

Globally Distributed Product Development

Role of Product Characteristics on the What, Where and How

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Motivation



General Motors
in China



Boeing 787
Supplier Challenges

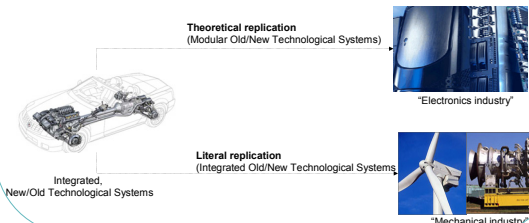
- Literature has NOT investigated the role of complexity in globally distributed product development
- Little rigorous and quantitative analysis on what determines the best location for global product development. Is it the cost, the capability, or market? How do we trade-off on these determinants?
- From the different subsystems, which ones can we best develop globally? Do the same hold for complex mechanical components as well and modular electronic subsystems?

Key Research Questions

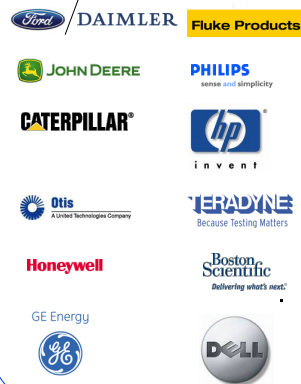
- What are some best practices in handling complexity in globally distributed product development operations?
- What types of subsystems are globally developed under the captive offshore, partner or supplier global product development modes?
- Where are the subsystems developed given technical and business constraints?

Research Design and Methods

- Design
 - Grounded theory
 - Multiple embedded case studies
- Methods
 - Semi-structured interviews
 - Internal documents
 - Public data



Completed Cases



Applications to Industry

- Compilation of best practices in globally distributed product development with a focus on handling complexity in execution and how to build the appropriate globally distributed product development organization
- Models that consider market, cost, capability and culture in predicting the best location for developing a particular subsystem
- Models that can help us decide which subsystems can best be developed globally