CS413 - Software Engineering Project Management

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#### **Strategic Management**

 The art and science of formulating, implementing, and evaluating crossfunctional decisions that enable an organization to achieve its objectives



#### **Strategic Management**

 Focuses on integrating management, marketing, finance and accounting, production and operations, research and development, and information systems to achieve organizational success



## **Strategic Management**

- The term strategic management is used synonymously with the term strategic planning
- The latter term is more often used in the business world, whereas the former is often used in academia



## **Strategic Management**

 Sometimes the term strategic management is used to refer to strategy formulation, implementation, and evaluation and strategic planning referring only to strategy formulation



## **Stages of Strategic Management**

 The strategic-management process consists of three stages: strategy formulation, strategy implementation, and strategy evaluation



## **Stages of Strategic Management**

- Strategy formulation includes
  - developing a vision and mission,
  - identifying opportunities and threats,
  - identifying strengths & weaknesses,
  - establishing long-term objectives,
  - generating alternative strategies, and
  - choosing particular strategies to pursue



#### **Stages of Strategic Management**

 Strategy-formulation issues include deciding what new businesses to enter, what businesses to abandon, whether to expand operations or diversify, whether to to enter international markets, whether to merge or form a joint venture, and how to avoid a hostile takeover



## **Stages of Strategic Management**

 Strategy implementation requires a firm to establish annual objectives, devise policies, motivate employees, and allocate resources so that formulated strategies can be executed



## **Stages of Strategic Management**

 Strategy implementation includes developing a strategy-supportive culture, creating an effective organizational structure, redirecting marketing efforts, preparing budgets, developing and using information systems, and linking employee compensation to organizational performance



## **Stages of Strategic Management**

- Strategy evaluation is the final stage in strategic management
- Managers desperately need to know when particular strategies are not working well; strategy evaluation is the primary means for obtaining this information



#### **Stages of Strategic Management**

 All strategies are subject to future modification because external and internal factors are constantly changing



## **Stages of Strategic Management**

- Three fundamental strategy-evaluation activities
  - Reviewing external and internal factors that are the bases for current strategies
  - Measuring performance
  - Taking corrective actions



## Key Terms in Strategic Management

- Competitive advantage: Anything that a firm does especially well compared to rival firms
- Strategists: The individuals most responsible for the success or failure of an organization



## Key Terms in Strategic Management

- Vision statement: Answers the question «What do we want to become?»
- **Mission statement**: Answers the question «What is our business?»



## Key Terms in Strategic Management

 Opportunities and threats: Refer to economic, social, cultural, demographic, environmental, political, legal, governmental, technological, and competitive trends and events that could significantly benefit or harm an organization in the future. Largely beyond the control of a single organization



## Key Terms in Strategic Management

- Strengths and weaknesses: An organization's controllable activities that are performed especially well or poorly
- Long-term objectives: Objectives can be defined as specific results that an organization seeks to achieve in pursuing its basic mission. Long-term means more than one year



## Key Terms in Strategic Management

- Strategies: The means by which longterm objectives will be achieved
- Business strategies may include geographic expansion, diversification, acquisition, product development, market penetration, retrenchment, divestiture, liquidation, and joint ventures



## Key Terms in Strategic Management

 Annual objectives: Short-term milestones that organizations must achieve to reach long-term objectives.
 Like long-term objectives, annual objectives should be measurable, quantitative, challenging, realistic, consistent, and prioritized

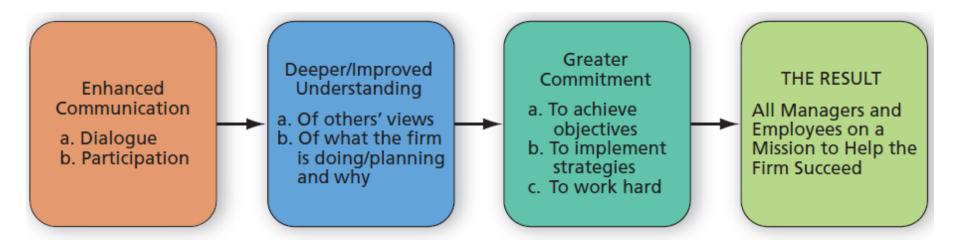


## Key Terms in Strategic Management

 Policies: The means by which annual objectives will be achieved. Policies include guidelines, rules, and procedures established to support efforts to achieve stated objectives

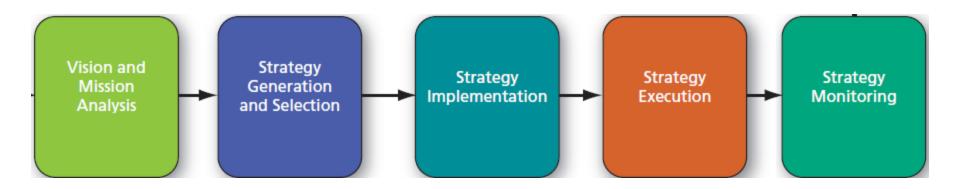


#### **Benefits of Strategic Planning**



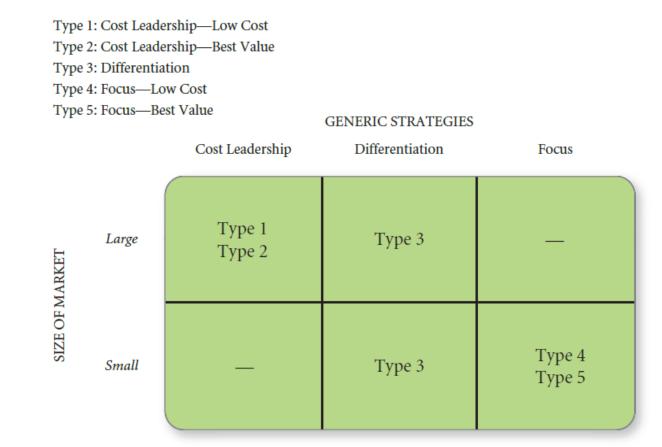


## **Strategic Management Model**



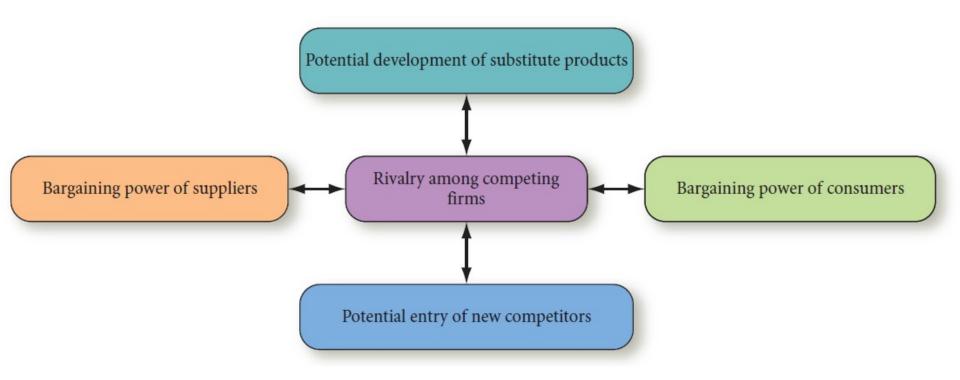


#### **Porter's Five Generic Strategies**



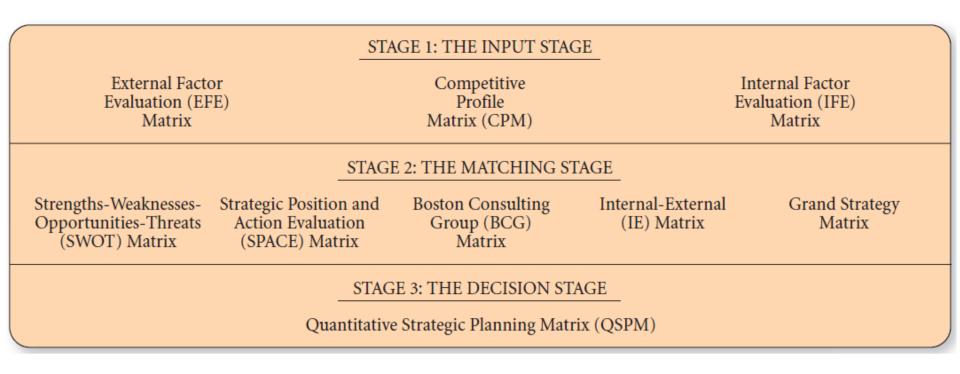


# **Porter's Five-Forces Model of Competition**





#### Strategy-Formulation Analytical Framework





## **Project Manager Competences**

- Technical project management: The knowledge, skills, and behaviors related to specific domains of project, program, and portfolio management. The technical aspects of performing one's role
- Leadership: The knowledge, skills, and behaviors needed to guide, motivate, and direct a team, to help an organization achieve its business goals

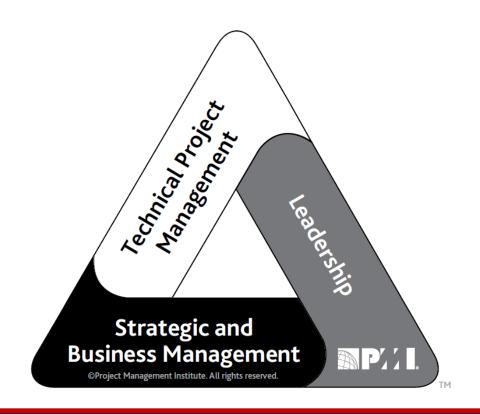


## **Project Manager Competences**

 Strategic and business management: The knowledge of and expertise in the industry and organization that enhanced performance and better delivers business outcomes



#### **Project Manager Competences** The PMI Talent Triangle®





## Financial versus Strategic Objectives

 Financial objectives include those associated with growth in revenues, growth in earnings, higher dividends, larger profit margins, greater return on investment, higher earnings per share, a rising stock price, improved cash flow, ...



## Financial versus Strategic Objectives

 Strategic objectives include a larger market share, quicker on-time delivery than rivals, **shorter design-to-market** times than rivals, **lower costs** than rivals, higher product quality than rivals, wider geographic coverage than rivals, achieving technological leadership, consistently getting new or improved products to market ahead of rivals, ...



## **Financial versus Strategic Objectives**

 Although financial objectives are especially important in firms, oftentimes there is a tradeoff between financial and strategic objectives such that crucial decisions have to be made



## **Financial versus Strategic Objectives**

- A firm can do certain things to maximize short-term financial objectives that would harm long-term strategic objectives
- To improve financial position in the short run through higher prices may, for example, jeopardize long-term market share



## Financial versus Strategic Objectives

 The dangers associated with trading off long-term strategic objectives with nearterm bottom-line performance are especially severe if competitors relentlessly pursue increased market share at the expense of short-term profitability



## Financial versus Strategic Objectives

 There are other trade-offs between financial and strategic objectives, related to riskiness of actions, concern for business ethics, need to preserve the natural environment, and social responsibility issues



## Financial versus Strategic Objectives

- Both financial and strategic objectives should include both annual and longterm performance targets
- Ultimately, the best way to sustain competitive advantage over the long run is to relentlessly pursue strategic objectives that strengthen a firm's business position over rivals



## Financial versus Strategic Objectives

 Financial objectives can best be met by focusing first and foremost on achieving strategic objectives that improve a firm's competitiveness and market strength



## **Finance and Accounting**

- Financial condition is often considered the single best measure of a firm's competitive position and overall attractiveness to investors
- Determining an organization's financial strengths and weaknesses is essential to effectively formulating strategies



## **Financial Ratios**

- Computed from an organization's income statement and balance sheets
- Computing financial ratios is like taking a picture because the results reflect a situation at just one point in time
- Comparing ratios over time and to industry averages is more likely to result in meaningful stats to identify & evaluate strengths & weaknesses



Ratio	How Calculated	What It Measures
Liquidity Ratios		
Current Ratio	Current assets Current liabilities	The extent to which a firm can meet its short-term obligations
Quick Ratio	Current assets minus inventory Current liabilities	The extent to which a firm can meet its short-term obligations without relying on the sale of its inventories
Leverage Ratios		
Debt-to-Total-Assets Ratio	Total debt Total assets	The percentage of total funds that are provided by creditors
Debt-to-Equity Ratio	Total debt Total stackholders' equity	The percentage of total funds provided by creditors versus by owners
Long-Term Debt-to-Equity Ratio	Long-term debt Total stackholders' equity	The balance between debt and equity in a firm's long-term capital structure
Times-Interest-Earned Ratio	Profits before interest and taxes Total interest charges	The extent to which earnings can decline without the firm becoming unable to meet its annual interest costs



Ratio Activity Ratios	How Calculated	What It Measures
Inventory Turnover	Sales Inventory of finished goods	Whether a firm holds excessive stocks of inventories and whether a firm is slowly selling its inventories compared to the industry average
Fixed Assets Turnover	Sales Fixed assets	Sales productivity and plant and equipment utilization
Total Assets Turnover	Sales       Total assets	Whether a firm is generating a sufficient volume of business for the size of its asset investment
Accounts Receivable Turnover	Annual credit sales Accounts receivable	The average length of time it takes a firm to collect credit sales (in percentage terms)
Average Collection Period	Accounts receivable Total credit sales/365 days	The average length of time it takes a firm to collect on credit sales (in days)



Ratio Profitability Ratios	How Calculated	What It Measures
Gross Profit Margin	Sales minus cost of goods sold	The total margin available to cover operating
	Sales	expenses and yield a profit
Operating Profit Margin	Earnings before interest and taxes EBIT	Profitability without concern for taxes and
	Sales	interest
Net Profit Margin	Net income	After-tax profits per dollar of sales
	Sales	
Return on Total Assets (ROA)	Net income	After-tax profits per dollar of assets; this ratio
	Total assets	is also called return on investment (ROI)
Return on Stockholders' Equity (ROE)		After-tax profits per dollar of stockholders'
		investment in the firm
Earnings Per Share (EPS)	Net income	Earnings available to the owners of common
	Number of shares of common stock outstanding	stock
Price-Earnings Ratio	Market price per share	Attractiveness of firm on equity markets
2	Earnings per share	



Ratio Growth Ratios	How Calculated	What It Measures
Sales	Annual percentage growth in total sales	Firm's growth rate in sales
Net Income	Annual percentage growth in profits	Firm's growth rate in profits
Earnings Per Share	Annual percentage growth in EPS	Firm's growth rate in EPS
Dividends Per Share	Annual percentage growth in dividends per share	Firm's growth rate in dividends per share



## **Financial Position**

Financial Position (FP)

Return on investment Leverage Liquidity Working capital Cash flow Inventory turnover Earnings per share Price earnings ratio



## **Financial Measures**

- May include but are not limited to:
  - Net present value (NPV)
  - Return on investment (ROI)
  - Internal rate of return (IRR)
  - Payback period (PBP)
  - Benefit-cost ratio (BCR)



#### **Financials**

- Considerations: Currency exchange rates, interest rates, inflation rates, tariffs, and geographic location
- Control procedures: Time reporting, required expenditure and disbursement reviews, accounting codes, and standard contract provisions)



## **Cost-Benefit Analysis**

- A financial analysis method used to determine the benefits provided by a project against its costs
- Meeting the agreed-upon financial measures documented in the business case



## **Cost-Benefit Analysis**

- A financial analysis tool used to estimate the strengths and weaknesses of alternatives in order to determine the best alternative in terms of benefits provided
- Will help the project manager determine if the planned quality activities are cost effective



## **Cost-Benefit Analysis**

- The primary benefits of meeting quality requirements include less rework, higher productivity, lower costs, increased stakeholder satisfaction, and increased profitability
- A cost-benefit analysis for each quality activity compares the cost of the quality step to the expected benefit



## Financial Benefits of Strategic-Management

- Organizations that use strategicmanagement concepts are more profitable and successful than those that do not
- Businesses using strategic-management concepts show significant improvement in sales, profitability, and productivity compared to firms without systematic planning activities



## Financial Benefits of Strategic-Management

 High-performing firms seem to make more informed decisions with good anticipation of both short- and long-term consequences. In contrast, firms that perform poorly often engage in activities that are shortsighted and do not reflect good forecasting of future conditions



#### References

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- Project Management Body of Knowledge (PMBOK) - 6th Edition and 7th Edition



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