

# MONITOR GROUP



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## Como Selecionar os Investimentos em P&D Nanotecnológicos

*Congresso Nanotec 2006*  
*São Paulo, 7 de novembro de 2006*

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# Agenda

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- **Context**
- Technological Investments Selection

## Context

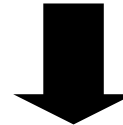
# Nanoscience and Nanotechnology

*Nanotechnology carries a strong disruptive potential*

**Definitions  
according to Royal  
Society  
(policy document)**

*Nanoscience is the study of phenomena and manipulation of materials at atomic, molecular and macromolecular scales, where properties differ significantly from those at a larger scale*

*Nanotechnologies are the design, characterization, production and application of structures, devices and systems by controlling shape and size at nanometre scale*



***There is not a nanotechnology but a series of nanotechnologies, linked to nanomaterials, nanosystems and nanodevices***

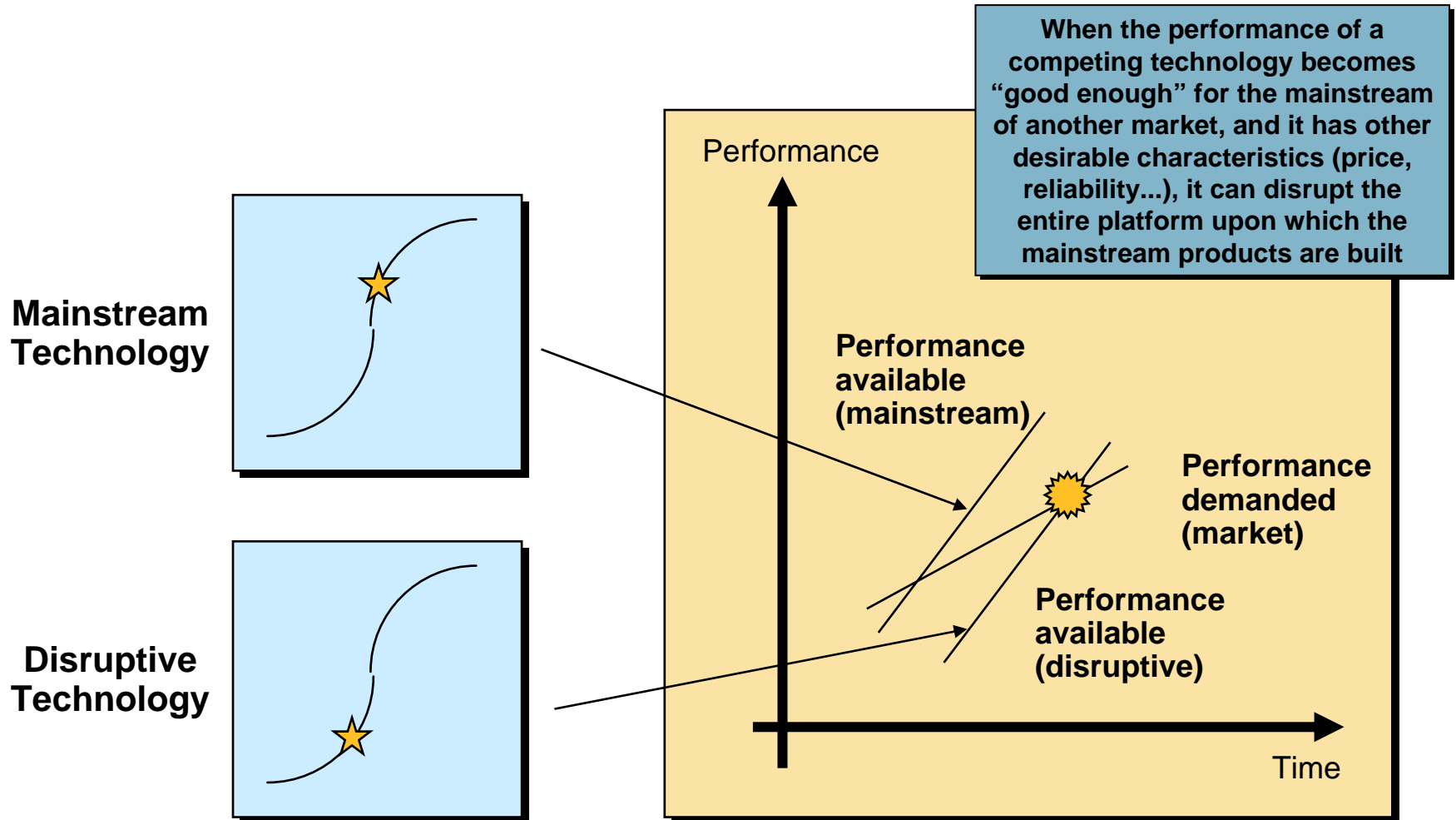
***Nanotechnologies differ substantially from other technological approaches leading to potentially disruptive technologies for several industries***

## Context

# Disruptive Technology Characteristics

Conceptual

*A key uncertainty is when (if ever) a disruptive technology will affect a specific business*



# Agenda

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- Context

- **Technological Investments Selection**

# Technological Investments Selection

## Technology Strategy Objectives

*Companies should have a Technology Strategy that addresses their main objectives*



# Investment Selection

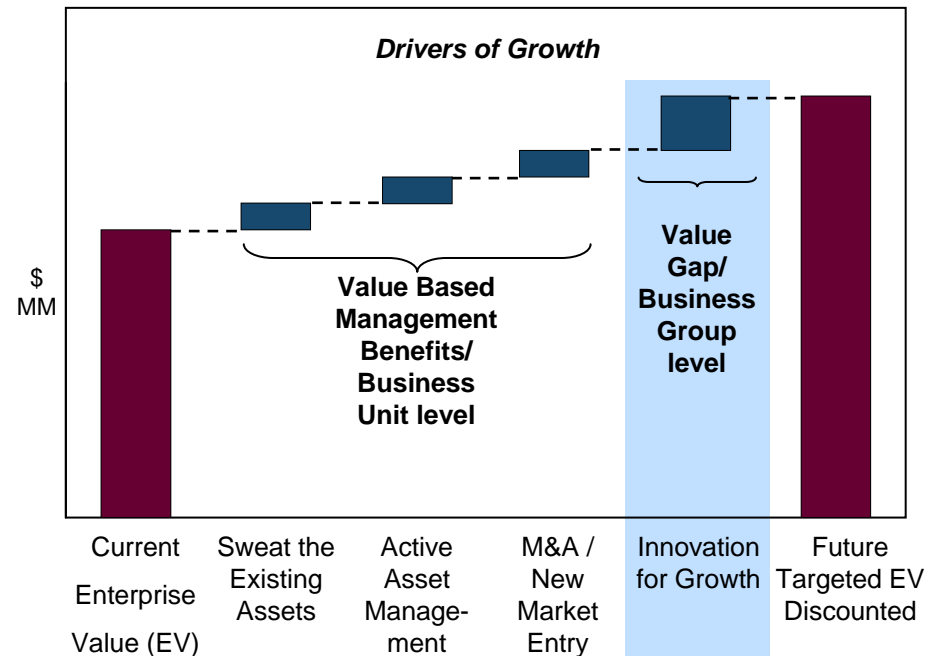
## Technology Assessment

*Technological assessment is a key component of the technology strategy*

### Technology Assessment

- Understand long-term technology horizon and the potential business impact
- Make trade-off decisions on current portfolio
- Understand value of existing technologies relative to competitive advancements
- Identify alliance partners

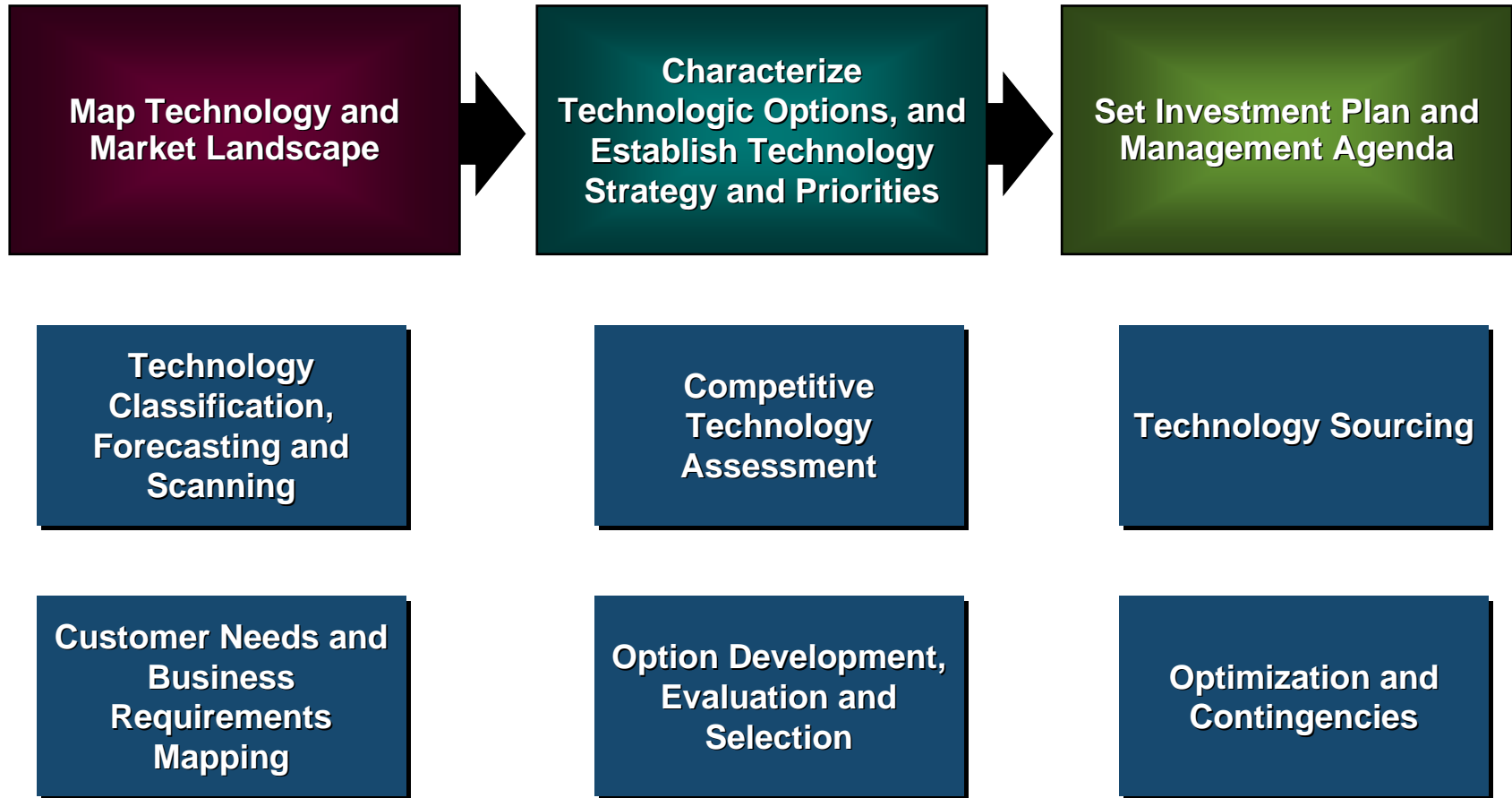
### Potential Impact



# Investment Selection

## Structured Approach to Technology

*Deciding a set of investments is a consequence of a series of analysis about options*



# Investment Selection

## Dealing with Uncertainty

*The scenario planning technique is useful in addressing technology uncertainty*

