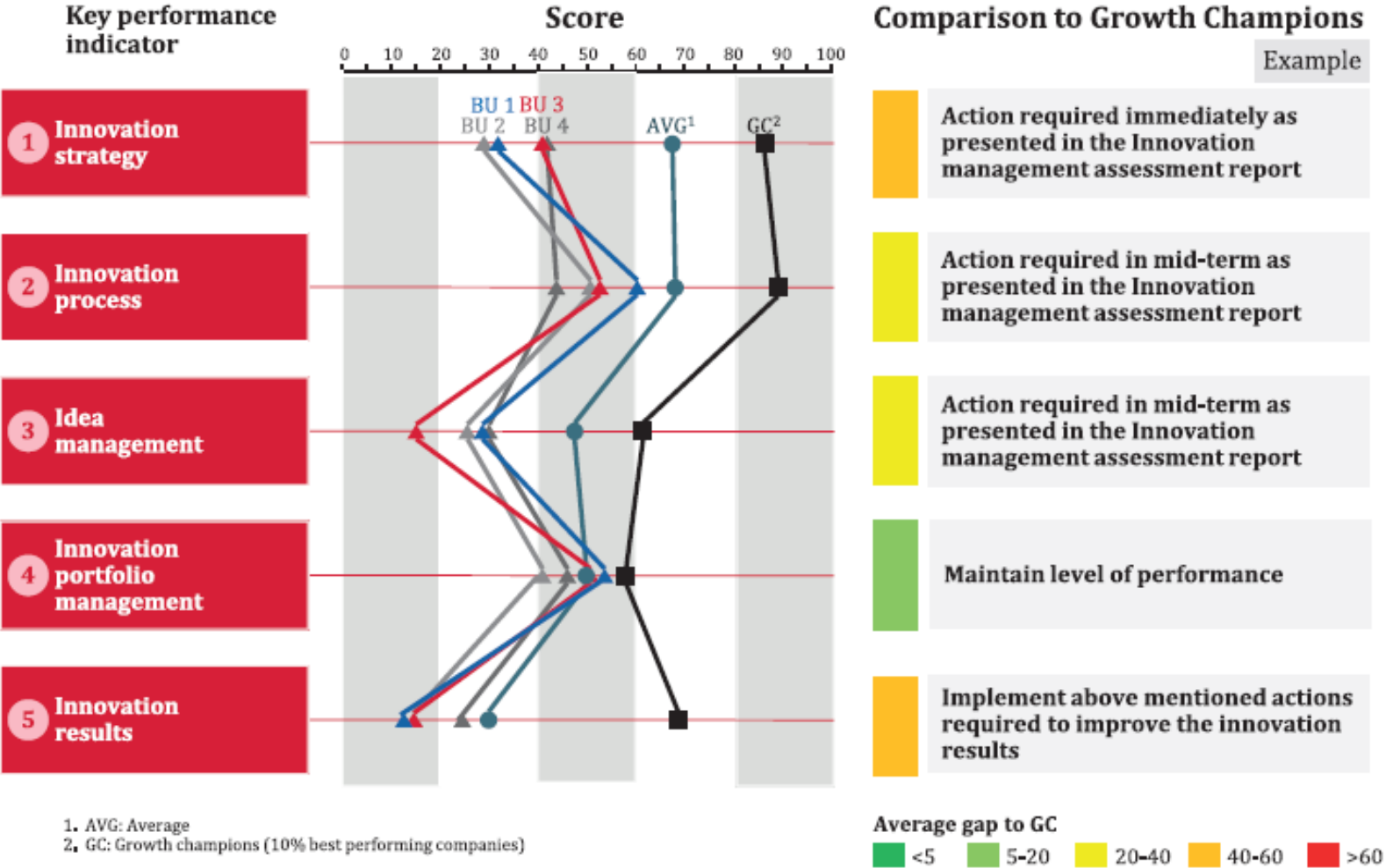
Perspective on Innovation Management Performance (ISO 56004, 2019)

Key Performance Indicators - Example 4



Performance Gaps on Innovation Management Performance (ISO 56004, 2019)

Key Performance Indicators - Example 5



Scoring of Innovation Management Performance (ISO 56004, 2019)

Key Performance Indicators - Example 6



Scoreboard of Innovation Management Performance (ISO 56004, 2019)