CHAPTER 1

Strategic Decision Making

Strategy is a very broadly used term applied in military, political, and business situations. Lawrence Freedman illustrates in his book *Strategy—A History* the origin of strategy though mythical figures, politicians, and business leaders. They all have in common to take decisions under uncertainty and confusion of the human affair. Strategic decision making aims to clarify these moments of uncertainty with an applied set of problem-solving principles. It is therefore a problem-solving methodology that is applied to complex, unstructured, and multidimensional issues, driven by the uncertainty of human behaviour and decision making. Max McKeown specifies in *The Strategy Book* that strategy is about shaping the future by which people attain desirable ends with available means. Authors such as Igor Ansoff, Henry Mintzberg, and Michael Porter established during the last 50–60 years a corporate discipline that aims to combine a rigorous planning approach with adaptability to the circumstances given the uncertainty of the situation.

Corporate and business strategy follows a vision for a business in accordance with an executable mission of a specific commercial and operational plan. This involves determining and implementing long-term goals and objectives, with the considerations of a financial institution's market positioning and available capabilities. These considerations include competitive analysis, macroeconomic and industry conditions, regulatory constraints, and other dimensions of the internal organisation and external environment. The following chapter introduces a series of core strategic principles and applies them to financial, commercial, and operational problem solving in financial institutions. It covers tools of strategic analysis such as hypothesis-driven problem solving, system theory and coherence, as well as strategic planning such as roadmaps; heat maps; strengths, weaknesses, opportunities, and threats (SWOT); and scenario analysis. It further discusses the operational efficiency and the design of target operating models (TOM), performance improvement, and merger & acquisition (M&A) as fundamental tools of the strategic decision-making process. The ability of an institution to convert strategy into a success business is directly related to the continuous testing of the logic and the assumptions when making structured decisions about how to win in a competitive marketplace.

1.1 STRATEGIC ANALYSIS

Strategic decision making develops a systematic approach and defines a methodology to analyse business situations and solve entrepreneurial issues that are by nature complex and unstructured. It solves the key question on how to get a competitive advantage over

the opponent in resolving the issues. The complex nature and dynamic relationship of the underlying drivers require a systematic problem-solving mindset. In business and finance, this problem-solving mindset establishes a clear understanding of the dynamics of the market positioning of a business with its revenue stream and the effectiveness of the operating platform with its cost structure. System theory is used to further assess the dynamics within the assumptions and limitations of theoretical models. At the same time, every strategy has to be coherent with an organisation's market positioning, capability set, and product and services fit while following a best-in-class benchmark. The following section introduces those three tools of strategic analysis.

1.1.1 Hypothesis-driven problem solving

Strategic analysis is by nature solution oriented and hypothesis driven while being fact-based at the same time. The process of coming up with a good strategy has the same logical structure as the problem of coming up with a good scientific hypothesis, as strategy deals with the edge between the known and the unknown. It is an educated guess about what will work in a specific situation. As a decision process, it applies a structured framework to generate fact-based hypotheses followed by data and information gathering with the objective to prove or disprove the hypotheses.

This decision and problem-solving process is therefore often referred to as a hypothesis-driven approach. The hypothesis-driven approach is a cornerstone in strategic analysis. It starts with understanding the situation, framing the problem, analysing through gathering information as well as data, and finally concluding the analysis by guiding policies and coherent action plans. In its analytical approach, it simplifies the often overwhelming complexity and reality by identifying certain aspects of the situation as critical.

This hypothesis-driven analysis is driven by three core principles that can be summarised as follows:

1. Simplify and reduce complexity by stating early an initial hypothesis which leads to a result-driven analysis.
2. Specify and focus through identifying key drivers in a designated analytical framework that is mutually exclusive collectively exhaustive (MECE).
3. Quantify and validate through available information and related data.

As Exhibit 1.1. illustrates, every strategic issue, as any complex und unstructured problem-solving challenge, starts with developing and testing a bunch of hypotheses that sets out the path how a situation can be resolved. This path knows five major steps.

The principles of the hypothesis-driven approach provide a central decision platform, based on which efficient problem-solving process can be applied. The process is defined through a structured framework that is centred on the initial hypothesis. It begins with framing the problem through understanding the situation and defining the boundaries of the analysis. It early comes up with an initial hypothesis and further breaks down the issue in its core components. By gathering information and data and through analysing them, it is continuously refined until a synthesis and conclusion can be reached. There are five steps that further define this methodology.

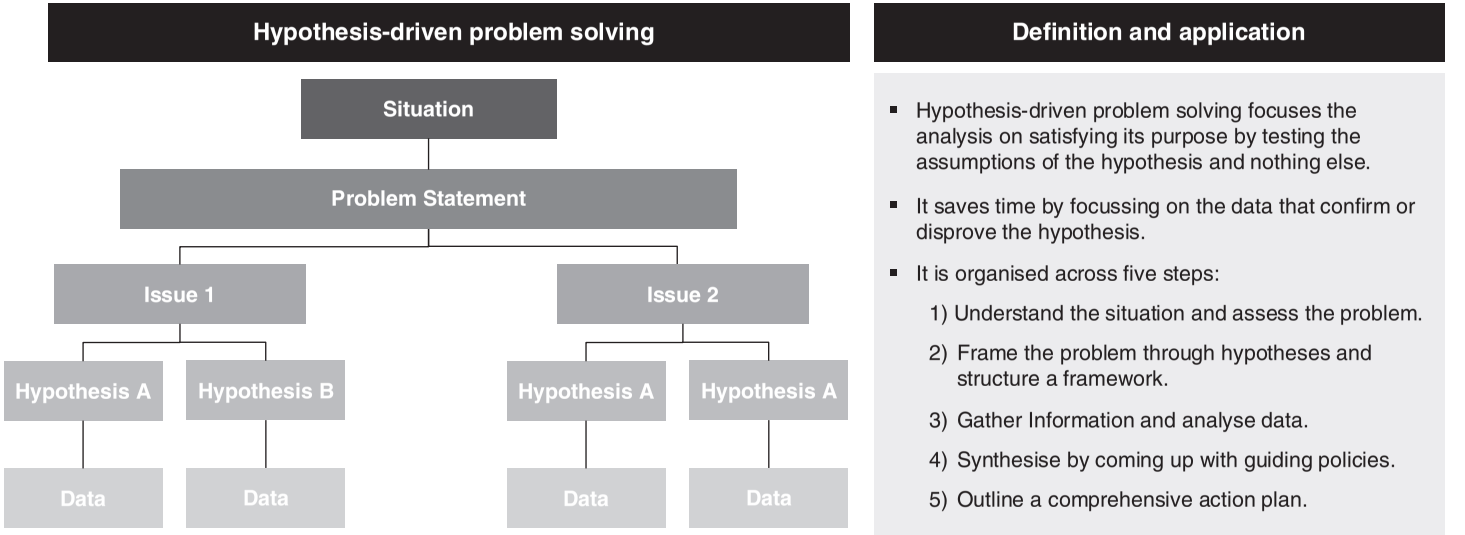

Exhibit 1.1 Hypothesis-driven problem solving[1]

[1]Exhibit 1.1 follows a standard presentation used in strategy consulting and is more formally described in publications such as Rasiel, Ethan M. and Paul N. Friga (2010).

Baseline, structure, and hypotheses

Step 1: Understand the situation and assess the problem

The objective here is to fundamentally comprehend the situation of a business by looking into initially available information and data. The step is known as baselining as it organises available data in a format that then further drives the structure of the analytical framework and the solution path around it.

In a restructuring situation, the incoming management team assesses the situation with readily available information while starting to work on a more detailed baselining. The baselining provides a detailed description of the business model, outlines the target operating model with its value chain, and provides a functional breakdown of the operational cost base.

Step 2: Frame the problem through hypotheses and structure a framework

In a first diagnosis, a clearly defined framework allows the management team to come up with an initial hypothesis on how to resolve the problem directionally. It is shaped across the core elements of the situation and its related issues. The following key elements are to be considered:

- Set up the analytical framework through defining the issues in a structured approach with its key drivers and major factors: It is followed by an issue tree that sets out a logical order for each of the issues.
- State an initial hypothesis that speeds up the quest for a solution and sketches out a roadmap for the analysis: It will guide the work throughout the entire problem-solving process. Forming an initial hypothesis will make the decision making more efficient and effective. It should be formed at the start of the process as it allows one to reach conclusions based on limited information. As different hypotheses are proven or rejected through gathering data and information, validate them accordingly. The initial hypothesis remains central in outlining the framework of the analytical process.
- Develop issue trees to bridge the gap between the analytical framework and hypotheses: An issue tree structures the issues that must be addressed to prove or disprove a hypothesis. Every issue generated by the framework can be further broken down to subissues. By creating an issue tree, the issues and subissues are laid out in visual progression. This allows determining what questions to ask in order to form the hypothesis and serves as a roadmap for the analysis. It also allows eliminating quickly dead ends of the analysis, since the answer to an issue immediately eliminates all the branches falsified by the answer. To reduce complexity, simplify by numbering the issues and state hypothesis in the MECE approach along an issue tree.

Mutually exclusive collectively exhaustive (MECE) refers to the concept of separating the problem into distinct, nonoverlapping issues while making sure that issues relevant to the situation and problem have not been overlooked. All possible options are to be considered or rejected in the problem-solving process.

In our restructuring case, a global T1 bank experienced a capital shortfall and had to sell a series of asset portfolios and businesses in a fire sale. A new management was appointed to execute a broader turnaround of the global markets business where the issues were located. During the baselining, an initial hypothesis was established that post sale the operational capabilities and their cost base were outsized with regard to the remaining portfolio of assets and businesses. The management team developed a functional breakdown of the cost base and identified the major cost driver for each function. Based on this analysis, a group of hypotheses was built to take costs out rapidly and stabilise the operations as base to further reposition the business.

Analysis, refinement, and elimination

Step 3: Gather information and analyse data

After setting up the framework and defining the set of applicable hypotheses, the next step is to design the analyses that must be pursued to prove and/or reject the hypotheses. It is followed by gathering the data and information needed for the analysis. Those steps include:

- Gather information and data to identify and verify the different issues specified by each hypothesis.
- Analyse and diagnose through, continuously refining the hypotheses along the issue tree.
- Isolate the core issues by a process of segmentation and elimination.

In our case study, the management team gathered detailed financial data across the different initiatives and conducted interviews with respective stakeholders. Through the received data streams and information, it validated and eliminated several of the cost reduction hypotheses. The hypotheses that got confirmed were further refined until the management team was in a position to agree on the cost targets with the different business leaders. The aggregated quantum was then presented and approved by the board of directors and subsequently communicated to the market.

Conclusion and action plan

Step 4: Synthesise by coming up with guiding policies

In a first conclusion, the key findings are summarised and synthesised to an overall conclusion. Additional factors may further be considered when they impact the outcome. This leads to the evaluation of which strategic options might be applicable while keeping the big picture.

Step 5: Outline a comprehensive action plan

In the final step, the management's action plan is outlined. This often implies several strategic options with different choices. Tangible recommendations need to be articulated as a conclusion before the implementation process can be started. Action steps

are to be coordinated with one another to work together in accomplishing the guiding policy. What is important to realise is that good strategy and good organisation lie in specialising on the right activities and imposing only the essential amount of coordination.

1.1.2 System theory

Systems theory is a multi- and interdisciplinary approach that integrates different theories with their individual premises and dynamic behaviours in a comprehensive setting. A problem-solving methodology follows specific theoretical assumptions that define a system with its boundaries, surrounded and influenced by its environmental factors. A system is a group of things that are interconnected and demonstrate their own behaviour patterns over time. This may be a natural system that exists in reality. It may be replicated through a logical system and theoretical model as an approximation of its reality. The combination of several systems represents an overarching system. Changing one part of the system may affect other parts and with it the whole system with predictable and unpredictable behavioural patterns. Some systems are self-adapting. Others need to adapt and their growth depends on how well they can adjust to the environment.

The goal of system theory is to discover dynamics, conditions, and constraints across systems that can be generalised to overarching principles. Whilst we aim to avoid the deep coverage of theoretical concepts such as dynamic system theory and cybernetics, it needs to be emphasised that interdisciplinary thinking is a crucial element of any strategy toolkit. The modern financial system is global in scale and intertwined. As a result, it has become immensely complex. Often several theories (i.e. systems) need to be applied as a fair proxy of reality. Different systems may model different dynamics and outcomes. The interdependence between the models is crucial and encourages us to use different disciplines to analyse a situation. Financial analysis, valuation, and modelling are by definition quantitative driven and highly dependent on specific premises as will be further covered in Chapter 2. This leads to a simplification of the real world dynamics, and as we will further learn similar behaviour patterns and decision making that consequently may destabilise the entire system.

System theory can crucially support strategic analysis by outlining the dynamics and impact factors on aggregated levels. It allows one to think through problems from different standpoints and interdependencies. Dynamic system theory in particular describes the long-term qualitative behaviour of complex system dynamics by using mathematics in the area of differential equations. Its focus is not on finding precise solutions through formal equations but by describing the dynamics of a system depending on its initial conditions. The study of chaotic systems is attributed to dynamic system theory. It has found its application in advanced financial modelling.

Exhibit 1.2 illustrates a simplified decision model based on system theory. Similar to more advanced applications such as the St. Galler Management Model, it uses an institution's ecosystem as the overarching system at the highest level and then applies subsystems to describe the organisational-level implications. Systems are interrelated and driven by feedback loops between output and input. Data, market intelligence, people, and resources are input factors. Products and services as well as processes and

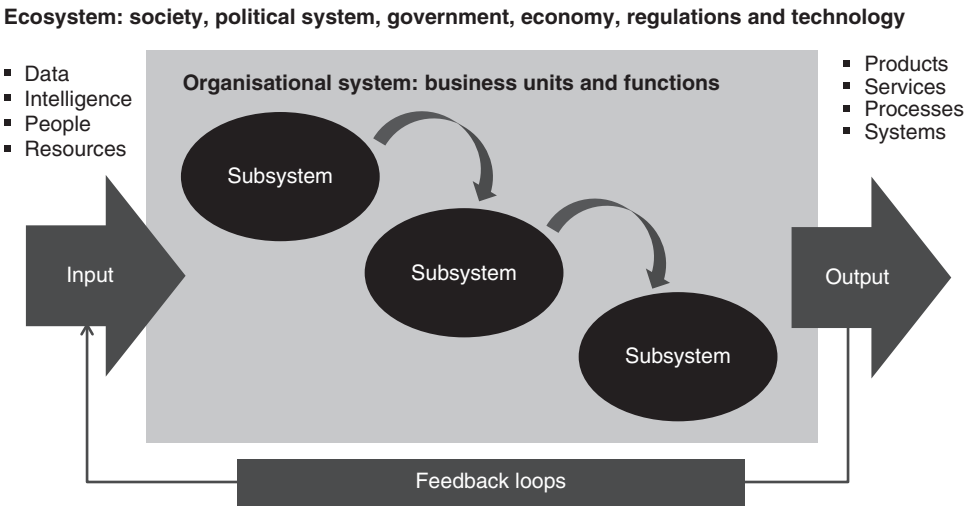

Exhibit 1.2 System theory and its application for strategic analysis

systems are output factors. The interdependencies drive the subsystem while organisational and ecosystem levels provide the constraints and requirements that need to be fulfilled.

When analysing broader trends in financial systems, macro-history that looks at events in financial history and approximates long-term trends with respective implications for decision making should be applied in combination with dynamic system theory. Chapter 2 will apply in its analysis of financial stress and banking crises a respective methodology that is based on the combination of quantitative analytics, dynamic system thinking, and macro-history.

1.1.3 Coherence

The term "coherence" refers to the degree of alignment among an institution's strategy, its capabilities set as well as the options and portfolio choices it encounters. It is a reflection of its successful commercial positioning. In its analysis, this methodology covers a range of fundamental questions on the effectiveness of the market position, the strategic fit of its business as well as portfolio and services, and the gap between available and required capabilities. It further assesses how capabilities can be built successfully either organically or through acquisitions. On the other hand, it provides a framework on how incoherent capabilities are to be disposed or divested. Every roadmap needs to be assessed with regard to its strategic coherence. This is equally applicable to turnaround and transformation as well as value creation plans.

Following the methodology, originally developed by Booz & Company (now Strategy& as part of the PwC network), a strategy is coherent across three core elements: the market position of a business, its capabilities set, and its services and product fit. To have a successful execution of the strategy, those three elements are to be in full

alignment. Every strategic decision needs to be targeted towards coherence and needs to be consistent with its strategic identity. Crises that lead to restructuring and turnaround, underperformance that requires business transformation, and/or an acquisition that demands a value creation are to be assessed against these three elements of coherence. If strategic coherence is not ensured, the strategy may fail, which applies in particular for complex and diverse businesses such as banking and financial services. Exhibit 1.3 describes the different factors of coherence that is also known as capability-driven strategy (CDS).

Sustainable competitive advantage

A financial institution needs to have a sustainable advantage to competitive advantage which is the overarching objective of a coherent strategy. There are three main sources of competitive advantages. The first one is economic success factors such as absolute and relative cost advantage through higher operational efficiencies as well as differentiation advantages through risk-based credit underwriting and technology-enabled distribution channels. The second one is organisational factors which relate to specific institutional and management capabilities. The third and last one comes from political and legal factors through high market entry costs and market protection such as high regulation.

Market positioning

The market positioning defines the way a business creates and realises value for its stakeholders and differentiates itself from competitors. Although the positioning needs to be nimble and adaptable for growth opportunities, it needs to be ultimately focused and tangible for decision making. It is a distinctive feature that is core to the strategic identity. At the core is an institution's value proposition. Financial institutions usually have multiple and often diverse businesses. Diversification benefits with regard to managing the economic cycle and the different risk factors as well as complex client requirements, franchise relationships, and distribution opportunities are often quoted as rationale. In the late 1990s and early 2000s, universal financial conglomerates were created that consisted of banking, insurance, and investment management businesses. The management complexity was dramatic and most of them spectacularly failed when the technology, media, and telecommunication bubble burst. Goldman Sachs, on the other hand, is known for its unique market positioning, business profile, and talent culture. Until very recently, the firm had remained loyal to its core strategic identity as an investment bank with risk-taking and advisory businesses at the core of its franchise. In looking for additional growth areas, Goldman Sachs has more recently ventured out to consumer finance although it had been struggling previously with its ultra-high net worth wealth management business. Applying the coherence methodology to this strategy move, it remains an open question whether this strategic change will be a successful one.

Capabilities set

A capabilities set is a combination of several mutually reinforcing activities that, together, constitute the market position of a business. On an individual level, a capability is the ability to reliably and consistently deliver a distinctive outcome

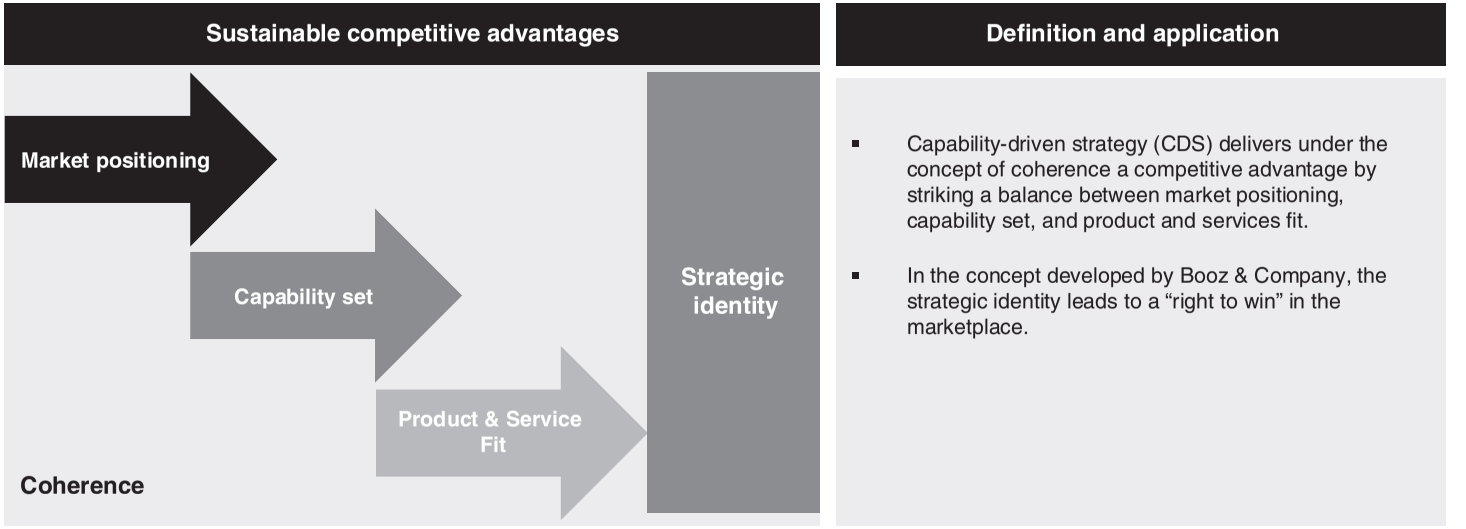

Exhibit 1.3 Capability-driven strategy (CDS)

for the business. This is ensured through the right combination of processes, tools, knowledge, skills, and organisation. Each of the capabilities has to be distinctive on its own and represents an extraordinary if not unique competence that is differentiating. When deployed effectively as set, the combined capabilities lead to a competitive advantage. It is not about individual capabilities but the way they work together. For financial institutions, this can mean the ability to centralise data analytics to assess and manage risk, to develop and bundle products and services in a unique way, or to effectively manage relationships with specific client segments. The capabilities deliver value as a combined entity. In case of Goldman Sachs, the firm's ability to manage data across products and businesses, and steer its balance sheet to transparent daily mark-to-market valuation, gave it a massive competitive advantage in managing the risks of the accelerating subprime crisis before the collapse of Lehman Brothers in autumn 2008.

Every strategic decision needs to consider if the organisation has the ability to deliver and the required capabilities set to do so. If a financial institution does not have them now, can they be built organically or acquired externally? To do so, the gap between available and required capabilities has to be assessed and clearly described. Then specific actions can be implemented to close the gap. Every strategic roadmap, if it is a turnaround plan or a value creation blueprint, needs to reflect this and, most important, always link back to the market position.

Product and service fit

Finally, every product and service offering has to be supported by the capabilities set and fully aligned with the market position. Products and services deliver revenues and add the financial aspect to every strategic decision. If they are not in alignment, then the overall impact of the strategic move remains questionable. Furthermore, if the product and services fit is not ensured, the exit of the respective product portfolios is to be considered. Often during periods of growth, the product and service portfolios are extended to nonaligned and/or not supported capabilities. UBS, for instance, added late in the cycle, leading up to the Global Financial Crisis (GFC), a series of fixed-income and credit businesses in a desperate attempt to catch up with the established American investment banks. When the credit cycle turned, UBS did not have the risk-management capabilities to manage the position and client exposure effectively. The group with its differentiating and sustainable wealth management business experienced losses in the area of US$40–50 billion. It was at the edge of collapse and had to be rescued in a combined operation by the Swiss government and the Swiss national bank. Following the stabilisation of its balance sheet, UBS, as many other banks in similar situations, moved all its incoherent or nonstrategic assets and businesses to a noncore unit and wound them down in a disciplined manner. Financial institutions complete pricing analyses in relation to the addressable target market and customer segmentation.

Strategy identity with winning ambitions

The thorough understanding of the market positioning and the institution's capability set and product and services fit lead to the strategic identity. The strategic identity sets the winning ambitions and initiatives in the competitive playing field for success. The winning ambitions are shaped by an institution's vision and purpose that gets captured

by the mission statement. It must be coherent across the firm's market positioning, capability set, and product and service fit. It eventually describes the way an institution intends to gain a competitive advantage through its value proposition and growth initiatives in the marketplace.

1.2 STRATEGIC PLANNING

Strategic planning follows a structured process that combines several layers of analysis to a roadmap. The roadmap evaluates a situation and concludes on a strategic direction. It starts with an impact assessment that outlines the available options and portfolio choices to be aligned with the requirements of the commercial and operating model. Finally, a coherent action plan is to be established.

1.2.1 Roadmap

A strategic roadmap summarises the cornerstones of a strategic plan. It is designed to help the management team to make its strategic choices. The roadmap starts with an evaluation of the situation, followed by impact assessment that leads to a response plan. The situational evaluation is shaped by the set of hypotheses that have been built in to understand the situation. The action plan outlines the strategic direction with its different options, defines the specific problem-solving process for a situation, and comes up with an action plan that further moves the analysis towards implementation. A turnaround and value creation plans that we are going to introduce in Chapters 5 and 6 are to be understood as such strategic roadmaps. For the time being, it remains crucial to be familiar with the term and understand its role. Conceptually, the hypothesis-driven approach as an efficient problem-solving process leads and shapes the strategic roadmap. It moves the focus from identification and evaluation to action and implementation.

1.2.2 Impact assessment

Every new situation such as a crisis, a major transformative event (e.g. new capital requirements), or the circumstances of an underperforming business require the detailed evaluation and impact assessment. Strategy offers a series of tools that facilitate this initial analysis. The following paragraphs are focussing on heat maps, SWOT, and scenario analysis as proposed tools. In its approach, all those tools are usually expert driven and supported by quantitative analysis. It allows illustration of the situation with its core drivers while getting senior decision makers and stakeholders aligned to the problem-solving process.

Heat map analysis

A heat map visualises and graphically illustrates an initial evaluation and impact assessment with its core issues against several dimensions. The individual outcomes are contained in a matrix, often as an expression of an institution's organisational structure and its operating model's functional structure. The important role of the target operating model will further be discussed in a subsequent section. As illustrated in Exhibit 1.4, the outcomes of a heat-map analysis are represented in accordance with a

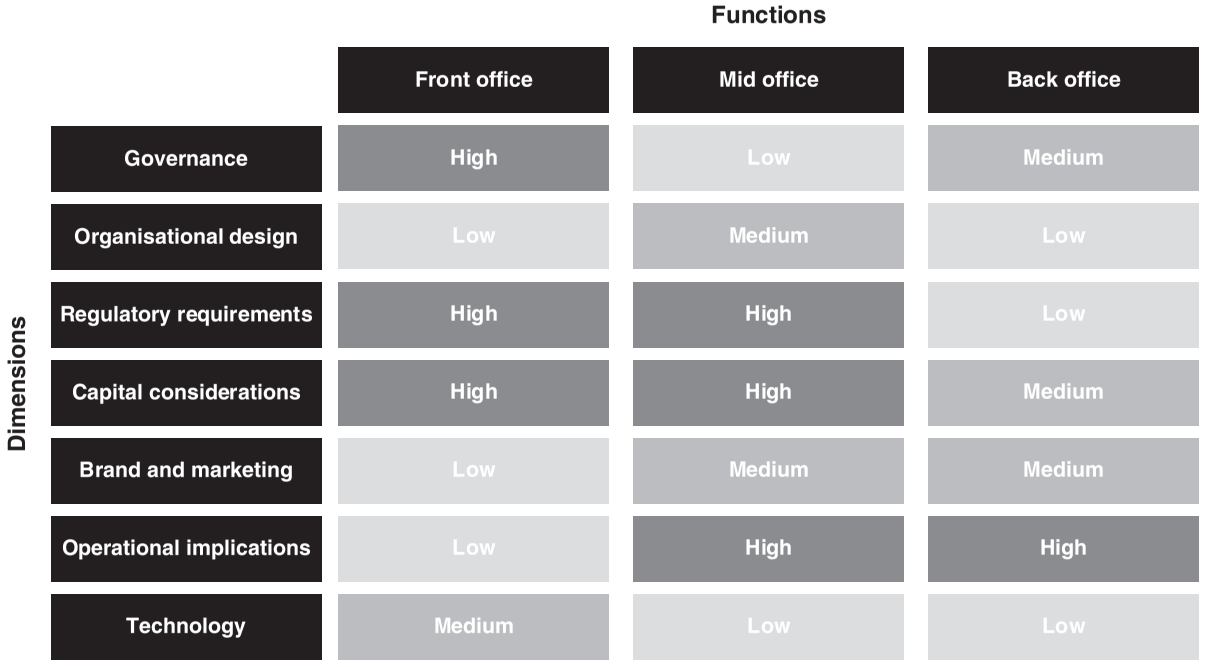

Exhibit 1.4 Heat map with high, medium, and low impact

colour scheme, for example, red for high impact, amber for medium impact, and green for low impact.

Heat maps can be applied to a variety of situations such as specific events in case of a crisis or a strategic shift. The heat map allows quick assessment of the situation and provides initial guidance and direction for how the situation can be approached and the issues resolved. It is a powerful tool for internal coordination and alignment across decision makers.

SWOT analysis

The SWOT analysis further provides helpful information for matching resources to an institution's capabilities and market positioning. It is one of the most commonly used approaches in strategic planning. It covers strengths (S) and weaknesses (W) from an internal view, and opportunities (O) and threats (T) from an external perspective. The analysis outlines advantages and disadvantages and identifies the environment's favourable and unfavourable factors in achieving the objectives of a strategic decision. It naturally illustrates the competitive advantage or disadvantage of an institution in a specific situation which can impact the decision dramatically.

Prior to performing a SWOT analysis, it is important to first develop the proper context by working through the process of a market assessment and identify the competitive advantage an institution. The assessment must follow the framework and requirements of strategic coherence. It is always applied within the context of a defined market that sets the barriers to implement a particular strategy at the organisational or product level. Through the combination of different scenarios, the SWOT analysis helps in developing strategic options and priorities. The combination of strengths and opportunities indicates the right or a strong strategic fit. The combination of weaknesses and opportunities allows to overcome gaps. The combination of strengths and threats leads to the reduction of organisational vulnerabilities. Finally, the combination of weaknesses and threats preempt threats that may attack vulnerable areas. Exhibit 1.5 illustrates the core components of a SWOT analysis with its applications.

Scenario analysis

A scenario analysis further evolves the initial assessment by analysing possible future outcomes by stressing specific factors for the evaluation. It assumes specific scenarios

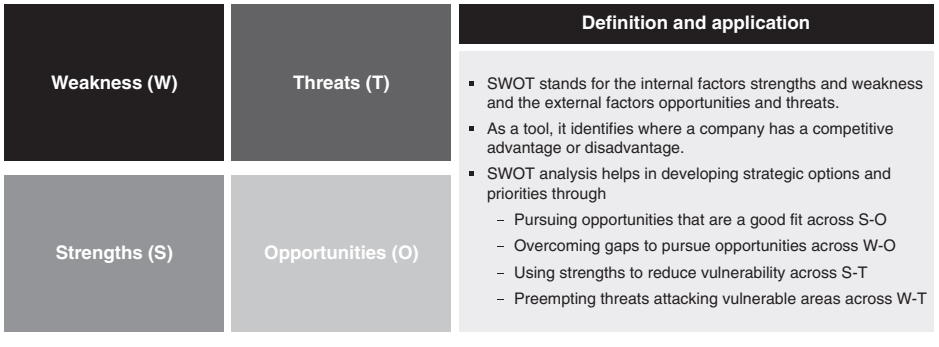

Exhibit 1.5 SWOT analysis

for the factors and assesses the possible outcomes under these developments. Each scenario normally combines optimistic (best case), standard (base case), and pessimistic or less probable (worst case) developments. The scenarios are built with the objective to assess the implications for decision making. The four combinations outlined under the SWOT analysis can be the starting point for an extended scenario analysis framework.

The scenarios can be qualitative or quantitative. Qualitative scenario analysis applies graphic factors to illustrate the dynamics and interdependencies by using instruments from system theory. Quantitative scenario analysis often uses a binominal or trinomial tree by applying specific probability distributions. As we are going to discuss further in Chapter 2, a probability distribution is a mathematical description of the probabilities of events of a sample space. The sample space describes the set of all possible outcomes of a random phenomenon being observed. There are discrete and continuous probability distribution with different specifications such as normal or t-shaped distributions. Monte Carlo simulation uses stochastic processes in forecasting the different outcomes. It develops a better view regarding the risk and uncertainty of an outcome and is often applied in financial analysis and valuation. Chapter 2 covers in detail the fundamentals of a scenario-based approach in the context of a financial decision-making process.

Game theory allows the simulation of the strategic interaction among rational decision makers. It can apply to a variety of situations in strategic decision making. In its simplest form, it applies zero-sum games, in which each participant's gains or losses are exactly balanced by those of the other participants. More advanced forms change assumptions and introduce behavioural relations to simulate the outcomes of the interactions. As we explore further, in financial decision making the behavioural element is usually approximated by utility functions that can be described by mathematical models. Through the application of deep-learning machine learning models, game theory can use today large amounts of data and apply advanced simulation for complex decision making. Chapter 4 will cover these developments further under the section on artificial intelligence and augmented decision making.

1.2.3 Strategic options and portfolio choices

The establishment of strategic options follows the impact assessment. This allows the structured evaluation of the relative merits and feasibility of different ways forward expressed by the available options. A strategic option is nothing else than an available choice. There naturally is always a chance of an inherent challenge or disadvantage to choice made. Options are therefore often aggregated and become portfolio choices in accordance with the strategic direction of an institution. Probability theory offers several quantitative techniques to quantify the options and their aggregation. Contingent claim models that are introduced in Chapter 2 apply binominal trees in a discrete setting and closed-end formulas in a continuous setting. However, the selection of a strategic options often remains subjective and is likely to be influenced by the specific political interests or cultural values of the decision makers.

It remains most important that any choice is coherent with the firm's strategy, market positioning, capability set, and product and services portfolio. The introduced methodology of strategic coherence articulates a paradigm against which all choices and

decisions are evaluated. In turnaround and transformational situations, the rationalisation of business portfolios is often required in accordance with the strategic direction chosen. Up to the GFC, many global European banks had pursued lofty ambitions, trying to build themselves into global powerhouses in some cases by expanding into businesses where they had little expertise such as investment banking. They suffered accordingly in the period following the crisis, incurring losses and, in some cases, had to accept government bailouts. However, a group of them radically restructured their business portfolio and significantly scaled back on major business lines and geographies. UBS, for instance, scaled back their investment bank to provide services to their core wealth management business. Royal Bank of Scotland (RBS) reduced their corporate and institutional bank substantially (now known under the Nat West Markets brand) to the requirements of their UK-domestic corporate and institutional client base. Other banks made none or only incremental changes to their strategy and had to go through an accelerated restructuring at a much later stage in the cycle. In value creation situations such as buy-to-build or buy-to-fix acquisitions, the same principle applies. Each value creation initiative must be coherent to the build-up and/or repositioning strategy, the market opportunities, and the capability set. As part of the broader transformation cycle of the industry, a group of specialty finance providers popped up after the GFC. They challenged the existing market structure by either focussing on underserved client and product segments or providing technology-enhanced services in a very effective manner. The profitability of these challenger banks has been much higher with a return on equity (ROE) of more than 30% and cost-income ratios below 40%. Targets that could have never been fulfilled as part of a large and complex organisation.

1.2.4 Action and response plan

An action and response plan is the part of the strategic roadmap that describes the set of actions to get the solutions to the respective situation implemented. It is often used for illustration and approvals in discussions with senior management with regard to next steps. It provides a detailed documentation that consists of an executive summary, a section on the evaluation and impact assessment, consisting of a combination of a heat map, scenario, and SWOT analysis, as well as a Gantt chart. The Gantt chart proposes a response schedule with its timeline, activities, and key milestones. This plan usually outlines the going-forward direction though a comprehensive business plan which then further describes the overall commercial considerations. It includes financial information, operational requirements, and specific implementation initiatives for the execution. Good examples of such action and response plans are separation and integration plans that are further covered in Chapter 6 under value creation and growth.

A Gantt chart is a bar chart, named after its inventor Henry Gantt, that uses a bar for each activity in accordance with its timeline while showing the dependency between activities and response status. Each activity is represented by a bar. The position and length of the bar reflect the start date, duration, and end date of the activity. Tasks and specific subtasks are created, and interdependencies and overlaps are visualised. Each activity is a response to mitigate or influence the outcome described by the evaluation and impact assessment. It illustrates the response schedule graphically and often describes milestones with specific marks to complete it. Exhibit 1.6 illustrates a Gantt

Activities	Start Date	End Date	Status	Respons.	Comments
Tasks I					
Subtasks i	*xx/xx/xxxx*	*xx/xx/xxxx*	*Not started*	*Initials*	*Descriptions*
Subtasks ii	*xx/xx/xxxx*	*xx/xx/xxxx*	*Open*	*Initials*	*Descriptions*
Subtasks iii	*xx/xx/xxx*	*xx/xx/xxxx*	*Open*	*Initials*	*Descriptions*
Tasks II					
Subtasks i	*xx/xx/xxxx*	*xx/xx/xxxx*	*Open*	*Initials*	*Descriptions*
Subtasks ii	*xx/xx/xxxx*	*xx/xx/xxxx*	*Open*	*Initials*	*Descriptions*
Subtasks iii	*xx/xx/xxx*	*xx/xx/xxxx*	*Open*	*Initials*	*Descriptions*
Tasks III					
Subtasks i	*xx/xx/xxxx*	*xx/xx/xxxx*	*Not started*	*Initials*	*Descriptions*
Subtasks ii	*xx/xx/xxxx*	*xx/xx/xxxx*	*Open*	*Initials*	*Descriptions*
Subtasks iii	*xx/xx/xxx*	*xx/xx/xxxx*	*Not started*	*Initials*	*Descriptions*

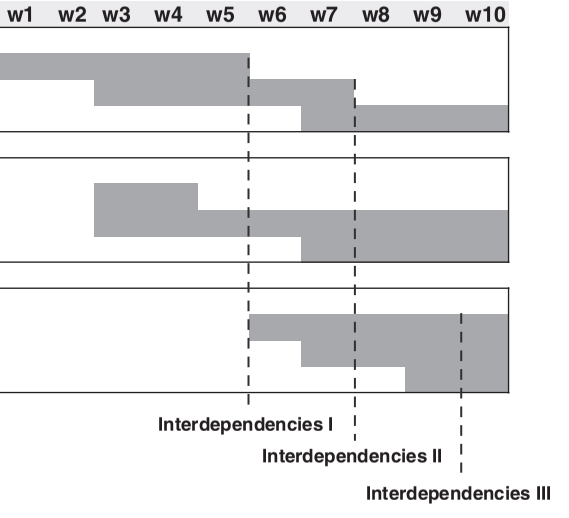

Exhibit 1.6 Gantt chart and performance tracking template

chart with its visible features. There are several software solutions available that allow a flexible integration in an institution's programme management.

A quantitative performance tracker accompanies the plan with the aim to track progress and associated costs. The tracker applies a selected set of key performance indicators (KPIs) that allows the management team to measure progress towards plan and highlights areas that need attention. The right set of indicators needs to be selected as a representation of the respective situation and desired outcomes. Important is to identify and select the critical few management metrics. KPIs can be grouped in a financial, commercial, and operational perspective. Its role will further be discussed in Chapter 6 when the different components of a value creation plan are going to be established.

1.3 OPERATIONAL EXCELLENCE

With strategic coherence, a methodology and group of core principles were introduced. A business must establish itself with a clear identity in the marketplace and create a set of differentiating capabilities to which all product and services have to fit. The operating model brings this all together with focus on operational excellence and efficiency. It outlines the governance structure of a business across locations and the different operational functions such as front office, operations, technology, and support functions, that is, finance, risk, human resources, and legal. It defines processes and systems as well as the services provided by each function across the value chain. It sets the people agenda by articulating skills and motivations of its people across each function and defines performance management and incentivisation as well as organisational development.

1.3.1 Operating model

The operating model facilitates the realisation of an organisation's strategic ambitions as an expression of its strategic identity in coherence and alignment with its market position, capability set, and product and services fit. It links back to vision, culture, and specific management processes and is organised in accordance with the paradigm of operational efficiency in transparent alignment with its KPIs. It most importantly clarifies if resources and costs are correctly allocated and its cost base and drivers in line with benchmarking peers and best practice. The information flow must be guaranteed and controlled back-to-front.

The operating model can be distinguished in an as-is and target operating model (TOM). The as-is operating model is a description of today's processes, systems, and services. It delivers a functional front-to-back view of today's cost base which is the starting point for the performance analysis. The TOM on the other hand implies a target state that is to be attained on a going-forward basis. For any turnaround and value creation plan, the TOM is fundamental to any business performance improvement initiative such as cost reduction, restructuring, or commercial as well as operational transformation. They all start with the design of the targeted state of the operation and its functions that are defined by the TOM. There are several design principles that have to be incorporated.

The TOM outlines where operations and people are going to be located. It defines the organisational structure with its major business units, sets roles and responsibilities,

and allocates resources respectively. Tasks are defined and divided, and authorities are distributed to ensure efficient delivery. It is an expression of an institution's day-to-day activities, organised front to back across functions, representing the value chain of a business. It starts with the front office which includes all revenue-based activities such as product and sales-related ones. It defines the market position and how the organisation faces off to customers and competitors. It is followed by operations and technology and outlines the services that are provided. It can be divided in middle office which includes product control and compliance functions as well as client services support. There also is a classic back-office which settles products and issues documentation and drives standardised operational services. The shared or support functions support the different business units, operations, and technology across the organisation. These are finance, risk, human resources, legal, and compliance. Technology can also be organised as a shared function, delivering services across business units. Given the specific requirements of individual business units, they usually remain close to operations or a hybrid model of group and business unit technology services is established. Within the risk function sits the second line of defence while the first line remains a responsibility of the front office, and auditing as the third line is part of the finance function.

The TOM design should be inspired by the quality and range of possibility that are open for the business. It is usually defined along six key dimensions or building blocks such as organisational structure, governance, authority matrix, decision rights, processes, policies, and procedures as well as staffing requirements. This incorporates which customers and markets to serve and the range and type of products and services to offer. In accordance with its coherent strategy, it is a well-defined system for planning, setting goals, delegating authority, budgeting, and measuring performance. The hierarchical structure is shaped by spans of control. Decision rights are at the same time a critical determinant of organisational performance. They describe the decision-making authority and accountability across the organisation. Efficient decision making is ensured through a good balance between centralisation and decentralisation in the way the decision making is structured. Exhibit 1.7 describes the front-to-back TOM of an international banking business together with the six key dimensions of an operating model design.

1.3.2 Balance scorecard

Business performance is captured by the balanced scorecard (BSC) as a standardised tool of management reporting, originally developed by Robert Kaplan and David Norton in the 1990s. It is used by executives to measure business performance through both financial and nonfinancial data as well as to keep track and monitor ongoing initiatives. The BSC combines financial and operational considerations through tangible KPIs and incorporates additional perspectives such as competition, customer, internal processes, and learning and growth. It is based on an institution's strategic agenda and monitors performance against its set objectives. Chapter 2 on financial decision making outlines KPIs with its different dimensions in more detail.

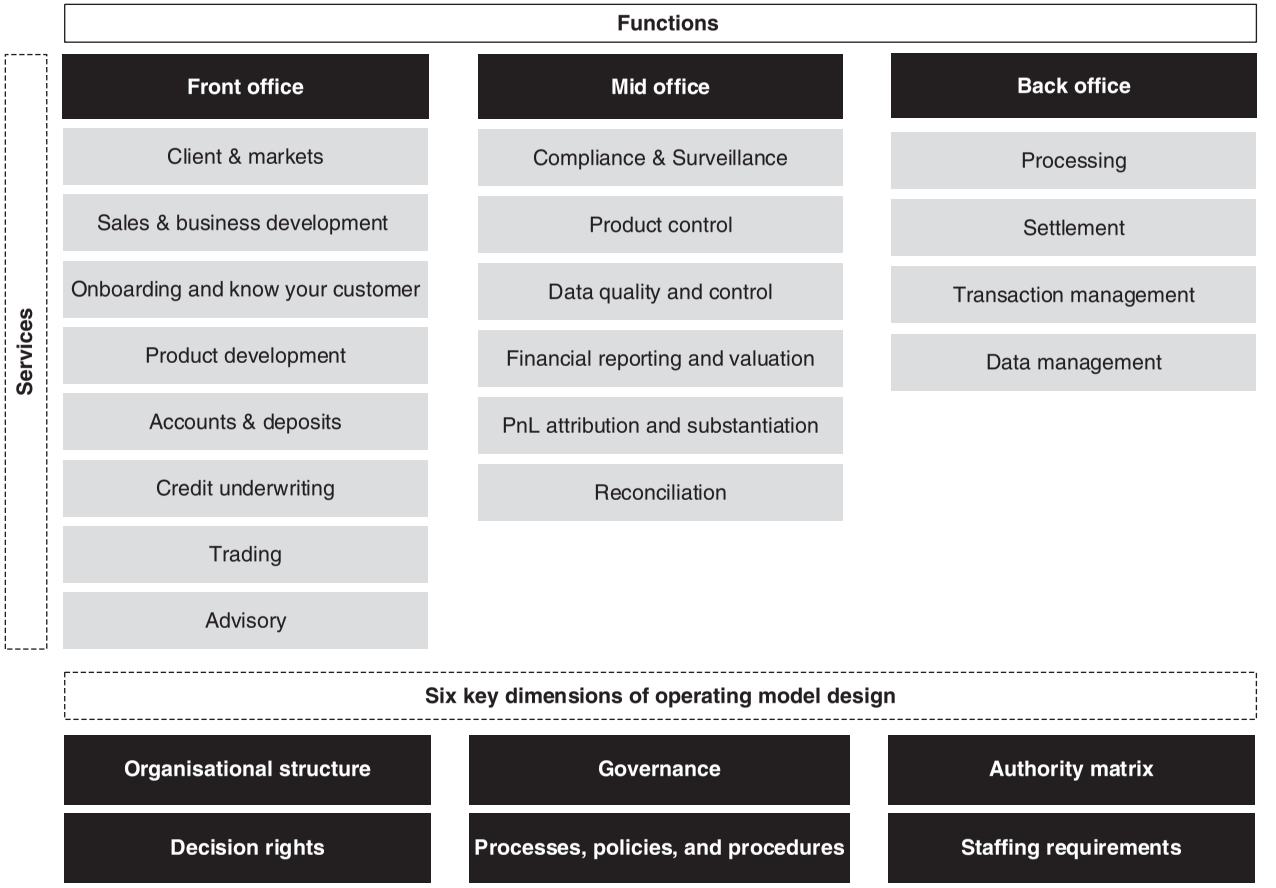

Exhibit 1.7 Front-to-back TOM of an international banking business

1.3.3 Best practice and benchmarking

Best practice defines a management method of market and peer comparison that focuses on achieving results superior to those achieved by other market participants. It is used as a benchmark and reference point in implementing strategic initiatives on operational effectiveness that applies cost benchmarks across the operating model. The challenge is to make the benchmarks comparable in accordance with a standardised framework. Most methods use surveys and quantitative techniques to build a data and market insight database that aggregates best-practice principles and sets of data point to the management information system (MIS). These data points represent an effective way to identify opportunities for performance improvement.

Several consulting firms have established independent platforms that provide independent, impartial, and anonymous benchmarks of competitors' businesses, operations, and technology performance. The Boston Consulting Group (BCG), for instance, offers through its subsidiary Expand benchmark services to financial institutions with the objective to validate in particular operational strategies in a peer comparison. Other consulting firms such as Oliver Wyman, McKinsey & Company, and Coalition offer similar services where independence and anonymous information gathering is core to the offering. McKinsey got in the news after closing its Corporate & Investment Banking (CIB) Insight service unit in early 2021 after it became apparent that its research team inappropriately took information from its former employer, Coalition.

1.4 BUSINESS PERFORMANCE IMPROVEMENT

The term business performance improvement is used in a broad format but often links back-to-back cost reduction with other efficiency considerations. However, it is a decision-making methodology and principle that is in particular relevant for stabilising businesses and repositioning them for growth. As a methodology, it replaces uncertainty and provides an execution plan with a number of available tools. It incorporates portfolio optimisation, business simplification, disposal and divestments, business simplification, cost reduction, and technology replatforming that are all covered in the following sections. It is all about operational change in accordance with the defined TOM design and starts with the definition of an agreed set of KPIs on which the organisational achievements and initiatives can be measured.

Operational change begins with an evaluation if the TOM is aligned with the strategic identity across market positioning, differentiating capability set, as well as product and services fit. Everything is assessed from a perspective of coherence and measured against a group of defined KPIs. The operational cost base is often the starting point but the KPIs are more broadly aligned. There may be an enormous franchise value in specific business segments with their services although they operate below the profitability targets. Corporate and institutional banking, for instance, depend heavily on auxiliary services such as foreign exchange trading or sophisticated cash management. The TOM further sets out the design for the location of operations and people. It is to be organised across principles of operational effectiveness with its KPIs fully aligned. KPIs translate strategic coherence in tangible outcomes. KPIs that are applied for financial

institutions are covered in more detail in Chapter 3 on financial decision making. A balance scorecard may further enforce financial and operational discipline by continuously monitoring a group of KPI dimensions.

1.4.1 Portfolio optimisation

As outlined previously, incoherent capabilities and businesses in institutions are to be disposed and investments in them scaled back. The same logic applies to portfolios of products and clients. More diverse product and client portfolios lead to operational complexity with high costs and inefficiencies. Often portfolio complexity is a result of aggressive growth. The 30 years of dramatic growth that the financial industry had gone through up to the GFC led not only to incoherent business but also to outsized product and client portfolios.

Business portfolios

Business portfolios are rationalised under the principle of coherence, crucially clarifying whether the business has a competitive advantage and operates above a profitability threshold or has a specific franchise value overall within a group structure. Incoherent and misaligned businesses should be disposed and their investments scaled back dramatically. With the incoming regulatory agenda post GFC, there had been a huge focus on streamlining balance sheets and mitigating higher risk-weighted assets implications at financial institutions. Often previously profitable businesses were heavily impacted by higher capital requirements. Correlation risk of high-rated senior credit tranches made the business unattractive and many trading desk and asset portfolios were liquidated as part of noncore legacy units. Chapter 2 introduces the economic value added (EVA) methodology that applies an excess economic spread in making those decisions and facilitates capital allocation respectively. A pure financial view often has to be balanced by the franchise value which is harder to measure quantitatively given the impact on customer relationships.

Product and client tails

Many financial institutions accumulated over the 30-year growth period dramatically outsized product and client portfolios. Often 90% of the revenues are eventually produced by 10% of the products and clients. In investment banking in particular, specific clients traded tailored products on a very infrequent basis. Those tailored products were often exotic in nature and required specific structuring and technology capabilities. Client segmentation provides a transparent picture of the net-profit contribution of each client, organised across segments. It illustrates comparative advantages and identifies inefficiencies. It further allows a focussed distribution model as well as risk-based and funding-based pricing model.

Product portfolio can be standardised across defined transparency requirements that are linked back to the KPIs. Exotic derivatives products were a strong profit driver for trading and sales units of international banks. The incoming regulatory agenda introduced very punitive capital and transparency requirements to address the systemic

risk of those businesses post-crisis. Deutsche Bank and many other European banks shifted strategy quickly and moved back to highly standardised instruments with large trading volumes. The exotic businesses that often just had been built prior to the GFC were disposed. As a result, the profit and profitability levels of those business units plunged and triggered a series of restructuring activities.

1.4.2 Divestments and disposals

A divestment, divestiture, or disposal is the sale of an existing asset or business by a financial institution. From a strategic perspective, a divestments allow to refocus the business portfolio with its capabilities and product and service mix on its market positioning. Post GFC, most international banks rationalised their asset and business portfolios by establishing noncore units for nonstrategic assets and businesses. This applied equally to distressed and nonperforming assets as well as businesses that were no longer coherent with the rescaled strategic objectives. A big driver of this development was the incoming regulations. They either constrained balance-sheet leverage or led to higher capital requirements which substantially impacted profitability as we covered in the previous section on portfolio optimisation.

1.4.3 Front-to-back optimisation

After applying the principles of coherence within a portfolio rationalisation framework, front-to-back optimisation applies business simplification and automation by streamlining the TOM with regard to people, processes, and systems. It often applies automation and straight-through-processing as core principle. Businesses with diverse product and service features lead to high organisation and operational complexity that require manual intervention with a lot of personnel. The respective full-time equivalent (FTE) requirements to provide those manual interventions can be extensive and expensive. In addition, there are often specific technology requirements that are outside standardised software solutions.

In financial institutions, structured derivatives businesses had gone through a dramatic growth period fuelled by financial innovation, laxer regulations, and a broader acceptance of more complex financial instruments. Tailored products grew across asset classes with different operational and technology requirements. The combination of a more difficult market and a more scrutinised regulatory environment made the complexity of those businesses transparent. The tailored and bespoke nature of these derivatives required a lot of manual work or specific applications on technology platforms which elevated the cost dramatically. This was very different from standardised flow products which could be fully automated and processed by standard software packages. By separating the processing of highly bespoke products and standardised flow products, operational efficiency could be increased dramatically. Standardised products were fully automated through off-the-shelf software solutions while eliminating breaks and errors caused by processing nonflow products in the same fashion. Dedicated and specialised teams with deep product expertise processed the bespoke products in accordance with its specific requirements. The operational costs of those teams became fully

transparent which allowed management to incorporate a more comprehensive analysis of their profitability. More advanced and structured derivatives products are usually traded on an infrequent basis by a specific set of clients. In addition to the higher capital requirements, management needs to assess each of these transactions to get full transparency on the cost of the transaction and its fit for the business holistically. Front-to-back optimisation is closely related to cost reduction and technology replatforming.

1.4.4 Cost reduction

Successful cost reduction is based on a comprehensive understanding of the operational cost base which is a derivative of the as-is operating model. The process of establishing this understanding is called baselining. The baselining starts with the development of a functional cost model that tracks costs front to back across functions with their respective services and activities for each function. Based on financial and management reporting, the baselining is derived by mapping the different cost components to each function which provides a comprehensive front-to-back view. For financial institutions, it is to be mentioned that the fixed costs consisting, for instance, of salaries are usually a major contribution factor for the production cost and cost of goods sold (COGS). In addition, capital costs are to be considered when respective decisions have been made. The product and sales costs will be allocated to the front office, reporting and valuation costs to the mid office, the finance costs to the share or support function, and so on and so forth. Through the cost mapping, the cost driver for each function can be identified which further requires a top-down view of the financial institution's strategy across market positioning, capabilities set, and product portfolio. Exhibit 1.8 describes a typical baselining and cost mapping for an international wholesale banking business. It further outlines some common cost reduction hypotheses for these types of businesses.

A comprehensive baselining allows the development of initial cost reduction hypotheses that are usually organised by function. The initial hypotheses are developed from experience and peer-to-peer comparison by applying benchmarking and best-practices. External advisors have established large pools of comparable data that allows to identify outsized cost components and articulate hypotheses around it. For illustration, a cash equity business with US$1 billion in revenues employs 260 full-time equivalents (FTEs) whereas the average peer group only needs 200 FTEs. An initial cost reduction hypothesis for this business of 60 FTEs can be established with an average cost per FTE across grades of US$220,000 which leads to a total cost saving of US$13.2 million. All initial cost reduction hypotheses are to be presented to the management team in a workshop and then further categorised and ranked according with the experienced-based consensus on the opportunities. Activity-based costing has been in particular applied to allocate overhead costs for shared and support function. It allows to extend traditional cost systems by linking resource expenses to the respective functions.

As a result of the increased regulatory requirements, overhead costs in compliance and regulatory functions exploded and became a major contribution factor for segment and product profitability as they were allocated to different business units in accordance

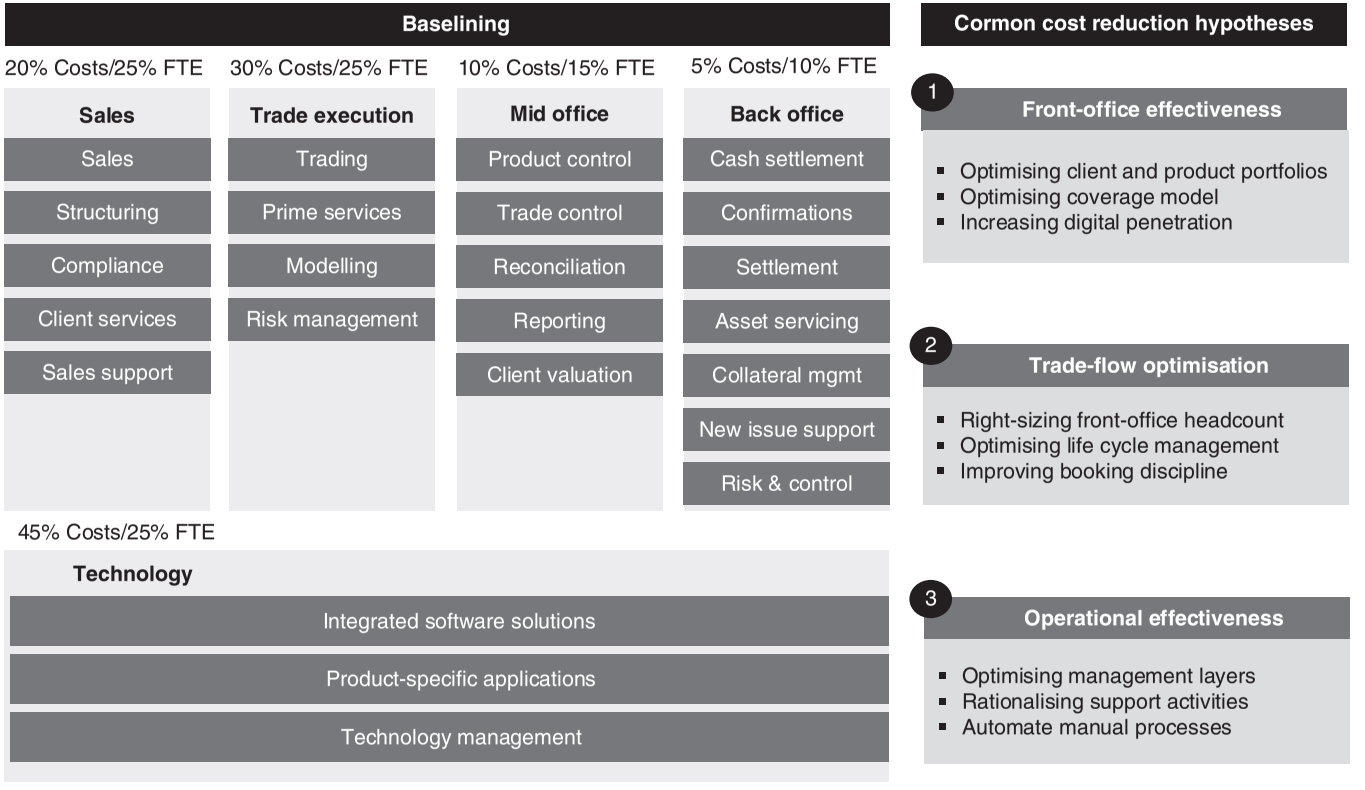

Exhibit 1.8 Baselining and cost mapping

with an allocation formula. The initial hypotheses then further have to be validated and refined by interviews with the business leaders. Many hypotheses are getting eliminated during this process. The selected and refined hypotheses can then be quantified as opportunities and then aggregated to overall cost reduction target. Often, it is the other way around and the management team articulates an initial cost target and the needs to outline the specific opportunities. In the second restructuring wave after the GFC, many global banks communicated specific cost targets as part of investor presentations. Through lean management, a systematic method for continuously eliminating overhead and non-value-added steps across financial institutions' value chain and business processes, strategic cost reduction targets can be reached over time. It is a commitment to efficiency and performance improvement on an ongoing basis.

1.4.5 Technology replatforming

Historically, technology was developed in-house tailored to the different commercial requirements of individual financial institutions. The core systems were often designed in the 1970s and 1980s, and the operational complexity increased dramatically as result of dramatic growth in client and product portfolios during the 1990s and 2000s. Different systems with individual databases were integrated through aggregators which increased their operational costs dramatically and often required manual work in processing the system adjustments. After asset and businesses were rationalised, many financial institutions were left with outsized and heterogeneous technology platform that were no longer in line with the product and client requirements.

As part of their business performance improvement initiatives, many financial institutions started to reorganise their technology platform through targeted replatforming initiatives. Off-the-shelf software solutions were replacing internally developed banking applications which often required the rationalisation and simplification of product portfolios beforehand. Providers such as Temenos, Avaloq, FIS, and Murex provided standardised software across core systems and specific product solutions. Cloud computing allowed new forms to centrally store crucial data which can resolve data fragmentation as one of the industry's core issue. Goldman Sachs previously created Securities DataBase (SecDB) in the early 1990s with the objective to have one data reference pool across products and asset classes for its securities business. It allowed the firm's pricing and risk management engines to access one unified data pool across the organisation which was efficient and transparent. SecDB was later credited to have been a crucial factor in Goldman Sachs' superior approach in managing the subprime crises in the United States. J.P. Morgan created at a later stage something similar called Athena for their integrated CIB unit.

Technology innovation and open architecture will accelerate the consolidation of the banking industry as digital distribution channels increase the scalability of services. Open architecture solutions such as application programming interface will allow the banks to become global digital banking platforms, partnered with best-in-class service providers, who will utilise their core infrastructure and customer base. This may lead to a competitive selection process as only a small group of global digital banking platforms is needed in this new world, connecting clients to the best-in-class service universe. Differentiation will happen on a regional or even a local level and in service areas where

specific skill sets are required. Participants must assess their competitive advantage and decide which role they want to play. Chapter 4 covers technology management and innovation in further detail.

1.5 MERGER AND ACQUISITION

Merger and acquisition (M&A) is an efficient tool to consolidate a market positioning and acquire a specific capability set and asset portfolio in building a business and an operating platform. Every M&A transaction must have a clear rationale that follows a clearly articulated hypothesis and is coherent with an institution's strategy, that is, market position, capabilities set, and product and service fit. Such transactions may follow a horizontal or vertical logic with focus on the same product and service areas or different stages of the value chain. M&A follows a life cycle across deal strategy, due diligence, and execution as well as the post-deal implementation which either is an integration and/or separation. Chapter 7 will cover this life cycle from a value creation perspective and outline the different steps within each stage. Chapter 2 covers different valuation methods that are a crucial part of the M&A process. M&A must be coherent with the existing businesses strategic direction and capability set, else there is an inherent risk that it distracts and concludes in additional cost layers driven by the increased regulatory complexity. M&A in banking and financial services has heavily been driven by regulations.

In the late 1980s and the 1990s, a series of mega mergers happened between financial institutions. JPMorgan Chase, in its current structure, is the result of the combination of several companies that started 1996. It includes Chase Manhattan Bank, J.P. Morgan & Co., Bank One, Bear Stearns, and Washington Mutual. UBS as we know it today was formed by the merger of Schweizerische Bankgesellschaft with Swiss Bank Corporation in autumn 1998. Citigroup is another company that followed an aggressive M&A strategy during 1990s. The US Congress further passed the Gramm-Leach-Bliley act in the late 1990s. It repealed parts of the Glass-Steagall Act of 1933 which aimed to prevent a broader bank crisis during the Great Depression. It separated conventional areas of banking from the risky areas of securities trading and investment banking. The passing of the Gramm-Leach-Bliley led to a big boom in banking mergers as traditional banking giants started to scale their traditional operations by acquisition of smaller players while accessing cheap capital that could put to work in the brokerage and advisory businesses. In the early 2000s, there were over 1000 banking deals in the United States alone in which Wachovia bought Commerce National, Wells Fargo bought H.D. Vest, and Bancorp bought Commercial Bank of New York. This consolidation was further accelerated during and after the GFC where several distressed banks such as Wachovia were acquired by Wells Fargo or Bank of America bought Merrill Lynch in 2008 after the collapse of Lehman Brothers. Those M&A activities slowed down dramatically when the G20 regulatory reform was implemented, and banks faced a new regulatory landscape with increased complexity.

Successful large-scale M&A in banking and financial services has always been challenging given the complexity and multigeography of the businesses. Often an integration must be combined with a business transformation which includes performance

improvement and operational change. Citigroup was formed by the merger of Citicorp and the financial conglomerate Travelers Group in 1998. It subsequently spun off its insurance businesses which included property and casualty as well as life insurance and annuities. ABN AMRO Bank N.V. was established in its current form in 2009, following the acquisition and break-up of the original ABN AMRO by a banking consortium consisting of RBS Group, Santander Group, and Fortis. This consortium, known as RFS Holdings B.V., acquired the bank in October 2007 and divided it into three parts. Each part was owned by one of the members of the consortium. RBS and Fortis soon ran into serious trouble as soon as the GFC started shortly after. The large debt created to fund the takeover had depleted the two financial institutions' reserves. The Dutch and UK government stepped in and bailed out Fortis, before splitting ABN AMRO's Dutch assets from those owned by RBS. The operations owned by Santander, notably those in Italy and Brazil, were merged with the rest of the group or divested.

The modern Santander Group was created through a series of global mergers, initially with Cantral Hispano in the early 1990s, followed by acquisitions in Latin America and the United Kingdom. Its management team was very strong in efficiently integrating the acquired businesses, combined with substantial performance improvement through cost reduction and digitisation. Every acquisition of Santander had been coherent with its positioning, capability set, and product portfolio as a leading retail bank across jurisdictions. This was very different from Deutsche Bank who established its global presence in investment banking through a series of acquisitions such as Morgan, Grenfell & Co., and Bankers Trust, which completely changed its traditional model as a domestic German banking giant. Similar to Credit Suisse, who acquired First Boston and struggled to integrate it in the broader group structure, Deutsche Bank had to substantially downsize its investment banking operations post GFC and return to its core commercial model as a domestic bank for German retail and corporate customers. Credit Suisse also returned to its domestic focus and original role as international wealth manager. RBS by itself had to accept government capital post crisis and scale down its global aspirations after a series of wrong investments, mainly related with the aggressive build-up of its trading and investment banking businesses. Those large global European banks together with UBS and Barclays drove the restructuring and transformation activities post the GFC with core focus on new organisational structures and performance improvement.

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