

# Methodology-based Consulting Service Technology Due Diligence



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The logical approach to harness innovation

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## Overview

The advanced technologies-based organizations conduct Technology Due Diligence to validate their investment decisions and reduce risks. According to the National Academy of Sciences, such due diligence efforts are based on subjective studies & peer review, and lack quantitative analyses. To increase the venture success rates and enhance ROI, there is a need to convert the Art of Technology Due Diligence process into a Science by incorporating quantitative analyses. To achieve this goal, Infologic has developed a methodology-based technology due diligence consulting practice.

This practice incorporates a methodology; called **TechIP™ (Technology and Innovation Plan)** which is based on a number of R&D and emerging technology management processes, including:

- The U.S. Department of Defense & NASA developed technology and manufacturing risk reduction methodology, called Technology Readiness Levels;
- Emerging Innovation Management practices, such as Innovation Cash Curve, Technology Hype Cycle, and Knowledge-based Stage-Gate process; and
- An Infologic-developed Innovation Management model which is based on the premise that any due diligence analysis of Product innovations should also incorporate related analyses of Processes and Execution strategies.

Using this methodology, our subject matter experts provide a comprehensive technology analysis and recommendations. Infologic R&D efforts that are incorporated in the TechIP methodology were selected for publication at a number of government and industry conferences, including the 24<sup>th</sup> Army Science Conference, and an Institute of Management Consultants (IMC) Technology event.

## Methodology-based Technology Due Diligence Consulting Services

Using the TechIP methodology, Infologic provides a four-phase technology due diligence consulting service.

**Phase I:** We analyze venture objectives and align them with the R&D and technology objectives. If these objectives are not clearly defined, we work with the stakeholders to develop R&D and technology objectives before any due diligence efforts are conducted.

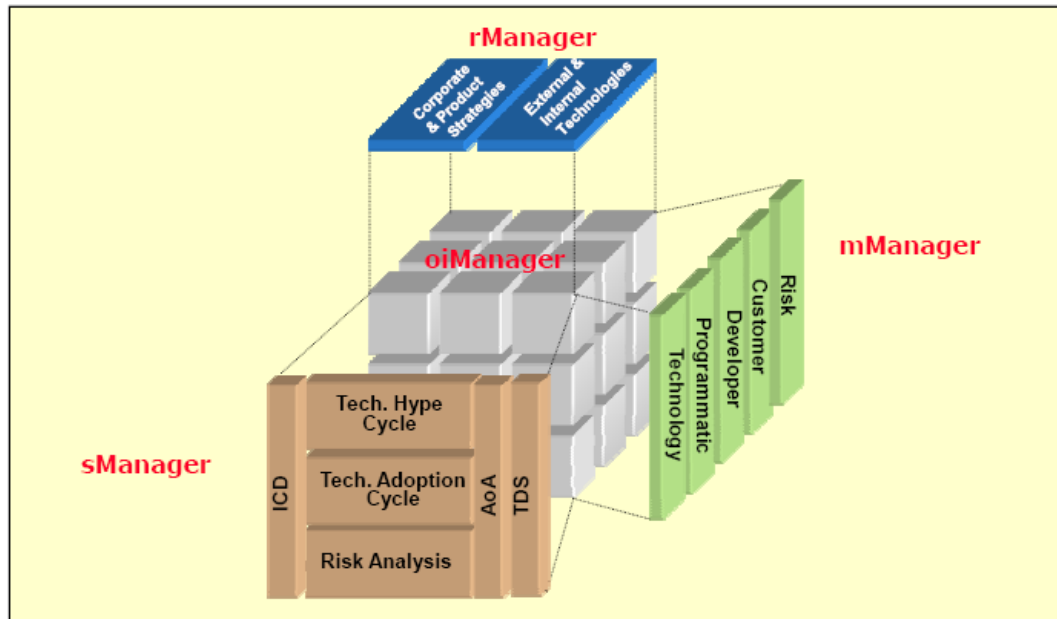
**Phase II:** During this phase, based on the Phase I output, we conduct three analyses to develop a global view of the technology environment. These analyses are Technology Hype Cycle, Innovation Cash Curve and Risk Analysis. The end product of this phase includes (a) snapshot of the technologies being assessed within an Innovation ecosystem; (b) technology gaps, and (c) identification of Critical Research Elements (CREs) and Critical Technology Elements (CTEs).

**Phase III:** This is the major technology due diligence phase. During these efforts, we conduct a quantitative multi-dimension technology maturity analysis for the CREs and CTEs which are identified in the Phase II. These dimensions include Technology, Programmatic, Customer, Developer and Regulation.

**Phase IV:** During this phase, we develop a management report which includes analysis and recommendations. The end result also includes an Executive dashboard.

**The TechIP™ methodology is introduced on the following page. It is based on over twenty years of our R&D and technology management experience in the Defense & Aerospace, Life Sciences, and High-Tech sectors. To learn more regarding our consulting practice and arrange a preliminary meeting, please contact us.**

# Infologic TechIP™ Methodology



## Overview

- This is a generic technology evaluation model, meaning it applies to all high-tech industries. It consists of four phases, Requirements Manager (rManager), Selection Manager (sManager), mManager (Maturity Manager), and oiManager (Open Innovation Manager)

## rManager

- During this phase, our consultants (a) review current organization and product strategies, (b) identify technology gaps in achieving these strategies, (c) review promising technology in laboratories and research centers, academia, and foreign and domestic commercial sources, and (d) develop a baseline list of Critical Technology Elements (CTEs) & Critical Research Elements (CREs).

## sManager

- The first step is to evaluate CREs/CTEs which were identified during the previous phase. The end result of this phase is a list of selected Critical Elements (CEs) that will form the core of the technology development process. To understand the realistic potential of the CEs, three analysis are conducted - Technology Hype Cycle, Technology Adoption Cycle and Risk Analysis.

## mManager

- The objective of a comprehensive maturity analysis is to reduce the risk of product development by conducting various analysis. This risk analysis is divided into five categories, Technology, Programmatic, Developer, Customer and Regulation. Under each category, there are a number of customizable subcategories.

## oiManager

- OiManager is a repository and reporting mechanism. The objective of this phase is to ensure that all supporting data for analyses and recommendations are available in a single coherent system. These analyses include a number of quantitative metrics, such as Technology Readiness Levels (TRLs) which can be used by stakeholders to make investment decisions.

