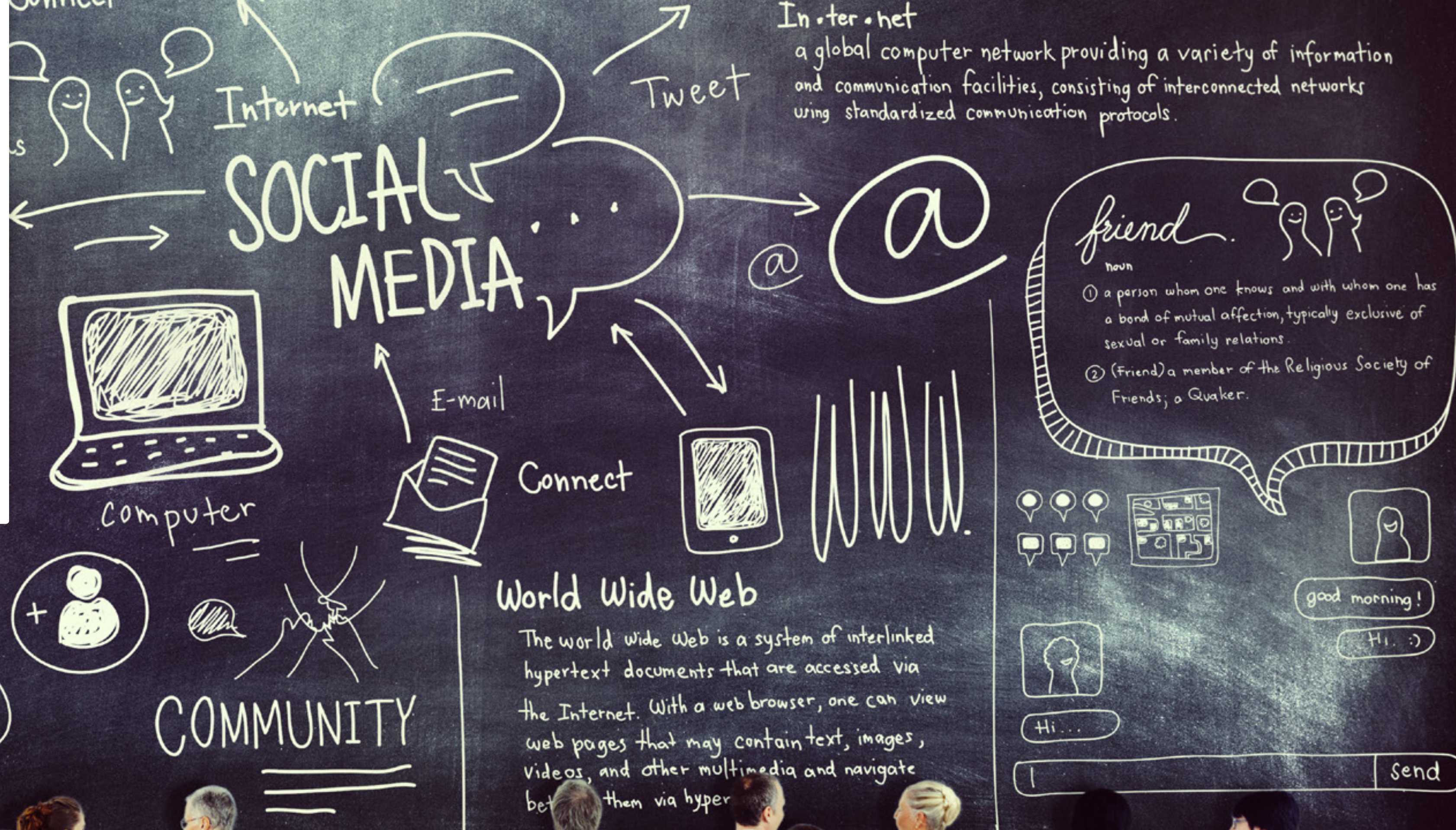


Deloitte.

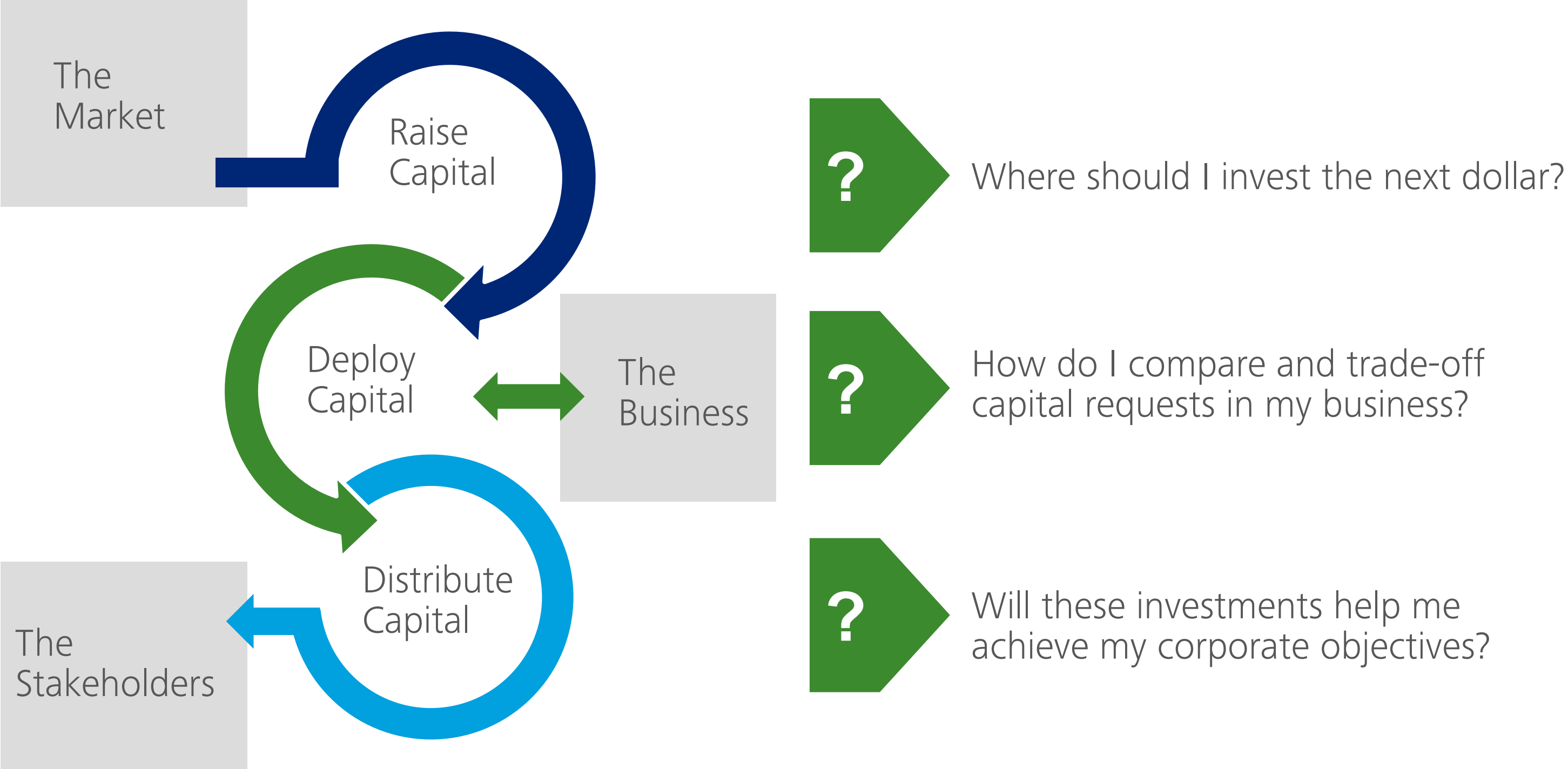
Capital Allocation Management

February 2016



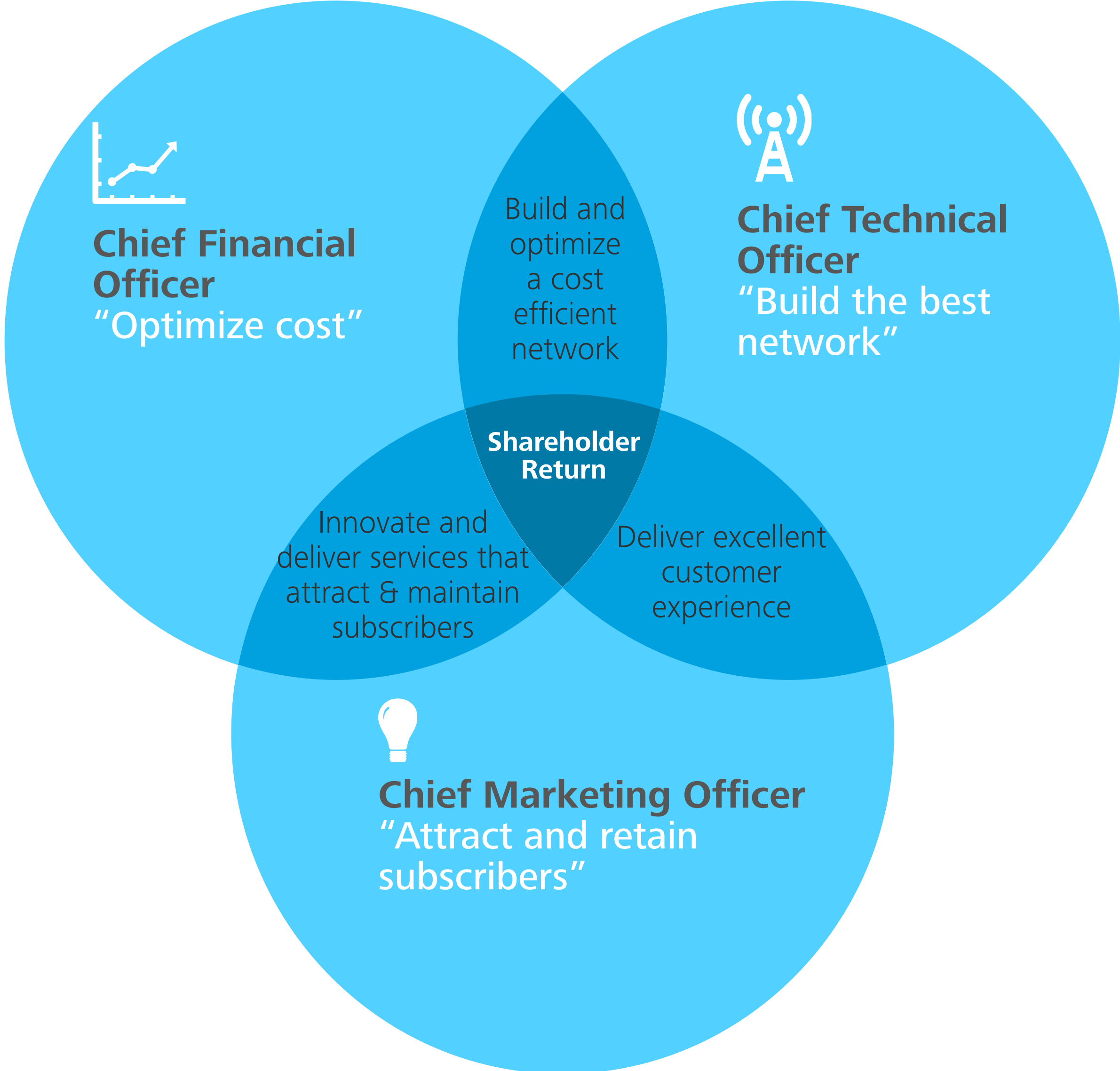
Effective capital allocation is at the heart of value creation

Capital allocation decisions can occur at all levels of an organization, and usually mean different things to different people.



Executives are not always aligned in their investment priorities

The key is building on what they want by focusing on what they have in common.



Achieving a more mature capital allocation process should be a goal of all telecom operator

Good decisions are already being made... they just need to be optimized.

Current State	Capital Allocation Maturity
<p>Decisions are based on advocacy and who has the loudest voice in the room</p> <p>There are many arguments in the organization about who should be funded, and for how much</p> <p>The company adds an increment to last year's network capital base to determine how much to budget this year</p> <p>The company knows it is spending a lot on network capital, but doesn't have an appreciation of whether it is getting a return on its investments</p> <p>Project owners are accountable for time and cost not post implementation benefit</p>	<p>Decisions are not based advocacy, but on a thorough vetting process, evaluation and metrics that effectively describe outcomes</p> <p>Leadership within functional units understand they are allocating based on the needs of the organization, not on the needs of the silo</p> <p>The numerical basis for allocation is based on the logical, rational reasoning for allocation</p> <p>The company is better able to track its spending and realize the returns on its investment through pre-defined metrics</p> <p>The business has a formalized post-investment appraisal process to share best practices</p>

...how do we drive the biggest
'bang-for-the-buck'?

Six issues challenge efficiency in telecom capital projects

Mastering these capital project challenges will increase return on invested capital.

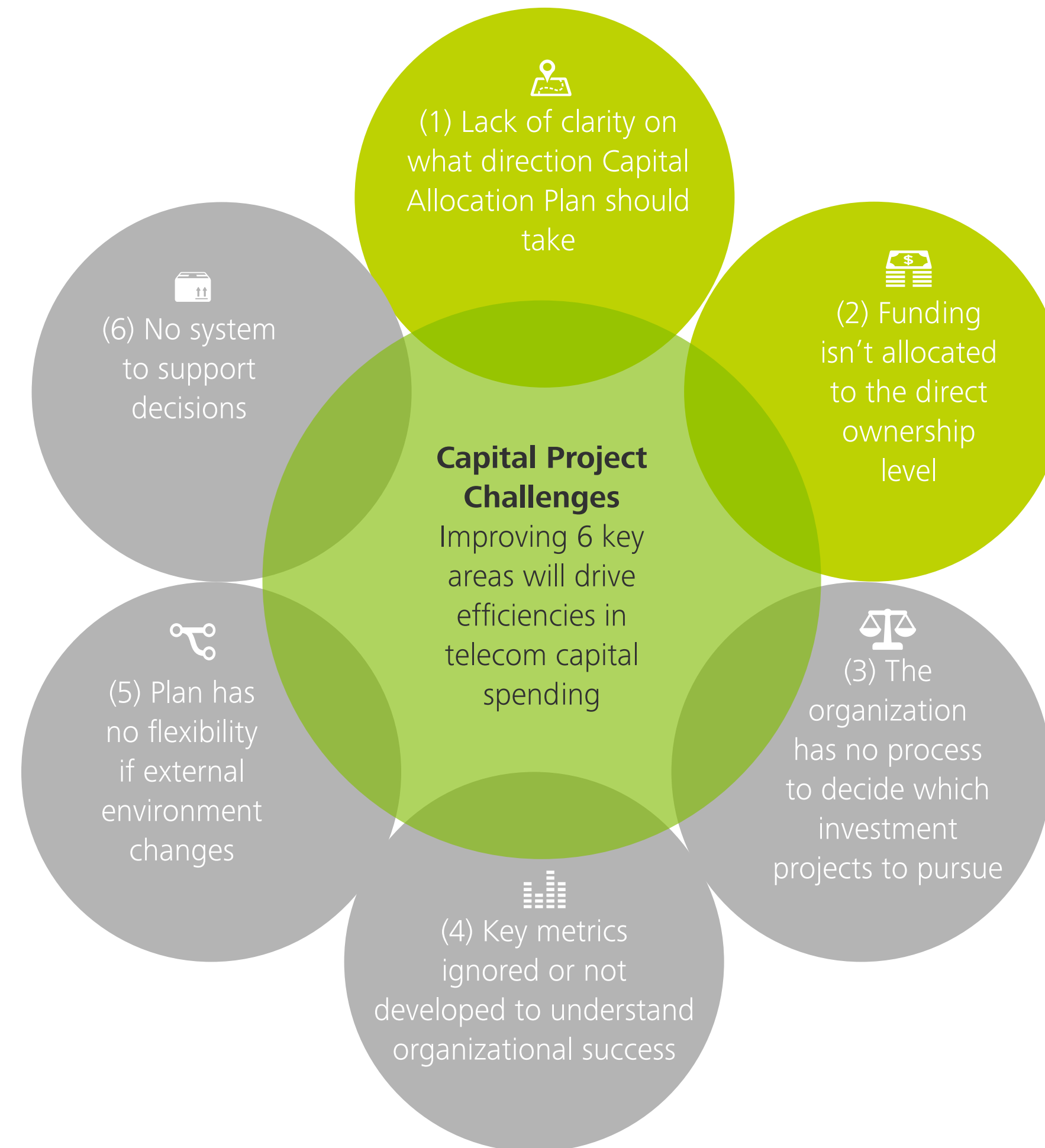


Start by a clear strategy and accountability

Gain clarity of direction & intent and allocate a proper level of funding to the right owners

Solution Highlights

- Deep framing, make sure we solve the right problems, build key relationships and have meaningful conversations.
- Use drivers of shareholder value to determine where the capital needs to be allotted.
- Have key, upfront discussions about what the organization wants as opposed to what the business units want.
- Help the finance organization better understand the value that is being proposed by the engineering group.



Frame issues by asking the three key questions

Knowing our frame helps make sure we solve the right problems.



We create intent by asking what are we going to do and who are the key stakeholders we plan to include. This includes surfacing all of the key issues, uncertainties and biases at the beginning.



Getting clarity around the reasons for the project, and getting stakeholder buy-in is critical to the success of the project. We should be asking this question at the beginning, not the end of the project.



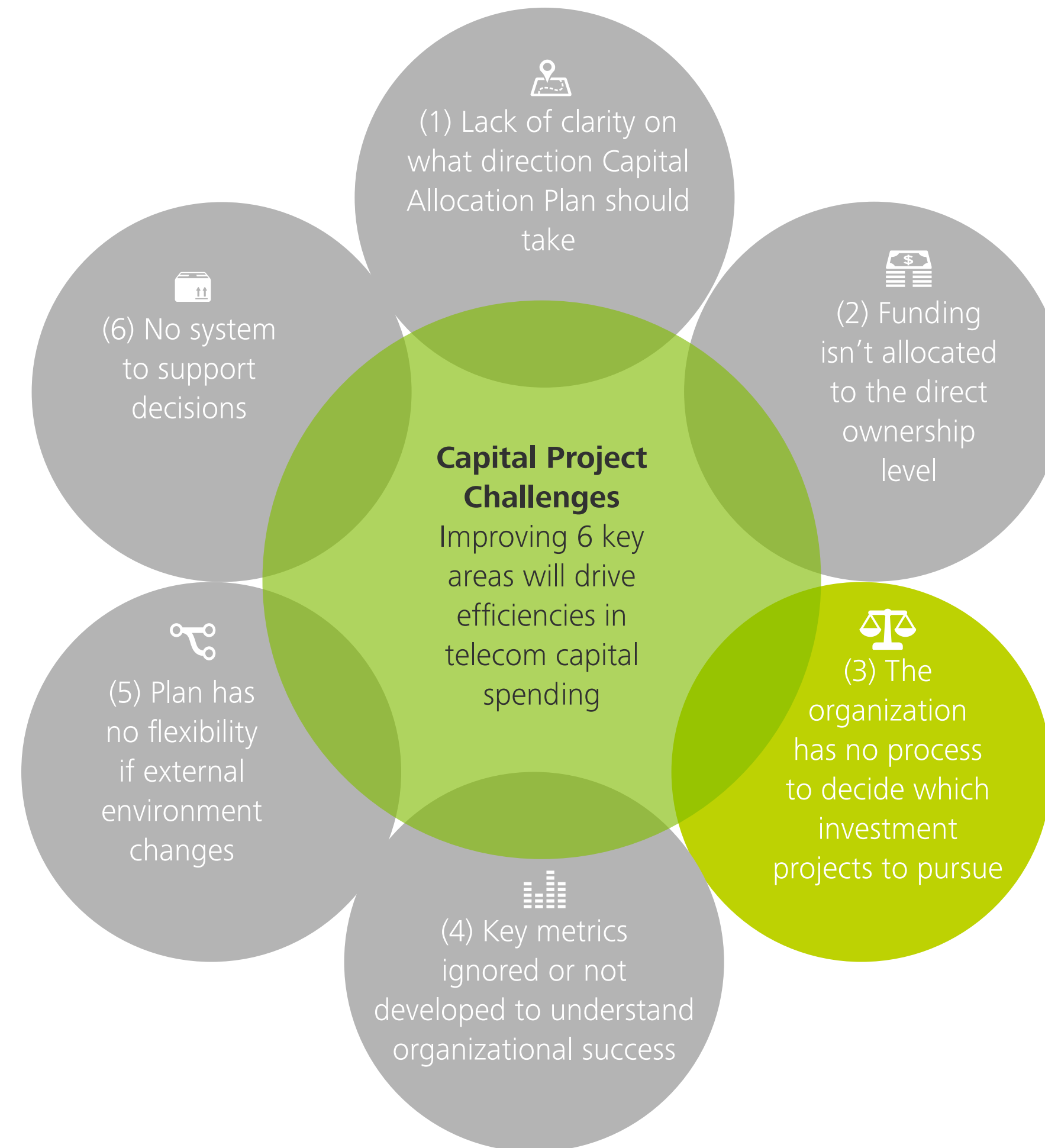
Determining success means determining the key metrics that we will use to help define that success. Without pre-defined metrics, we cannot know if we are successful.

Decisions on investments must be based on clear criteria

Insight into to strategic goals, dependencies, real cost and real profit will shed light into the decision making process.

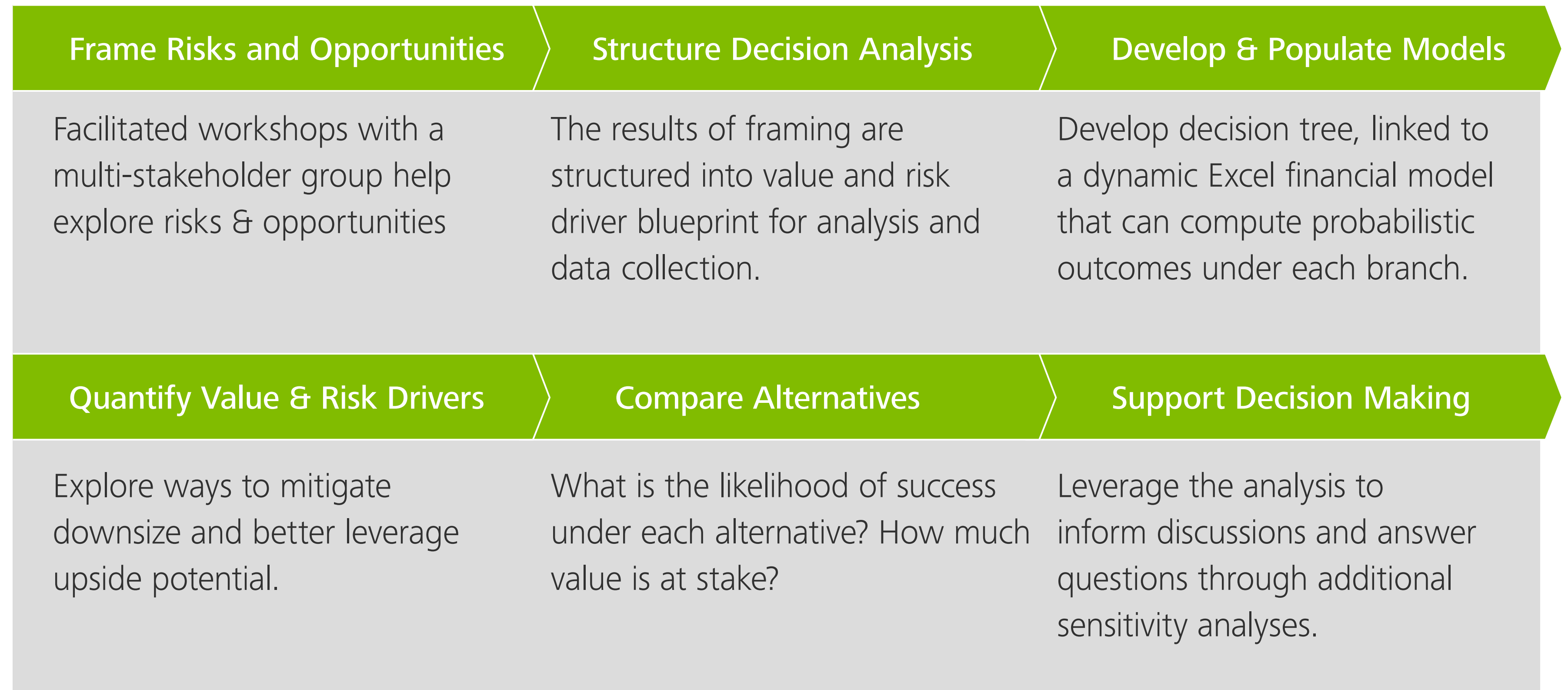
Solution Highlights

- Projects need to be evaluated using the same criteria.
- Develop standardized templates and tools for collecting data efficiently and in the direction of the company strategy.
- Move typical decision-making out of the company's comfort zone into one that is based on logic and proper allocation of resources.
- Create a governance model and empower teams to drive capital allocation.



Building Better Business Cases

High-stake investments can often benefit from structured framing and robust risk-and-return analysis in order to design businesses cases that make the most of the opportunity at hand.

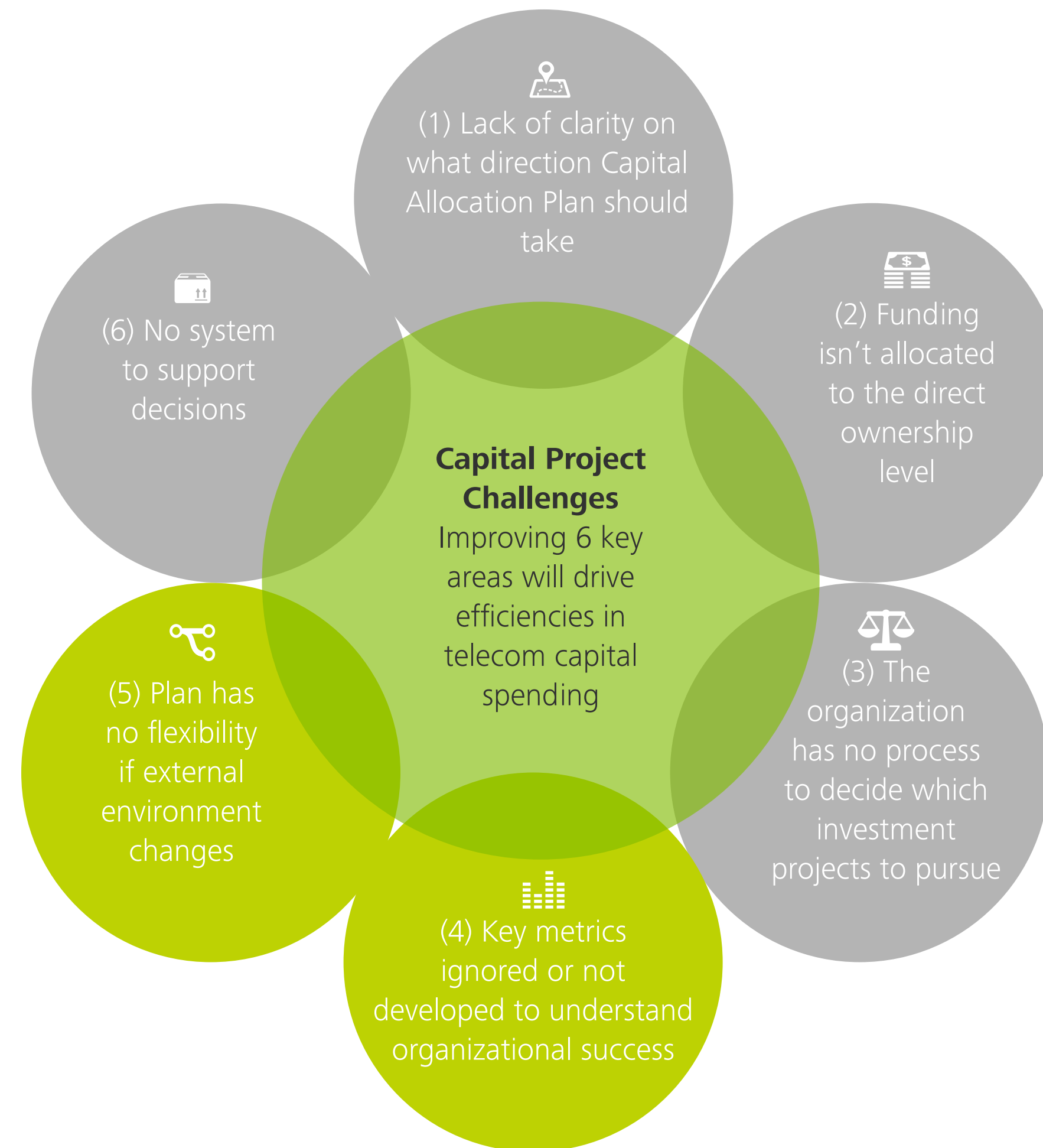


Define and develop metrics to determine success of investments

Continuous monitoring and flexibility in the process is key to ensure sustainability.

Solution Highlights

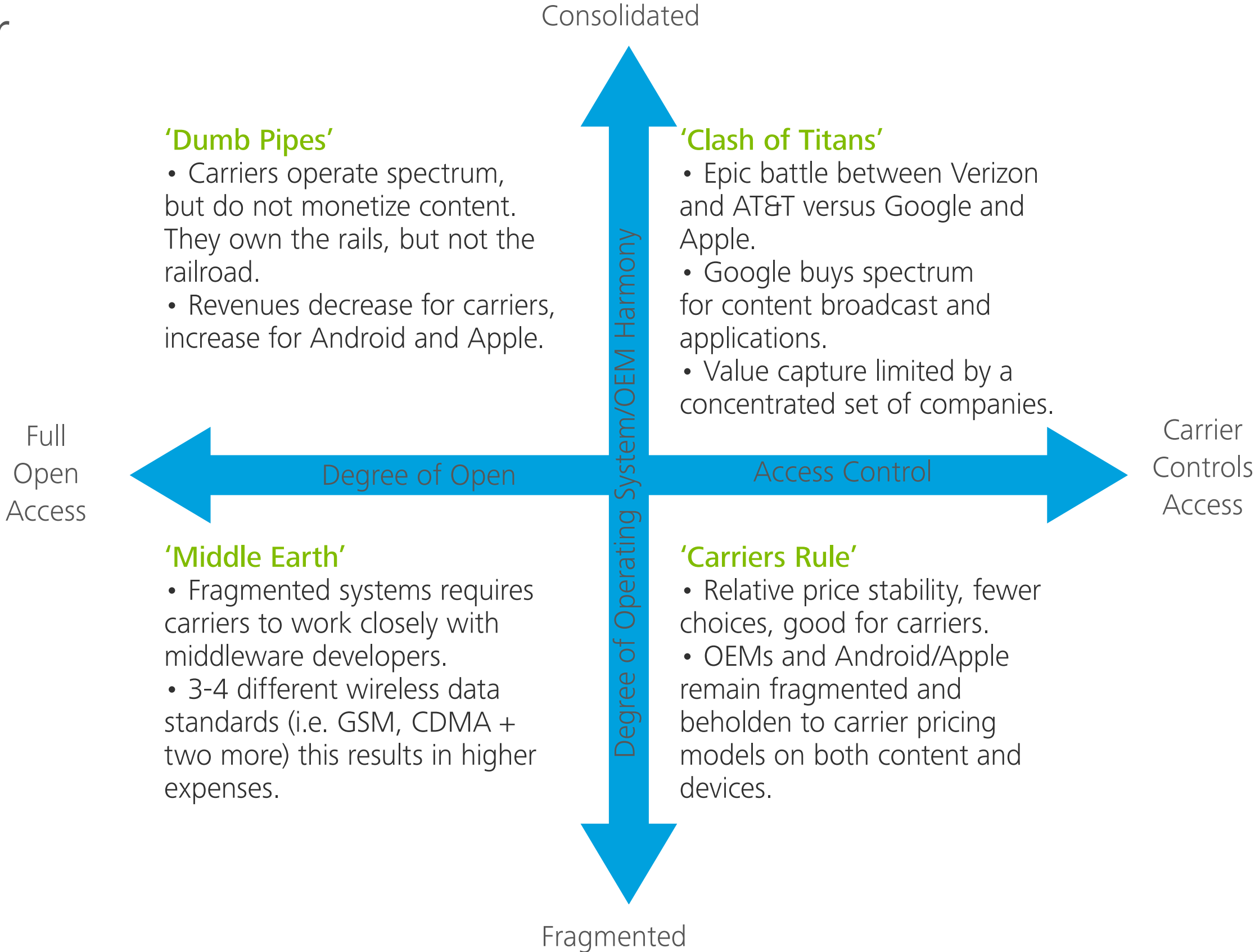
- Create measurable, actionable metrics that can be used to understand whether investments are considered successful.
- Update plan with actuals on a regular basis.
- Continuously monitor plan & allocation of capital to ensure consistency with organization's goals.
- Test capital decision against scenarios, monitor and adjust.



Scenario analysis to allow for informed investment choices

Helping to frame uncertainty to empower more robust investment design and decision making.

Example of wireless scenarios



<p>1. Anticipate Build scenarios of the future.</p>	<p>2. Formulate Create an optimal strategy for each scenario.</p>
<p>4. Operate Manage portfolio of options. Preserve, exercise or abandon.</p>	<p>3. Accumulate Identify strategic options that work across scenarios.</p>

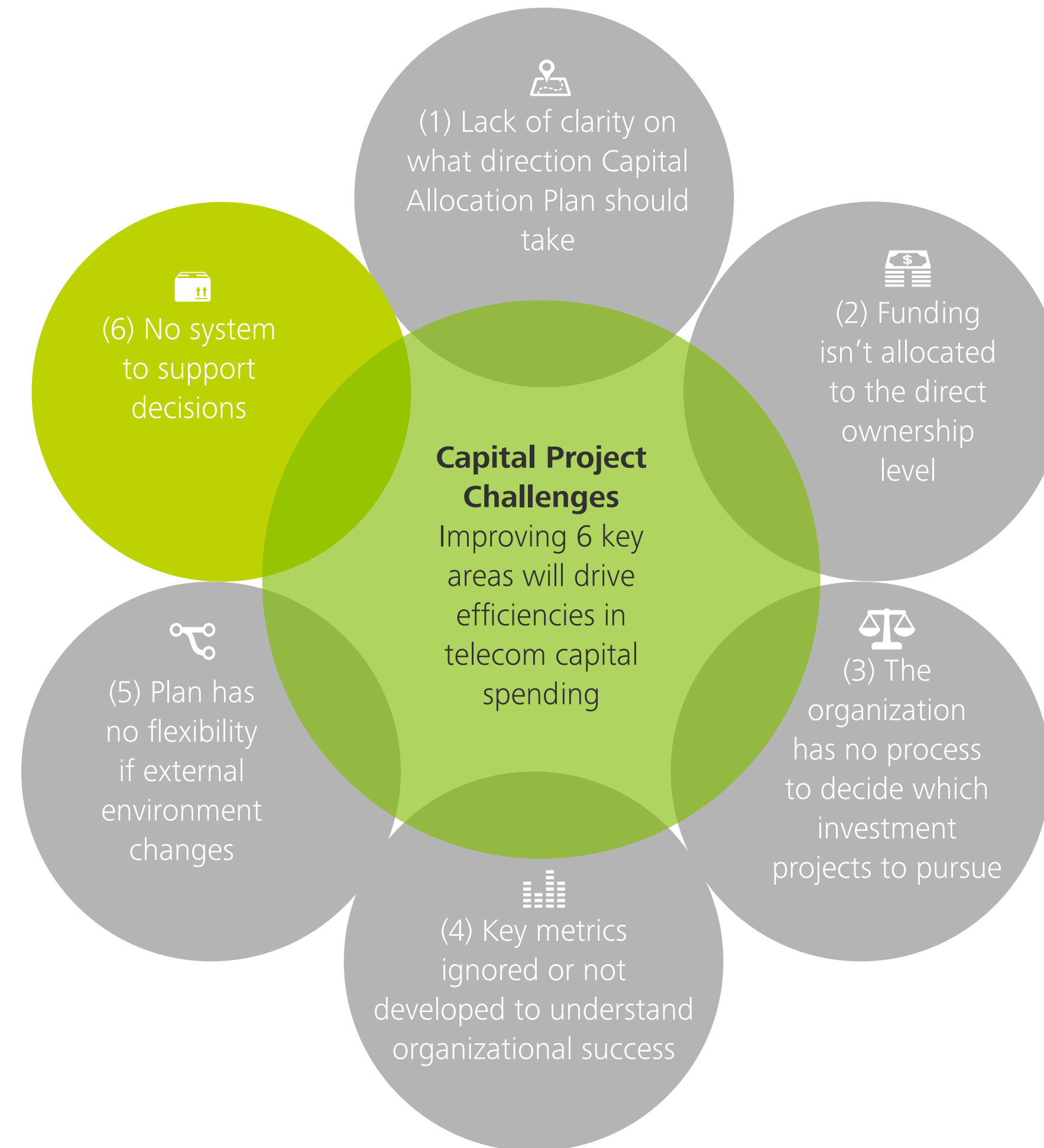
These wireless scenarios helped a client make better decisions about their external environment.

Systems should be in place to automate processes & support analysis

Automation and visualization are key to ensure trust in the process and drive adoption.

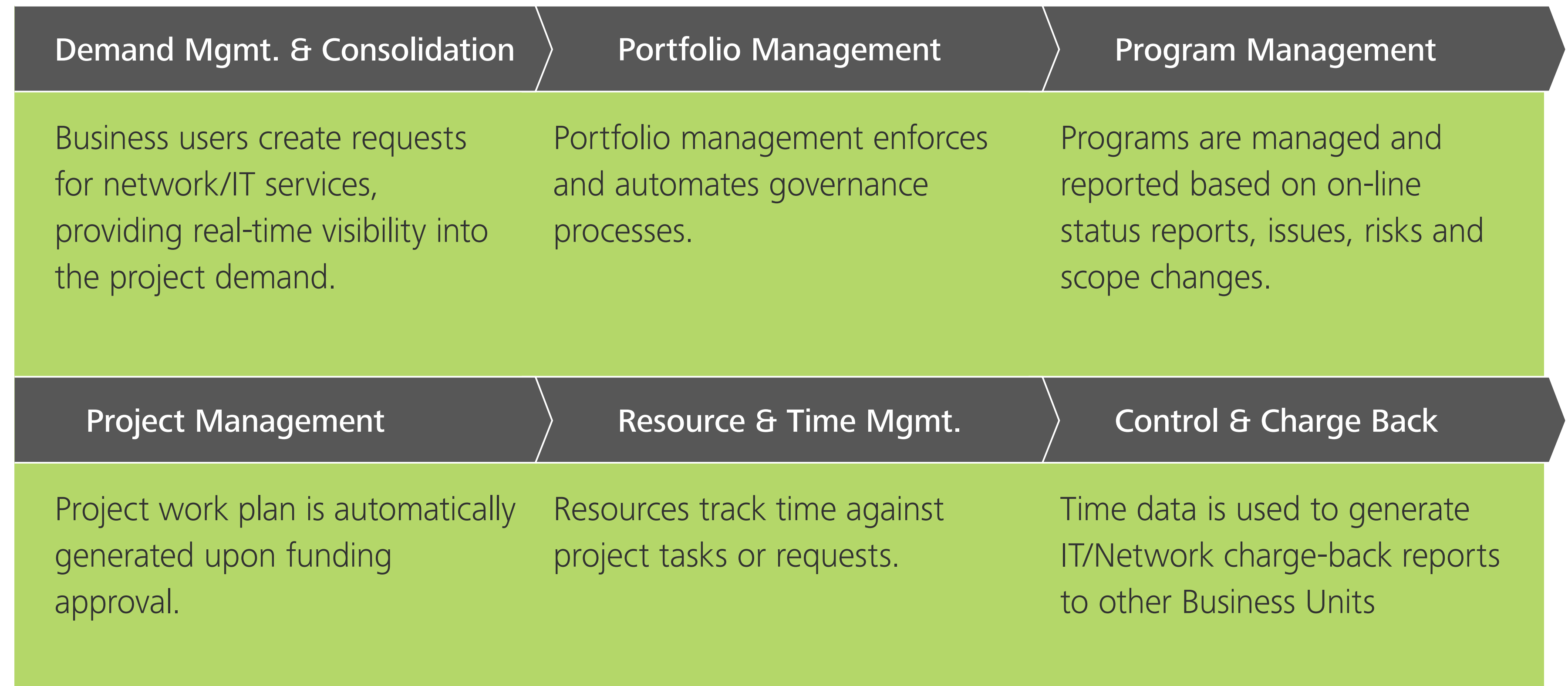
Solution Highlights

- Project and Portfolio Solutions can shed some light into the Capital Projects bridging the gap between marketing requirements, finance controls and network execution.
- Periodically evaluate demand and current projects to perform portfolio decisions.
- Analytics capabilities need to be put in place to make sure the correct questions can be answered by the Capital Allocation team.



Capital Allocation Process Automation with Software

PPM software tools can be an important enabler to achieve success.



Robust analytics must drive investment choices

1st Where should we invest?

Network & Technology:

- Which areas have the best-worst QoS & QoE?
- Which areas can meet the MBB quality requirements and rank no. 1 in QoS & QoE from customer experience testing?

Sales & Commercial:

- Which areas have the highest/lowest net income, NPV, revenue?
- Which areas do I need to focus my marketing efforts?

2nd What should we invest in?

Network & Technology:

- What is the root cause of degraded QoS & QoE?
- What is the dominant technology? 2G, 3G, 4G or Wi-Fi

Sales & Commercial:

- What is the focused services in each POI?: voice, data, SMS?

Finance:

- What is the incremental NPV by improving QoS by 1% in a particular POI, site, cell?

3rd How should we invest and why?

Network & Technology:

- What is the crucial analysis can operators use to decide if they should invest in each POI/Area?
 - New spectrum investment (2nd or 3rd carrier upgrade or 3G on 900 MHz)
 - 3G or LTE new site, small cell investment
 - Capacity upgrade (CE, IuB bandwidth, HSPA concurrent user,..)
 - Coverage Enhancement or Capability Enhancement

4th How much should we invest in each case?

Finance:

- How much can we save in CapEx in each case?
- At a high-level, from How and Why analysis we can answer how much should we invest by multiplying the average unit cost for each CapEx program to get the total investment by target.
- How can we simulate a marketing campaign in a particular target area and track the changes in NPV?
- How can we compare investment scenarios?

How well capital is allocated is
the most important driver of value
creation...

... it is also one of the hardest
organizational disciplines to master.

For more information:

Joaquim Ribeiro

Partner
joaquiribeiro@deloitte.pt
Portugal

Charles Alsdorf

Advisory Director
calsdorf@deloitte.com
US – New York

Jan Wuppermann

Executive Director
jwuppermann@deloitte.com
Singapore

Igor Heinzer

Director
igheinzer@deloitte.ch
Switzerland

Terrence Karner

Advisory Manager
tkarner@deloitte.com
US - Chicago



Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as “Deloitte Global”) does not provide services to clients. Please see www.deloitte.com/pt/en/about for a more detailed description of DTTL and its member firms.

Deloitte provides audit, consulting, financial advisory, risk management, tax and related services to public and private clients spanning multiple industries. With a globally connected network of member firms in more than 150 countries and territories, Deloitte brings world-class capabilities and high-quality service to clients, delivering the insights they need to address their most complex business challenges. Deloitte’s more than 225,000 professionals are committed to making an impact that matters.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the “Deloitte Network”) is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect you, you should consult a qualified professional advisor. No entity in the Deloitte network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.