

From Strategic Analysis to Organizational Foresight

> 65 Techniques for Diagnosing Present Realities and Potential Futures

> > Matthew E. Gladden

From Strategic Analysis to Organizational Foresight

65 Techniques for Diagnosing
Present Realities and Potential Futures

Matthew E. Gladden



From Strategic Analysis to Organizational Foresight: 65 Techniques for Diagnosing Present Realities and Potential Futures

Copyright © 2017 Matthew E. Gladden

Published in the United States of America by Synthypnion Business, an imprint of Synthypnion Press LLC

Synthypnion Press LLC Indianapolis, IN 46227 http://www.synthypnionpress.com

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the publisher, apart from those fair-use purposes permitted by law.

SYNTHYPNION business synthypnionpress.com



ISBN 978-1-944373-11-5 (print edition) ISBN 978-1-944373-12-2 (ebook) 10 9 8 7 6 5 4 3 2 1 June 2017

Brief Table of Contents

Preface	10
The Purpose and Organization of This Text	12
Part I: Foundations of Strategic Analysis and Organizational Foresight	18
Chapter 1: An Introduction to Strategic Analysis and Organizational Foresight	19
Chapter 2: The Strategic Futures Hub: Developing a Customized Plan for Generating Organizational Foresight	39
Part II: Tools and Techniques for Strategic Analysis and Organizational Foresight	71
Chapter 3: Strategic Tools for Diagnosing an Organization's Financial Resources and Realities	72
Chapter 4: Strategic Tools for Analyzing an Organization's Internal Architecture and Capacities	86
Chapter 5: Strategic Tools for Appraising an Organization's Current and Potential Products	120
Chapter 6: Strategic Tools for Understanding Consumers' Needs and Anticipating Their Future Behaviors	143
Chapter 7: Strategic Tools for Assessing Competitors and Anticipating Their Future Behaviors	163
Chapter 8: Strategic Tools for Understanding the Current and Future Dynamics of an Organization's Competitive Ecosystem	169
Chapter 9: Strategic Tools for Diagnosing Causal Chains and Envisioning Possible, Probable, and Desirable Organizational Futures	195
Chapter 10: Tools for Identifying and Evaluating Potential Organizational Strategies	. 229
References	.273
Index	.291
About the Author	.294

Detailed Table of Contents

Preface	10
The Purpose and Organization of This Text	12
Part I: Foundations of Strategic Analysis and Organizational Foresight	18
Chapter 1: An Introduction to Strategic Analysis and Organizational Foresight	19
The importance of strategy for commercial and nonprofit organizations	20
The rapidly evolving context for strategic analysis	21
The three stages of strategic management: analysis, formulation, and implementation	22
Raw materials needed to perform strategic analysis	24
The difficulty of gathering complete and accurate data	26
The challenge of predicting future developments in the competitive environment	27
Products generated by strategic analysis	27
From possible to probable and desirable futures	27
Evaluating and comparing strategic options	28
When strategic analysis yields ambiguous results	29
Understanding an organization's reality versus reshaping it	29
The mechanics of strategic analysis	30
Quantitative versus qualitative dynamics	30
Skills involved with strategic analysis	30
Selecting the right strategic analyst	31
The internal organizational employee as strategic analyst	31
The external consultant as strategic analyst	32
The 'strategic analysis team' of internal and external personnel	33
The growing importance of futures studies for strategic analysis	34
Not all types of scientific predictions constitute future studies	34
Futures studies' ability to anticipate discontinuous change	35
Futures studies as a means of strategically positioning organizations for long-term developments	36
The compression of strategic distinctions between 'future' and 'present'	37

Tools for strategic futurology	38
Chapter 2: The Strategic Futures Hub: Developing a Customized Plan for Generating Organizational Foresight	39
Understanding the eight essential strategic domains	
The Strategic Futures Hub	
The organizational system	
The organizational supersystem	
Conceptual constructs	
Choosing the most appropriate strategic domain as a starting point for strategic analysis	
Determining whether a new strategy is currently needed	
The merits of each domain as a strategic starting point	47
The organization's financial resources and realities	47
The organization's internal architecture and capacities	
The organization's current and potential products	48
Consumers' needs and expected future behaviors	48
Competitors and their expected future behaviors	49
Current and future dynamics of the competitive ecosystem	49
Causal chains and possible, probable, and desirable futures	50
Potential organizational strategies	50
Three generic templates for processes of strategic analysis	51
Template 1: quick and easy preliminary strategic analysis	51
Template 2: generic strategic analysis for a startup attempting to create a new market	53
Template 3: generic strategic analysis for an established firm in a	
mature market	
Finding analytical tools to address specific strategic questions	56
Strategic questions regarding an organization's financial resources and realities	56
Strategic questions regarding an organization's internal architecture and capacities	····· 57
Strategic questions regarding an organization's current and potential products	59
Strategic questions regarding consumers' needs and anticipated future behaviors	61
Strategic questions regarding an organization's competitors and their anticipated future behaviors	
Strategic questions regarding the current and future dynamics of an organization's competitive ecosystem	
Strategic questions regarding causal chains and the envisioning of potential futures	
1 J	

Questions regarding potential organizational strategies	
Looking ahead	70
Part II: Tools and Techniques for Strategic Analysis and Organizational Foresight	71
Chapter 3: Strategic Tools for Diagnosing an Organization's Financial Resources and Realities	72
Financial statement analysis	
Activity-based costing (ABC)	-
Value chain analysis	
Cost-benefit analysis	
Financial forecasting	83
Chapter 4: Strategic Tools for Analyzing an Organization's Internal Architecture and Capacities	86
Resource analysis	
Technological posthumanization and the understanding of resources	89
Experience curve analysis	91
Statistical analyses	93
The cultural web	94
Technology assessment	96
Vulnerability analysis	98
SWOT analysis	100
The Internal Factor Evaluation (IFE) matrix	102
Strategic gap analysis	106
Enterprise architecture (EA) domains, views, and landscapes	108
The identification of misalignment as a form of strategic analysis	109
Formulating a generic EA framework	
The four constituent architectures or 'domains'	
The building blocks that constitute domains	
Strategy as an element that links and transcends domains	
Three basic 'views' for describing domains	
Landscapes: from current to target states	116
Chapter 5: Strategic Tools for Appraising an Organization's Current and Potential Products	120
Conjoint analysis	120
Comb analysis	122
Market share analysis	123
The growth-share matrix	125

The Hofer matrix	129
Product diffusion analysis	131
Product life cycle analysis	136
Unit life cycle analysis	140
Chapter 6: Strategic Tools for Understanding Consumers' Needs and Anticipating Their Future Behaviors	143
Market segmentation	144
Analytical customer relationship management (CRM)	147
Win/loss analysis	148
Customer loyalty analysis	150
Price analysis	152
Brand equity analysis	154
Social network analysis	155
Focus groups	158
Surveys	160
Chapter 7: Strategic Tools for Assessing Competitors and Anticipating Their Future Behaviors	163
Competitor analysis	
Strategic group analysis	_
Benchmarking	_
Chapter 8: Strategic Tools for Understanding the Current and Future Dynamics of an Organization's Competitive Ecosystem	•
Industry life cycle analysis	170
Economic forecasting	174
PESTEL analysis (and variants)	175
Emerging issues analysis (EIA)	179
Market opportunity analysis	180
Porter's Five Forces model	182
Porter's Diamond model	187
SPIRE environmental forecasting	191
Chapter 9: Strategic Tools for Diagnosing Causal Chains and Envisioning Possible, Probable, and Desirable Organizational Futures	195
Trend analysis	
Technical analysis and the efficient-market hypothesis (EMH)	_
Spreadsheet modelling	
Relative probability analysis	-
Risk assessment	

The futures wheel	204
Cross-impact analysis	207
Influence diagrams	212
Scenario analysis and alternative futures	215
Scenario analysis with extreme alternative futures	217
Simulations	219
Interactive simulations	219
Computer simulations	221
The mechanics of simulations	221
Computer simulations and organizational strategy	223
Simulations and 'wicked problems'	224
Thought experiments	225
Chapter 10: Tools for Identifying and Evaluating Potential	
Organizational Strategies	229
Dialectical inquiry	229
The External Factor Evaluation (EFE) matrix	231
Market signal analysis	235
Stakeholder analysis	237
Types of stakeholders	237
Owners	237
Personnel	238
Consumers	239
Suppliers, distributors, and strategic partners	239
Competitors	239
Industry associations	240
Policy-makers and regulators	240
The general public	240
Stakeholder mapping	
Strategic planning as an opportunity to engage stakeholders	244
Brainstorming	245
Blue sky thinking	248
Decision trees	249
The Delphi method	252
Backcasting	253
Morphological analysis	
Morphological analysis and the investigation of 'wicked problems'	_
QUEST analysis	

Roleplaying exercises and serious games	263
Roleplaying exercises and serious games as simulations	264
The mechanics of roleplaying exercises	265
Roleplaying and serious games as strategic analysis tools	267
Games as tools for developing strategic analysis skills	267
Prediction markets	269
References	273
Index	291
About the Author	294

Preface

This volume is the result of a passion for helping organizations implement successful strategic management practices that has been nourished through years of work as an executive, consultant, and researcher. Throughout this journey many individuals have entrusted me with invaluable opportunities to learn from their example and to experience firsthand the challenge of developing sound strategy - and the immense impact that it can have on organizations. I am especially thankful to Gasper F. Lo Biondo, S.J., Terry R. Armstrong, and all of my past and present colleagues from NeuraXenetica, Cognitive Firewall, Georgetown University's Department of Psychology, and the Woodstock Theological Center. I am also grateful to Kathy Kretman, Luisa Boyarski, Douglas M. McCabe, Serge Pukas, Paulina Krystosiak, Jacek Koronacki, and all the faculty and staff of Georgetown University's Schools of Public Policy and Continuing Studies and of the Institute of Computer Science of the Polish Academy of Sciences for the insights and support that they shared during my graduate studies in management. As always, I am most thankful to my family and friends for their encouragement of my work.

Throughout the process of preparing this volume, I have benefitted from the input and support of many individuals who contributed in one way or another to its successful completion. Some of the material contained in this volume relating to the three phases of strategic management and the relationship between future studies and strategic foresight is adapted from work that I first presented at a number of academic conferences at the Jagiellonian University and the Facta Ficta Research Centre. I am grateful to Barbara Kożuch, Stanisława Jung-Konstanty, Krzysztof Maj, Ksenia Olkusz, Sven Dwulecki, Michał Kłosiński, Paweł Gąska, and all of the other conference organizers and participants who engaged in lively discussion and offered meaningful critique of my work.

The individuals mentioned above have collectively made it possible for me to prepare this book. Whatever value this volume holds for those interested in strategic analysis is due largely to the insights, suggestions, encouragement, and good example that they have offered. Whatever flaws and limitations the book might possess in spite of their best efforts remain its author's responsibility alone.

Introduction

The Purpose and Organization of This Text

This volume is a guide to more than sixty of the most popular, valuable, and important tools and techniques employed in contemporary strategic analysis. It is designed to serve as a comprehensive reference for the experienced strategic analyst as well as an accessible introduction for those who are new to the field of strategic analysis – including those whose primary professional responsibilities lie in another field but who have been tasked by their organization with designing and executing a process of strategic analysis.

Chapters One and Two offer a general introduction to the practice of contemporary strategic analysis that constitutes the conceptual foundation of the volume. Chapter One provides an introduction to the process of strategic analysis and an exploration of the ways in which futures studies is becoming an essential component of contemporary organizations' attempts to develop strategic foresight. We begin by presenting an overview of competitive strategy and the rapidly evolving strategic context within which organizations can no longer expect to carve out some unassailable competitive advantage and then 'coast' successfully for years (or even decades) without a radical reimagining of strategy; instead, contemporary organizations must engage in a continuous cycle of strategy development in order to stay abreast of accelerating environmental change – especially that of a technological nature. We then describe the three stages of strategic management, which are (1) strategic analysis, (2) strategy formulation, and (3) strategy implementation. This volume focuses especially on the first of these stages. Consideration is given to the types of raw materials or inputs needed for strategic analysis and the types of products or outputs generated by that process. We then present a generic overview of the mechanics by which strategic analysis is performed, along with guidance for selecting the right type of strategic analyst. The chapter concludes with an investigation of the nature of futures studies, the unique perspective that it adds to strategic analysis, and its importance for developing strategic organizational foresight in the contemporary competitive environment.

Chapter Two offers a step-by-step guide for designing a customized process of strategic analysis for a contemporary organization. It begins by introducing the concept of the Strategic Futures Hub as a means for understanding the eight strategic domains that are critical to the development of strategic foresight for any organization. An organization's internal system comprises the domains of (1) the organization's financial resources and realities, (2) its internal architecture and capacities, and (3) its current and potential products. The organization's external supersystem comprises the domains of (4) consumers' needs and anticipated future behaviors, (5) competitors and their expected future behaviors, and (6) the current and future dynamics of the organization's competitive ecosystem. Finally, the sphere of conceptual constructs by which an organization conceptually links and aligns its internal system and external supersystem comprises the domains of (7) causal chains and possible, probable, and desirable organizational futures and (8) potential organizational strategies. Criteria are presented to help a strategic analyst determine which of these eight domains provides the most appropriate starting point for a given organization's process of strategic analysis. A suite of generic templates containing particular selections and orderings of analytical tools are developed that can be adapted by a strategic analyst for use in three commonly encountered situations: (1) when performing a fast and simple strategic analysis as preparation for a more in-depth and formal analytical process; (2) when conducting strategic analysis for a startup attempting to create a new market; or (3) when performing a strategic analysis for an established firm in a mature market. The chapter concludes with a guide to choosing analytical tools to address a wide range of critical strategic questions. Together, the practices presented in this chapter provide a key to understanding and applying the individual tools for strategic analysis that are described throughout the remainder of the book

Chapters Three through Ten constitute the second part of the volume. in which particular tools for strategic analysis are discussed in detail. Within each of these chapters, the tools are listed not in alphabetical order but in a more functional order that takes into account not only the sequence in which tools conceptually flow from one another but also the sequence in which tools practically precede or follow one another. (For example, it is easier to do benchmarking after one has carried out the more basic work of competitor analysis and strategic group analysis.) For each tool, a brief bibliography suggests resources that a strategic analyst can consult in order to develop greater expertise than can be gained from studying this volume. Where possible, works are noted that represent the latest scholarship and practice, although in a few cases we have included classic foundational texts which - while written decades ago - are still valuable for gaining a full understanding of a particular analytical tool. We have also prioritized texts that explain the theory and practice of a strategic tool broadly (rather than very narrow and idiosyncratic case studies) and works that are dedicated in their entirety to a given technique (rather than those that address a given tool only briefly among many other techniques).

Chapter Three identifies and describes popular strategic management tools that can be employed to diagnose the financial realities that an organization is facing. Such analysis is critical, given the fact that no organization possesses unlimited financial resources, and the range of strategic options that can be seriously considered will be expanded or constrained by an organization's current and anticipated future financial situation. The tools presented here include financial statement analysis, industry and company value chain analysis, cost-benefit analysis (CBA), financial forecasting, and activity-based costing (ABC). For each analytical tool, we explore the type of strategic question that it helps to answer, the nature of the tool, practical considerations relating to its application, and recommendations for developing deeper expertise in its use.

In **Chapter Four**, tools are explored that can be utilized to analyze an organization's internal structures, systems, processes, and capacities. It is essential that an organization accurately understand its internal architecture and capabilities prior to embarking on the task of strategy formulation, as an organization that lacks such knowledge may unwittingly adopt an excessively ambitious strategy that cannot be realized, given its limited internal capabilities – or it may adopt an unnecessarily narrow and timid

strategy that fails to fully exploit the significant internal resources that the organization has at its disposal. The tools presented here include resource analysis, experience curve analysis, statistical analyses, the concept of the 'cultural web,' technology assessment, vulnerability analysis, SWOT analysis, the Internal Factor Evaluation (IFE) matrix, strategic gap analysis, and enterprise architecture (EA) domains, views, and land-scapes.

Chapter Five presents and investigates tools that can be employed to analyze an organization's current or potential future product lines or individual products from a strategic perspective. It is important for an organization to understand the value and limitations of its current or envisioned products before initiating the work of strategy formulation, as an organization that lacks such knowledge might inadvertently develop a strategy that stakes the organization's survival on the success of a product whose strategic value is limited – or it may misguidedly cancel the production or development of products that possess significant long-term strategic potential. The tools for strategically appraising products presented here include conjoint analysis, comb analysis, market share analysis, the growth-share matrix, the Hofer matrix, product diffusion analysis, and product life cycle analysis.

In Chapter Six we explore tools that can be utilized to understand the needs and anticipated future behaviors of an organization's current or potential customers. It is essential that an organization acquire the best possible understanding of consumers' sentiments, needs, and behaviors before embarking on a process of strategy formulation, as in the absence of such knowledge an organization may unwittingly adopt a strategy that will alienate existing customers or may fail to notice some emerging need on the part of consumers that is not yet being met by competitors and which provides the organization with a major opportunity for product innovation, the creation of new markets, and the development of a unique competitive advantage. The tools described here include market segmentation, analytical customer relationship management (CRM), win/loss analysis, customer loyalty analysis, price analysis, brand equity analysis, social network analysis, focus groups, and surveys.

Chapter Seven discusses tools that can be utilized to evaluate the nature and activities of an organization's competitors and attempt to predict their future behaviors. Before undertaking the work of strategy formulation, it is important to gain the best possible understanding of its current

competitors; in the absence of such knowledge, an organization might fail to recognize successful strategies and best practices employed by competitors that it could beneficially adopt for its own use and it might fail to correctly identify those organizations that constitute its most threatening direct competitors. The techniques described here include competitor analysis, strategic group analysis, and benchmarking.

In Chapter Eight we describe tools that can be employed to analyze the current dynamics of an organization's competitive ecosystem and anticipate its future behavior. Before undertaking the work of formulating new strategies, it is important for an organization to develop the best possible understanding of the complex external ecosystem that constitutes its competitive environment, as without such knowledge an organization may inadvertently develop strategies whose successful fulfillment will be rendered impossible by future political shifts, legal and regulatory changes, economic developments, technological advances, ecological change, natural resource and infrastructure developments, social transformations that impact consumers' needs and expectations, changes in competitive intensity, or broader market and industry evolution. Conversely, organizations that understand such environmental forces and accurately anticipate changes in the ecosystem may be able to align their strategies with them in order to generate new forms of competitive advantage. The tools described here include industry life cycle analysis, economic forecasting, the PESTEL analysis and its variants, emerging issues analysis (EIA), market opportunity analysis, Porter's Five Forces and Diamond models, and SPIRE environmental forecasting.

In **Chapter Nine** we explore tools that can be utilized to analyze the chains of causality that link past, present, and future events and to envision an organization's possible, probable, and desirable future states. Such tools are strategically important, insofar as they provide a cost-effective means of 'testing' an organization's potential strategies and anticipating their effects. By means of such analyses, an organization can gauge the resilience or fragility of potential strategies and diagnose the extent to which the successful implementation of a given strategy may be facilitated or impeded by future changes within the organization or its external environment. If an organization neglects to perform such analysis, it might unwittingly adopt and implement a strategy that generates unforeseen (but not unforeseeable) side-effects and whose negative impacts could easily have been avoided if minor strategic adjustments had been

made. The tools presented here include trend analysis, spreadsheet modelling, relative probability analysis, risk assessment, the futures wheel, cross-impact analysis, influence diagrams, scenario analysis and alternative futures, simulations, and thought experiments.

Chapter Ten investigates tools that can be employed by an organization to identify a broad range of potential strategies that exist for it, develop a solid understanding of the nature of such strategic options, and assess their strengths and weaknesses. The analytical tools discussed here include dialectical inquiry, the External Factor Evaluation (EFE) matrix, market signal analysis, stakeholder analysis, brainstorming, blue sky thinking, decision trees, the Delphi method, backcasting, morphological analysis, QUEST analysis, roleplaying exercises and serious games, and prediction markets.

Collectively, the tools and techniques for strategic analysis described in this volume constitute the core of an invaluable toolbox for the contemporary analyst who must develop actionable strategic foresight for a wide range of organizations. The challenge of developing organizational strategy grows increasingly difficult as accelerating technological change transforms the world's competitive ecosystems in ways that render many traditional approaches to strategy obsolete. What tools and techniques can a contemporary strategic analyst can employ to understand an organization's internal structure and dynamics and its external competitive environment – and to predict the ways in which such elements may evolve in the future?

This book provides a practical step-by-step guide to using dozens of the most important tools for generating organizational insight and foresight, along with an investigation of their underlying nature and purpose. It serves as an accessible introduction for those seeking to learn the essentials of strategic analysis and a comprehensive reference for the experienced organizational strategist.

The text employs the Strategic Futures Hub as a means for understanding eight domains that are key to the development of strategic foresight: (1) an organization's financial resources and realities; (2) its internal architecture and capacities; (3) its products; (4) consumers' needs and anticipated behaviors; (5) competitors and their expected future behaviors; (6) the dynamics of the organization's competitive ecosystem; (7) causal chains and possible, probable, and desirable futures; and (8) potential organizational strategies. For each domain, the reader is taught when and why to choose (or avoid) specific techniques to answer the most frequently encountered strategic questions.

The volume explains not only traditional tools like market opportunity analysis, benchmarking, resource analysis, stakeholder analysis, SWOT and PESTEL analyses, and the Delphi method, but also emerging techniques like internal prediction markets, as well as longer-range diagnostic tools from the field of futures studies, such as emerging issues analysis, backcasting, morphological analysis, and crossimpact analysis. The nature of each technique is clearly described, along with recommended approaches to its use and practical considerations such as the time commitment and skills required.



