ADL ON PORTFOLIO MANAGEMENT

Discussion slides for ISO Meeting ISO 56000

Innovation Management for SME

23 MAY 2024
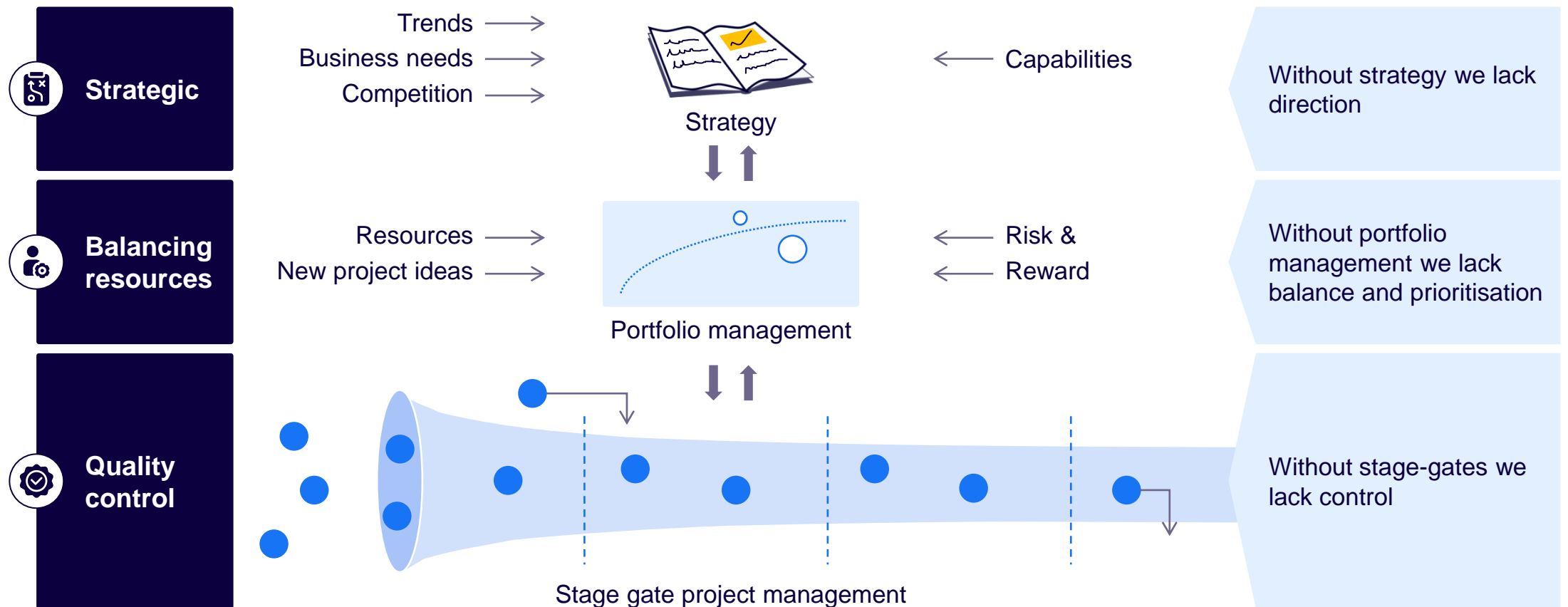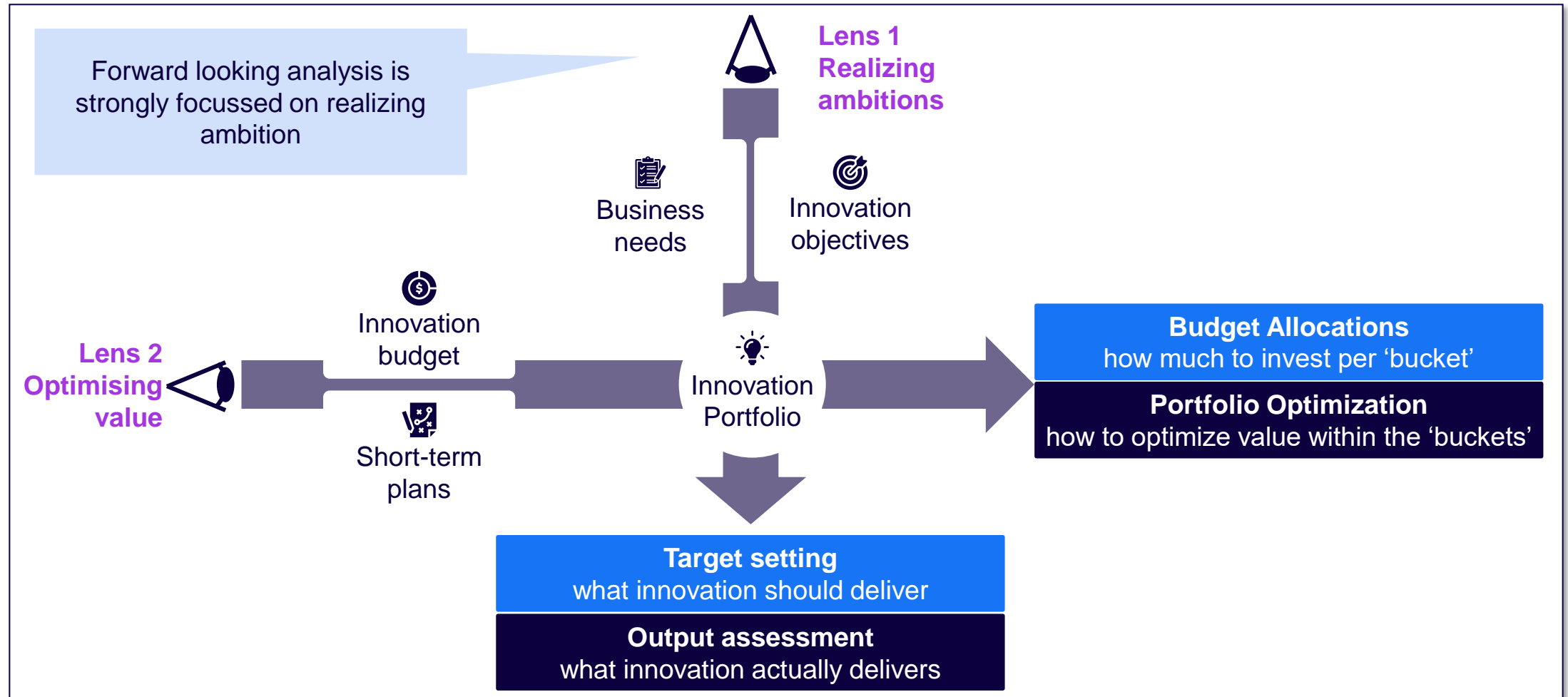
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We view R&D portfolio management as the process that links strategy with activity by selecting options to develop and projects to support

The role of R&D Portfolio Management

● Individual project

Strategic

Trends →
Business needs →
Competition →

← Capabilities

Strategy

Without strategy we lack direction

Balancing resources

Resources →
New project ideas →

← Risk &
← Reward

Portfolio management

Without portfolio management we lack balance and prioritisation

Quality control

Stage gate project management

Without stage-gates we lack control
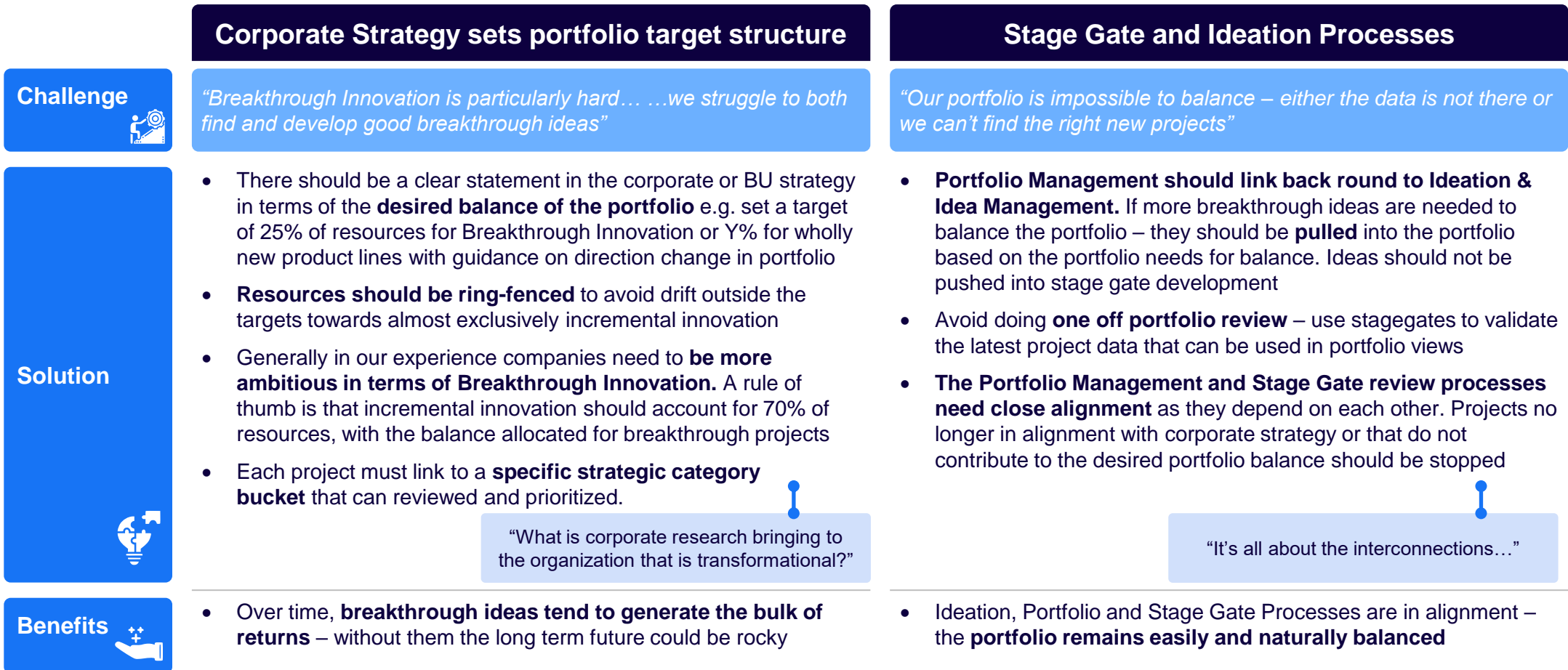
R&D Portfolio optimization needs to cover two dimensions: realizing ambitions and optimizing value. In this document we are focused on realizing ambitions

Forward looking analysis is strongly focussed on realizing ambition

Lens 1 Realizing ambitions

Business needs

Innovation objectives

Lens 2 Optimising value

Innovation budget

Short-term plans

Innovation Portfolio

Budget Allocations
how much to invest per 'bucket'

Portfolio Optimization
how to optimize value within the 'buckets'

Target setting
what innovation should deliver

Output assessment
what innovation actually delivers

Corporate strategy must provide clear guidance on portfolio balance for different types of innovation. New projects should be selected to balance the portfolio over time

Corporate Strategy sets portfolio target structure	Stage Gate and Ideation Processes

Challenge

"Breakthrough Innovation is particularly hard… …we struggle to both find and develop good breakthrough ideas"

"Our portfolio is impossible to balance – either the data is not there or we can't find the right new projects"

Solution

- There should be a clear statement in the corporate or BU strategy in terms of the **desired balance of the portfolio** e.g. set a target of 25% of resources for Breakthrough Innovation or Y% for wholly new product lines with guidance on direction change in portfolio
- **Resources should be ring-fenced** to avoid drift outside the targets towards almost exclusively incremental innovation
- Generally in our experience companies need to **be more ambitious in terms of Breakthrough Innovation.** A rule of thumb is that incremental innovation should account for 70% of resources, with the balance allocated for breakthrough projects
- Each project must link to a **specific strategic category bucket** that can reviewed and prioritized.

"What is corporate research bringing to the organization that is transformational?"

- **Portfolio Management should link back round to Ideation & Idea Management.** If more breakthrough ideas are needed to balance the portfolio – they should be **pulled** into the portfolio based on the portfolio needs for balance. Ideas should not be pushed into stage gate development
- Avoid doing **one off portfolio review** – use stagegates to validate the latest project data that can be used in portfolio views
- **The Portfolio Management and Stage Gate review processes need close alignment** as they depend on each other. Projects no longer in alignment with corporate strategy or that do not contribute to the desired portfolio balance should be stopped

"It's all about the interconnections…"

Benefits

- Over time, **breakthrough ideas tend to generate the bulk of returns** – without them the long term future could be rocky

- Ideation, Portfolio and Stage Gate Processes are in alignment – the **portfolio remains easily and naturally balanced**

Leading companies have learned to avoid "bubblefests" and focus on criteria linked to explicit targets. Portfolio reviews should be focussed on actions not reporting.

	Avoid Paralysis by Analysis	**Make Portfolio Decisions**
Challenge	*"Portfolio Management takes too much effort – reporting takes too much time and I can't digest the lengthy reports!"*	*"We spend hours talking but nothing changes – some projects have been in the doldrums for years"*
Solution	• **Make conscious decisions about reporting.** Always ask 'to whom?' and 'for what purpose?'. Many organizations find a regular semi-annual process for senior review is the right frequency. *"We need to avoid endless 2D graphical bubblefests…"* • Restrict constraints to those within the corporate strategy **and avoid overly constraining the portfolio** with targets that are not orthogonal (e.g. time horizon and incremental vs. breakthrough) • Consider a central analyst team for project valuation to ensure decisions are taken on a common basis and minimize distraction to project leaders. Use IT tools – but ensure they help not hinder *"Project valuation can take a lot of effort"*	• Portfolios are not primarily reporting tools but instead they are **decision making tools.** Review is not sufficient – action is needed. There must be a committee empowered to **make go, no-go or accelerate decisions** on the portfolio to shape it to meet the targets in the corporate strategy • Regular action is needed to **clean up the portfolio** and remove legacy, failing projects – too often the failing figurehead projects of yesterday are left as orphans. *"Always ask "Why should this remain?" and not "Why should this be removed?"* • **Check for flow through the portfolio** – long term projects should be moving closer to reality. A stagnant portfolio is a failing portfolio
Benefits	• Let **decision makers & project leaders focus** on their 'day job'	• **Better aligned portfolio** with unwanted projects removed to deliver innovation in line with corporate strategy

The portfolio review is not just about existing activities – it should also be an opportunity to "pull in" new projects to move the portfolio to its intended structure

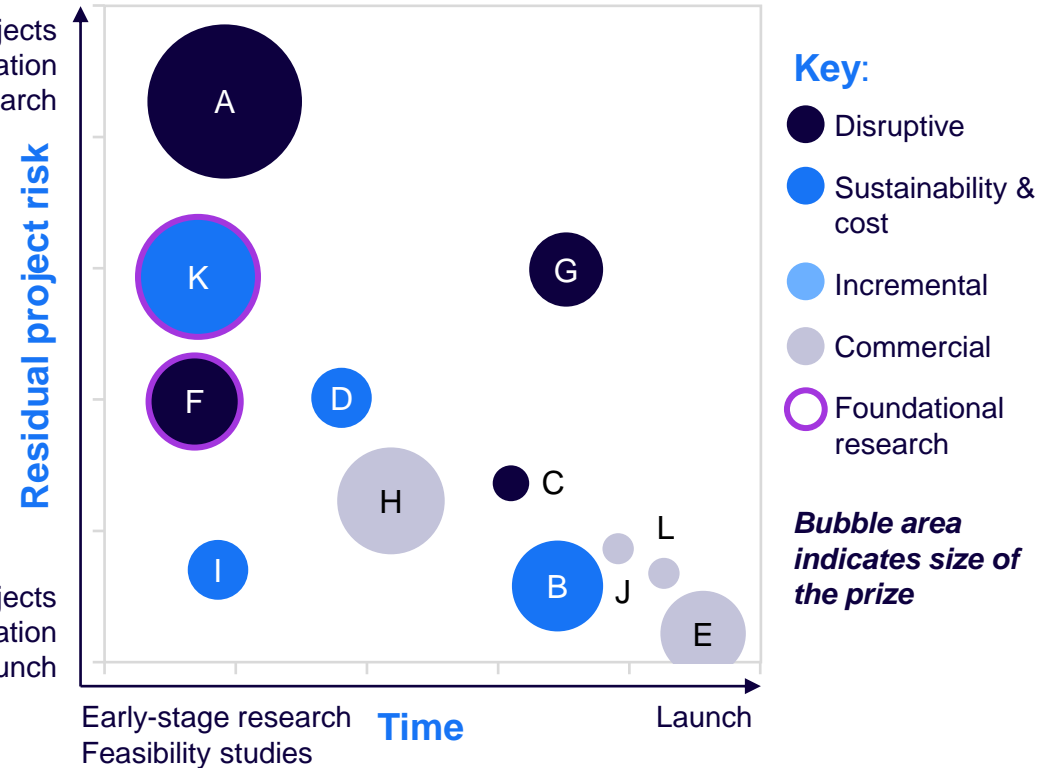## The link to Ideation and Stage Gate processes

Potential opportunity list

Portfolio "cut"	Idea
Disruptive Innovation	
Sustainability and cost innovation	
Incremental innovation	
Commercial innovation	

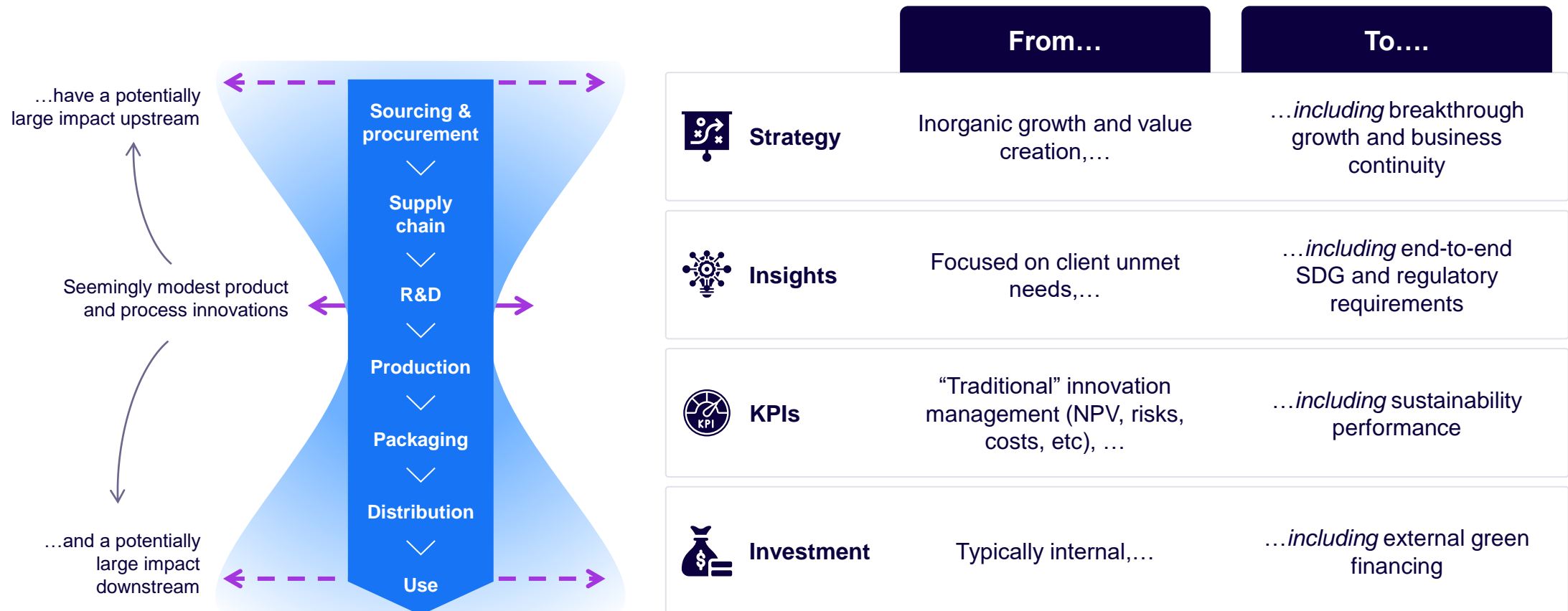High risk projects
Disruptive innovation
Early-stage research

Residual project risk

Low risk projects
Incremental innovation
Projects approaching launch

Early-stage research
Feasibility studies

Time

Launch

Key:
- Disruptive
- Sustainability & cost
- Incremental
- Commercial
- Foundational research

Bubble area indicates size of the prize

Source: Finding your balance: insight into world class portfolio management; Arthur D. Little

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Changing the R&D portfolio and the products can have a strong impact upstream and downstream – getting it wrong can have large and often hidden consequences

EXAMPLES

How to deal with the sustainable innovation "bullwhip effect"

…have a potentially large impact upstream

Seemingly modest product and process innovations

…and a potentially large impact downstream

Sourcing & procurement
Supply chain
R&D
Production
Packaging
Distribution
Use

		From…	To….
	Strategy	Inorganic growth and value creation,…	…*including* breakthrough growth and business continuity
	Insights	Focused on client unmet needs,…	…*including* end-to-end SDG and regulatory requirements
	KPIs	"Traditional" innovation management (NPV, risks, costs, etc), …	…*including* sustainability performance
	Investment	Typically internal,…	…*including* external green financing

There are four pillars to developing a solid portfolio forward look

Funnel/stage-gate management

We need project level data on performance and whether projects are on-track and whether they are overcoming technical challenges.

The funnel data should be based on stagegate reviews (i.e. validated / QA project-level data).

We possibly need to understand the resources that are available or that can be freed up.

Portfolio management

We need a clear view on "what good looks like" in terms of intended / target portfolio structure

We need a governance review process that allows us to do retrospective (for lessons learned) and forward look analysis (to allow us to "pull" new ideas into portfolio)

Innovation roadmapping

We need a bottom-up project-level view on probability adjusted time to market, sales impact and key roadmap for delivery for ongoing projects and how that will likely evolve over time

We also need to know what new ideas/projects could contribute to the portfolio and what these projects could look like over the next checkpoints.

Persona-based innovation dashboards

We need code and good user interfaces to allow portfolio reviewers to explore options and "fast forward" the portfolio to see how it will mature with current projects

And either launch or define characteristics of the projects that need to be launched to make sure the portfolio delivers and meets its target state.

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THE DIFFERENCE