EXPLAINER

Setting the Direction with Roadmapping

Roadmapping involves collaboration among members of an organization. Infographic by Rodel Valenzuela/ADB.

Roadmapping is a technology and strategic planning approach that organizations can use to plan for long-term sustainability.

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Introduction

Public and private sectors in the Asia-Pacific region have become more dynamic, open, and consumer-driven in the wake of globalization and liberalization. As a result, they are faced with the challenge of enhancing their competitive advantage. There could also be changes in the economy and the environment that would require their immediate response and action. Thus, it is essential for organizations to synchronize core competencies, capabilities, resources, and applications with market needs.

Many organizations have turned to roadmapping as a method for strategy and innovation. It can help organizations determine where they are headed and plan how and when they will get there. An important step in the decision-making process, it serves as a guide for top management who need to do the following:

- Identify core competencies and capabilities to focus on.
- Select the right technologies to invest in.
Allocate scarce resources to support application development in order to meet market needs.

**What is roadmapping?**

Roadmapping is a technology and strategic planning approach that aims to create and deliver strategy and innovation in organizations. It enables organizations to integrate various perspectives to identify future goals and strategic gaps, as well as to prioritize activities toward the achievement of goals.

For the past decades, roadmapping has been used by different kinds of organizations worldwide and in various contexts and scales. It often involves a workshop-based method and process that promotes consensus-based and transparent decision-making, thereby facilitating communication between key stakeholders and other members of the organization.

**How can organizations implement roadmapping?**

Roadmapping is most effective when the approach is integrated in the organizational system and business cycle for technology and strategic planning. The Gerdsri three-stage concept is one of the useful guidelines in roadmapping. This concept was developed to support and guide organizations in planning their resources and capabilities prior to adopting the roadmapping approach.

**Figure 1: The Gerdsri Three-Stage Concept**

![Figure 1: The Gerdsri Three-Stage Concept](source: N. Gerdsri, R. Vatananan, and S. Dansamasatid. 2009. Dealing with the Dynamics of Technology Roadmapping Implementation: A Case Study, Technological Forecasting and Social Change. 76 (1). pp. 50-60.)

The Gerdsri concept suggests the following steps to roadmapping implementation:

**Initiation Stage** - Organizations understand and learn the nature and characteristics of roadmapping in this stage. It serves as preparation for customizing the general approach and aligns it with the organization’s technology and strategic planning process, environment, and work culture. A core team, consisting of key players responsible for initiating the roadmapping process, will be formed. Indicators
for success include acceptance of roadmapping implementation by the organization’s key stakeholders and initiative by the core team to develop a customized roadmapping approach.

**Development Stage**: This stage requires the conduct of roadmapping workshops with the research and development team, different business units, and relevant departments as participants. The workshop outcomes are analyzed and presented as a visual roadmap and shared with workshop participants and key stakeholders. Individuals in the organization, including workshop participants and the core team, may come up with iterations of the roadmapping process to provide designed outcomes for the organization. Indicators for success include the quality of strategic contents presented in the developed roadmaps and the level of knowledge and experience shared with workshop participants and key stakeholders in the organization.

**Integration Stage**: In this stage, the customized roadmapping process is integrated fully in the organizational system and business cycles for technology and strategic planning. The roadmapping process is assigned to a group of key players in the organization who will be responsible for regularly maintaining and updating the roadmaps. Indicators for success include level of alignment between technology, business, and corporate strategies, and continuation of the roadmapping process in the organization on a daily basis.

Roadmapping can help an organization strategically plan for its future through a highly collaborative, innovative, and structured process that brings together the expertise and knowledge of its members.

**Resources**


Cambridge Roadmapping.

Insight TRM.

University of Cambridge Institute for Manufacturing. *Insights: Roadmapping*.

University of Cambridge Institute for Manufacturing. *Roadmapping at the IfM*.

Nathasit Gerdsri
Associate Professor, College of Management, Mahidol University, Thailand

Nathasit Gerdsri is an Associate Professor at the Mahidol University in Bangkok, Thailand. He has industrial experiences in technical consulting, contract research, management of mega construction projects, and technology development. He currently conducts research in the area of technology planning and roadmapping, innovation management, R&D management, decision analysis and project management.

Yuta Hirose
Industrial Associate, IfM Education and Consultancy Services, Institute for Manufacturing, University of Cambridge

Yuta Hirose is an Industrial Associate at the University of Cambridge in the United Kingdom. He is mainly based in Tokyo, Japan, where he develops and deploys research outputs from the Institute for Manufacturing of the University of Cambridge into practice through projects on a collaborative basis, working closely with organizational partners in the Asia-Pacific region.

Sungjoo Lee
Associate Professor, Department of Industrial Engineering, Ajou University

Sungjoo Lee is an Associate Professor at Ajou University in the Republic of Korea. During the last 15 years, she has been actively involved in roadmapping projects at the sector and firm level as a lecturer, consultant, and facilitator. Her research interests include technology roadmapping, patent engineering, and R&D planning in small and medium enterprises.

Robert Phaal
Director of Research, Institute for Manufacturing, Department of Engineering, University of Cambridge

Robert Phaal is a Director of Research (STIM, CUED) at the University of Cambridge in the United Kingdom. He researches the application of engineering principles and methods to management and organizational challenges in the context of high-tech innovation and strategy.