

# Communication in Program Leadership-Management

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***43 slides***

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# Communication in Program Leadership-Management

- Leadership – is the inspired use of *Communication* to deliver:
  - creative motivation
  - calculated risk taking
  - excitement
  - involvement
- Hence:*
  - *Efficiency–competitiveness-minimal schedules*
  - *Business objective achievement*
- Management is the necessary *Linear Mechanics* - delivered by information via *Communication*

# Communication in Program Leadership-Management

- **Summary of Contents**
  - Key Players viewpoints on what Program Management must deliver
  - Program Manager (*Leader-Facilitator*) Role
  - Project Startup
  - Mock Design Phase
  - *Concurrent Projects*
  - *Business Management Styles*

# Key Players Viewpoints

# Executive Viewpoint I

- Executives key R&D priorities:
  - #1 achievement of key product (*schedule, performance, cost etc*) objectives
  - #2 ongoing communication of critical schedule, objective, risk data
  - #3 achievement of planned resource utilization
  - #4 management of shared resource demands

# Executive Viewpoint II

- Executives ongoing communication priorities:
  - #1 'no surprises' – schedule, objective attainment, resource needs
  - #2 measurement – of project progress toward objectives
  - #3 project risk – extent, nature, management strategy, mitigation status

# Team Members Viewpoint

## R&D Team Members Require:

- *Leadership via Communication*
  - to deliver *shared* objectives - via discussion, review, agreement, commitment, risk information transmission
  - to deliver motivation, risk taking, excitement, involvement, enjoyment
- Management skills to establish and achieve the schedule

# Teams viewpoint of Executive I

## Executive must deliver:

- Attitudes, information to:
  - facilitate, help
  - inform, guide, connect
  - consult, support
  - excite, enthuse
  - respect
- *Not:*
  - demand, instruct, measure, coerce...
- So Team stays motivated and excited

# Teams viewpoint of Executive II

## Executive must deliver:

- Project risk acceptance - on behalf of the business.
- Risk accepted by executives *'eyes open'*, not by team members in isolation

# Individuals Viewpoint

Individuals want Program Management to deliver:

- Individual Responsibility and Motivation
  - assurance that individuals accept responsibility *with enthusiasm and excitement*
  - assurance that individuals are personally sympathetic to and involved in the business's objectives – so they *instinctively* use individual creativity *in ways relevant to the project and to the business*

# Business - as a whole - needs:

- Leadership and Management to deliver Real Team Behavior !
  - for product success the Program Manager must ensure *real team behavior*
  - is a team a group isolated individuals ? *No..*
  - it is a group of motivated individuals working synergistically together to produce more...
  - synergism can only result from *communication*
  - only *communication* can deliver the great *team performance advantage* – “greater than the sum of the individuals”

# Program Manager - Leader-Facilitator Role

# R&D Project Structure

- **Basic Project Structure – *Tacit or Formal***
  - team composed of few highly experienced players, some middle, multiple junior, multi-discipline, scattered *across the business*
  - **Program Manager creates a successful project by leading communication** to develop a excited, motivated, efficient team
  - Program Manager is the overall project leader-facilitator-manager

# Jobs - Job Titles - Functions

- **Program Manager**
  - project leader-facilitator-manager, horizontal responsibility
  - total communication focus, broad experience, *makes everything happen*
  - responds to Executive Management
- **Project Manager**
  - collects and maintains info on status vs schedule objectives > Project Office
- **Product Manager**
  - project content control/monitoring <> Product Management, Executive Management
  - sales and marketing orientation

# The Program Manager

- **Skills of Program Manager - Leader-Facilitator**
  - excellent judgment and communication skills – vertical and horizontal
  - broadly, soundly technical - not a narrow expert
  - facilitating, organizing, cheer leading, boundary crossing, whole life-cycle focus...
  - *supplants* classical/formal vertical structure *to get results* – not subservient to it. Ultimately is responsible to Executive Management.
- **Role of “classical” vertical structure changed**
  - Click to *see later slide*

# Project Startup

# Project Startup I

- Assume a Product Development initiates by some route beyond this presentation's viewpoint
- Project objectives defined within the context of the business's *“Practical Business Vision”*
- Program Manager is appointed and key contributors identified
- Overall Program Manager strategy: *Front load project startup with extensive discussion and planning !*

# Project Startup II

- **Kick-off Meeting**
  - all senior execs present
  - CEO/President presents objectives of the project and puts them in context
  - objectives available on paper
  - role-responsibilities of Program Manager defined
  - exhaustive Q&A
- **Purpose – *Communication of the Business's Motivation for the project***

# Project Phases I

- Phase 1: Mock Design
- Phase 2: Initial Work – Risk Exploration and Mitigation
- Phase 3: Detailed Work !
- Phase 4: Testing, Beta's etc
- **In Parallel:** *Application/evolution of technical/ISO development process - process gating etc + PM SW tools ...*

# Project Phases II

- Phase 1: Mock Design
- Phase 2: Initial Work – Risk Exploration and Mitigation
- Phase 3: Detailed Work
- Phase 4: Testing, Beta's etc
- In Parallel: *Application/evolution of technical/ISO development process - process gating etc.*

New schedule etc.  
at end of each phase

# Mock Design I

- Phase 1: Mock Design - Objectives:
  - motivation-communication + team dynamics
  - team commits to target performance
  - team commits to partitioning, sequence of work, detailed schedule & resourcing
  - team measures risks
  - update target specification
  - define unique development process for project
  - Program Manager commits - on behalf of team: Executive publicly, on-paper, accept risks...

# Mock Design II

- Steps in Mock Design ?
  - team ‘key players’ meet for 1-4-? weeks and ‘go through motions’ of doing all project design work
    - *to do a mock design*
  - “where do we start, how do we partition, what do we know/not know, assumptions...”
  - task division/assignment (*into 1-3 week person-modules*)
  - module risk evaluation (*unknowns = risk = potential additional time*)
  - work “sizing” – *design complexity, BoM complexity, key components, product cost, budget, documentation quantities...*

# Mock Design III

- **Mock Design - *comments***
  - specification/schedule/deliverable exploration-clarification occurs
  - work sequence ? *Highest risks first !*
  - development process defined - or becomes part of project if not available/appropriate
  - level of risk can lead to partitioning of project into separate “feasibility-R” and “committed-D” phases/components

# Risk Measurement

- Risk Metric – Practical Definition
  - module risk measured by the *person responsible for module* as “degree of certainty” of schedule estimate  
*e.g. Low risk: +-10% High risk: +100% -0%*
  - “Degree of Certainty” = individual’s familiarity with task content
  - individual calibration is key risk factor for L-F and project risk management
  - “Project Risk” is sum of risk weeks *relative to* nominal project total length

# Mock Design IV

- Phase 1: Mock Design - Completion
  - Project motivation, communication, team dynamics established
  - Team commits to project objectives
  - Team committed to partitioning, sequence of work, **detailed schedule** & resourcing
  - Team has measured risks
  - Updates Target Specification
  - Development process agreed
  - PL-F commits; *Executive publicly, on-paper, accept identified risks+outcomes...*

# Mock Design V

- Phase 1: Mock Design
- Phase 2: Initial Work – Risk Exploration
- Phase 3: Detailed Work !
- Phase 4: Testing, Beta's etc
- In Parallel: Application of technical development process, including documentation
- Actual Milestones are Overlaid
- As team members added schedule must be updated using their schedule estimates
  - *Crucial for each individual's motivation !*

# Phase 2: *Risk Explore-Mitigate*

- **Objective – Manage Risks**
  - explore each risk area
  - choose and implement a path to reduce-eliminate unknowns
  - disconnect risk impacts from other work
  - completion: reworked schedule with **much reduced uncertainty** and new risk data
- ***Explicit* Risk Management: A sensitive area for many executives !**

# Phase 2 Onwards: A Key Motivational Issue

- Managing “Resource Stealing”
  - cannot “close” most projects – key people usually “have” to be diverted to high priority interrupts
  - must *publicly track/report/record* schedule effect of interrupts realistically to maintain *team motivation*
  - diverting a key individual for 5 days wastes 2-3 days of work and adds 1-2 days of work + delays schedule by 5 days
  - overall schedule may be consequently delayed by 8-10 days – *not 5 days !!*
  - *diversion often causes loss of schedule control and the personal commitment of key people*

# Subsequent Phases

- Subsequent phases follow development process
  - Phase 3: Detailed Work !
  - Phase 4: Testing, Beta's etc
- **In Parallel:** *Application/evolution of technical/ISO development process - process gating etc + PM SW tools - to flexibly meet project's specific needs*

# Status Reporting

- **Ongoing:**
  - exceptions
  - regular and/or natural milestone attainment
- **Reports:**
  - follow team reporting meetings
  - walk around follow-ups - constantly
- **Risk and Schedule Updates**
  - accepted by executive at outset and at each update

# Concurrent Projects

# Concurrent Projects I

- Some concurrency normal in all projects
- In Concurrent Projects additional “*unnatural*” concurrency is introduced to shorten schedule

# Concurrent Projects II

- Needed under (*unusual !*) time pressures when:
  - target specification unavailable – is developed in parallel as work proceeds
  - research to identify/verify technical solutions/methodology is significant
  - unacceptable schedule caused by task ‘serialization’
  - excess resource advocated because schedule insurance required
  - business reward/risk ratio is unusually attractive

# Concurrent Projects III

- **Concurrent Projects**
  - parallels tasks that are ‘naturally’ serial
  - uses **communication management** and modeling to ‘unlink’ the various project contributors
  - uses modeling to substitute for unavailable modules
  - requires extensive project process
  - may require presence of all contributors from outset
  - *special case*: often applied to multiple similar product developments

# Concurrent Projects – *Characteristics I*

- Risk can be higher
- Requires continuous intense communication
- Depends on development of :
  - good work partitioning assumptions
  - effective isolation of work modules
  - definition of internal deliverables
  - additional work in developing test data etc

## Concurrent Projects – *Characteristics II*

- Some individuals are intolerant of communication demands
- Leadership and management very hands-on
- Some work often wasted
- Mock phase extended
- End-to-end product optimization can be feature or performance rewarding

# Business Management Styles

# Vertical versus Horizontal I

- “Command and Control” versus “Team-Horizontal-Matrix”
- “C&C” has vertical pipes, co-ordination by ill-informed to-and-fro middle managers, slow motion, *failure commercially in current business environment...*
- “C&C” is dying slowly and painfully

# Vertical versus Horizontal II

- “Team-Horizontal-Matrix” is having growing pains as old attitudes linger, driven by lack of trust and by frustration in crisis situations
- “Team-Horizontal-Matrix” focused on developing critical IP based on Market Understanding and Technology Creation, with offshore detailed product development and manufacturing, is the future of western technology based businesses !

# Vertical versus Horizontal III

- “Team-Horizontal-Matrix” has transient teams
- The re-vectored vertical structure facilitates, *mentors, advises, verifies, learns, plans, investigates...identifies, collects, applies-develops business’s key narrow expertises*
- Executive controls via Business Vision, Project Start-Up, Program Manager, Project Office > *communication > motivation*
- **Everything** done in the business has a schedule > info coordination, dissemination by a Project Office function !

# Vertical versus Horizontal IV

- “C&C” presumes executive know everything *a la* Henry Ford; employees are extensions of executives right hand - *controlled via middle managers due to business size*
- Horizontal recognizes professionals know more than executive, in key expertise areas – *the inverted responsibility-triangle of knowledge*
- Horizontal obtains competitiveness from harnessing professionals knowledge in the business’s ever-changing context – *via motivation, excitement, enjoyment, hence communication and teams*

# Vertical versus Horizontal V

- Transitioning to a horizontal structure is a major challenge as a business grows from small to medium sized
- Some entrepreneurs never make the transition because they cannot trust !
- This issue creates key, often insurmountable, problems for many growing businesses.

end