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The nature and dynamics of vanguard (innovation) projects

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Overview

- The innovation balancing act: exploration and exploitation

- Learning from innovative projects

- Group work: vanguard projects

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Types of innovation projects

- Mainstream v newstream projects (Kanter, 1990)
- Derivative and Platform vs breakthrough projects (Wheelwright and Clark, 1992; Tushman and O'Reilly, 2004)
- Routine vs novel projects (Loch et al, 2006)
- Exploitation and exploration projects (Lenfle, 2008)
- Routine vs innovative (vanguard) (Brady and Davies, 2004 and 2016)

The innovation balancing act

- "Pressures to innovate confront businesses as well as people with another demanding **balancing act**: keeping up with the activities we are already committed to, to reap the benefits of our investment in them, while at the same time starting new activities that will be of benefit in the future. While caught in the mainstream, we must also generate 'newstreams'"
  - Rosabeth Moss Kanter *When Giants Learn to Dance* (1990)

- March (1991)
  - Exploratory learning
  - Exploitative learning

Types of projects

Routine projects	Innovative projects
Transfer of capabilities across similar projects	Innovation and renewal of capabilities
Support the momentum behind a company's existing business	No experience base
Focused on existing customers' needs and established technologies	Breakthrough initiatives in technologies, products, processes, and services

Existing business develops a reputation for 'doing what it does best', repeats certain types of projects by exploiting specific products, contingencies and programmes (Mintzberg 1983:27).

Breakout into new technologies and markets is led by:

Breakthrough project (Tushman & O'Reilly, 2004)

Rosabeth Moss Kanter (1990) When Giants Learn to Dance

Organising for breakthroughs

- "Most successful enterprises are adept at refining their current offerings, but they falter when it comes to pioneering radically new products and services"
  - O'Reilly and Tushman (2004) 'The Ambidextrous Organization', *Harvard Business Review*

- Two types of organisational units:
  - Exploitative units: make steady improvements in existing business – incremental innovations
  - Exploratory units: breakthrough projects – radical innovations beyond current products or markets

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Functional designs

integrate teams into the existing organisational and management structure
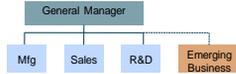
General Manager

Mfg	Sales	R&D

Cross-functional teams

operate within the established organisation but outside the existing management hierarchy

General Manager

Mfg	Sales	R&D

Emerging Business

Unsupported teams

are set up outside the established organisation and management hierarchy

General Manager

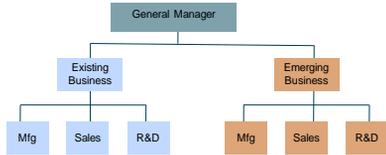| Mfg	Sales	R&D	Emerging Business

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Ambidextrous organisation

establish project teams that are structurally independent units, each having its own processes, structures and cultures, but are integrated into the existing management hierarchy

General Manager

Existing Business	Emerging Business

Mfg	Sales	R&D	Mfg	Sales	R&D

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Scope of ambidexterity

Alignment of:	Exploitative Business	Exploratory Business
Strategic intent	cost, profit	innovation, growth
Critical tasks	operations, efficiency, incremental innovation	adaptability, new products, breakthrough innovation
Competencies	operational	entrepreneurial
Structure	formal, mechanistic	adaptive loose
Controls, rewards	margins, productivity	milestones, growth
Culture	efficiency, low risk, quality, customers	risk taking, speed, flexibility, experimentation
Leadership role	authoritative, top-down	visionary, bold

Ambidextrous Leadership
Different alignments held together through senior-team integration, common vision and values, and common senior-team rewards

- The innovation balancing act: exploration and exploitation

- Learning from innovative projects

- Group work: vanguard projects

Learning from projects

- Learning from projects is difficult
  – Temporary, teams disband when project finishes
  – But improved project performance depends on learning

- 'Every project creates a unique learning opportunity. Things change rapidly, decisions are constantly made, and mistakes are made. Lessons can be learned every week and at every milestone, and clearly at project completion. But few organizations have a habit of recording, documenting, and sharing project lessons throughout the company'
  – Shenhar & Dvir *Reinventing Project Management* (2007: 212)

The challenge of learning: capturing and transferring knowledge

- "Company executives and CEOs should install a learning culture around projects.
- It should become a habit to summarize lessons learned in each opportunity or major event and to document a completed project (whether a success or failure) with a summary report describing the lessons learnt.
- This report should be prepared after all team members have shared their thoughts during a long discussion about what went right or wrong and why, and then it should be distributed to the rest of the company, perhaps on its intranet.
- In this way the company will retain its organizational memory and will be able to avoid repeated failures of the same kind"
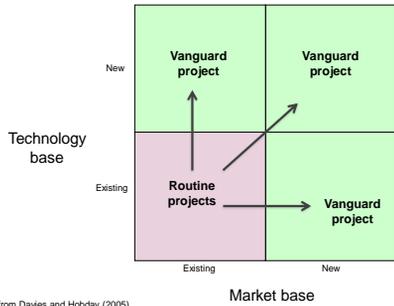 – Shenhar & Dvir (2007: 212)

Project capability base of the firm

Adapted from Davies and Hobday (2005)

Vanguard project: the challenge of moving a firm's capability base

- Vanguard projects for fast-emerging technologies or rapidly changing or new customer needs
- Outside a firm's project experience
- Relying on detailed project plans will give a false sense of security
- Do not require the same resources as maintstream projects
- Bring greater risk and uncertainty
- Managers need to be creative and rely on improvisation and intuition

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Vanguard projects

- Learning from innovation
- Starts with a "vanguard project"
- "…established at the forefront of an organization to explore strategic opportunities to move into new technology or market bases or adapt to a changing market environment. Vanguard projects lead the way by anticipating progress as well as gaining experience about a new activity. They are often set up as a separate pilot group to explore a new opportunity on a trial basis and to provide room for new ways of thinking and acting at a distance from the mainstream organization". p1607, Brady and Davies (2005)
- Dealing with tensions and transitions
  - Bottom-up learning from projects and top-down strategic learning
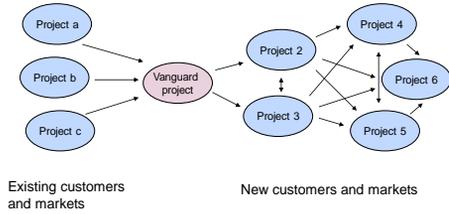 - Transition from exploratory and exploitative learning

Vanguard project and learning

Project a

Project b

Project c

Vanguard project

Project 2

Project 3

Project 4

Project 6

Project 5

Existing customers and markets

New customers and markets

Project capability building model*
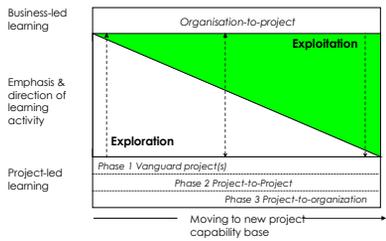
Business-led learning

Emphasis & direction of learning activity

Project-led learning

Organisation-to-project

Exploitation

Exploration

Phase 1 Vanguard project(s)

Phase 2 Project-to-Project

Phase 3 Project-to-organization

Moving to new project capability base

*Brady and Davies (2004)

- The innovation balancing act: exploration and exploitation

- Learning from innovative projects

- Group work: vanguard projects

Group work: vanguard projects

Each group examines one vanguard project

Develop a presentation (10 mins)

Each group answers the following questions:

1. Describe the innovation associated with the vanguard project? (product, service, process; driven by opportunity or customer needs)

2. How was the vanguard project organised? (team structure, process for dealing with uncertainty)

3. Which organisations benefited from the project?

4. How did they capture and transfer learning? (build capabilities, etc)

Literature:
– Davies and Brady (2000); Brady and Davies (2004); Davies and Brady (2016)