Structuring the Product Development Organization (Continued)

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Matrix Connections to Market and Technology

Referee to manage priorities

Competition for Resources

DRIFT
Imbalance

• What is the problem when power, authority and credit drift to the project side of the product development matrix?
  – Project managers are in a high pressure role.
    • Pressure emanates from the Marketing function and from key customers.
      – The competition already has their next generation out. Where is ours?
    • This can tempt project managers into premature clearance of the product.
Countering Imbalance

• There must be a countering force to constrain the project manager’s temptation toward premature release.
  – Where better to find this force than in departmental management?
    • Departmental management should be responsible for the technical integrity of the product.
• Of course, if the balance shifts too far toward departmental management, products may be delayed too long and ‘time-to-market’ extended too far.
Problems with Imbalance

Market

OUT

IPT

Tech Integrity

Technology

Depts Head
Problems with Imbalance
Resolution of Two Forces

- It is the resolution of the two forces that produces the optimum.
  - Project management pulling the product out.
  - Departmental management holding back.
- This quite naturally leads to conflict.
The Inescapable Conflict

IPT

CONFLICT

Market

Technology

Tech Integrity

OUT
The Inevitable Conflict

- Do not be surprised by the presence of conflict in the product development matrix.
  - Conflict is designed into the matrix.
- Be worried when conflict is absent from the product development matrix.
  - The absence of conflict means that one side ‘won’.
    - The system is out of balance.
A More Complete Matrix Using Integrated Product Teams
Management of Transitions

- The critical points of vulnerability in the life of a project are the points of transition.
  - Transitions can involve many parameters, for example:
    - People
    - Management
    - Leadership & leadership style.
    - Primary organizational responsibility and reporting relationships.
    - Nature of the work.
    - Types of knowledge required.
    - Physical location.

- To change all of these simultaneously is to court disaster.
Matrix Connections to Product Development and Manufacturing Engineering
Management of Transitions II

Transition Points

Project Size & Scope

Time
• Projects must be protected through transitions.
  – There must be areas of continuity to offset the areas of change.
  – Team size must grow in a gradual fashion.
    • This has implications for both organizational structure and physical architecture.
    • Both must be very flexible to allow this to happen along with a gradual transition in reporting relationship.
  – There should be an extra effort to retain a sense of ‘ownership’ among team members.
    • Avoid ‘runway management’.
Management of Transitions III

Diagram showing the relationship between project size, scope, and time, with marked transition points.
Space & Location
Distance Measurement
Proportion of Communication Partners as a Function of Distance
Probability of Technical Communication as a Function of Distance Between Work Stations

![Graph showing the probability of weekly communication decreases as separation distance increases.

Y-axis: Probability of Weekly Communication
X-axis: Separation Distance
The graph illustrates a downward trend, indicating a decrease in communication probability with increased distance.
Probability of Technical Communication as a Function of Distance Between Work Stations

![Graph showing the relationship between separation distance in meters and the probability of weekly communication.]