# FTTM BEST PRACTICES

#### JOE NEIPP JHN & ASSOCIATES



## "I WAS JUST A LITTLE BEHIND WHEN TIME RAN OUT!"

-No Fear T-Shirt Saying

# WHAT IS FTTM?

# **FAST-TIME-TO-MARKET**

First used by Lateralworks in 1991-1992 Best Practices Study

# WHAT IS FTTM?

SPEED BASED PLANNING AND SCHEDULING METHODOLOGY

RESULT OF A STUDY DONE BY LATERALWORK SYSTEMS IN CONJUNCTION WITH STANFORD UNIVERSITY BEGINNING IN 1990

□ A COMBINED SET OF BEST PRACTICES THAT FAST TEAMS EMPLOY INCLUDING:

- ✓ VOICE-OF-THE-CUSTOMER
- ✓ INFRASTRUCTURE
- ✓ OPERATIONAL TEAM MANAGEMENT

#### **EFFECTIVE PROJECT MANAGEMENT**

DELIVER ON SCHEDULE & ON BUDGET

□ MANAGE ALL ISSUES AFFECTING CSP

□ DEVELOP THE TEAM'S CAPABILITY

□ CAPTURE & IMPLEMENT LEARNINGS

## THE ECONOMICS OF DELAY



#### □ ASP & market share is a function of time of entry into market

Early entry insures higher ASP and larger market share

## **BALANCING THE FOUR KEY FACTORS**



## **BENEFITS OF USING THESE TRADE-OFFS**

 THINK LIKE A BUSINESS PERSON
THE LANGUAGE OF UPPER MANAGEMENT = \$
BALANCING THE 4 FACTORS GIVES YOU LEVERAGE

## **TECHNICAL RISK:**

The probability of failing to achieve the performance, cost, or schedule targets of the specification

#### "Missing the Target"



#### **MARKET RISK:**

The probability of not meeting the needs of the market, assuming the specification has been satisfied.



## **Measuring FTTM Success**



#### WANNA KNOW AN IRRITATING LITTLE SECRET ABOUT PROJECT MANAGEMENT?

## ALL PROJECTS SLIP !!!

#### **Key to Schedule Acceleration**



#### **FTTM Model**



#### □ Supported by ongoing best-practice research started in 1990

✓ 12 years of continuous refinement through application to hundred's of projects

#### "Host" Related Factors That Slow TTM

Poor management of the "fuzzy front end"

Lots of time wasted

No project budget, only "host" functional budgets

Lack of overall management of the product from concept to break-even

In the semiconductor business schedules stop at Tape-Out

• 2/3 of the project remains

#### "Host" Related Factors That Slow TTM

□Speed is not built into the strategy of the business

 Rather it is an after thought once the company market share deteriorates

#### Poor product portfolio management

- ✓ No "starts" control (every thing starts)
- Limited pipeline management
- Little effort to prioritize development projects
- No "stomach" to kill "bad" projects
  - Bad = low ASP/Share/Margin/not Strategic

## "Host" Related Factors That Slow TTM

- □ Team in the background, host in the foreground
- □ PM is a coordinator & does not control resources
  - Nor their allocation to the project
  - Nor their performance reviews
- Over allocated resources & over aggressive schedules
- □ Decision-making is hierarchical & slow
  - Versus core team driven
- □ Lack of clear ownership of the product
  - Rather it is owned by the functions & tossed over the wall, etc.

#### **KEY PRINCIPLES OF FTTM SCHEDULING**

□ Schedule as driver vs. "reporter"

□ Schedules are based on "reality"

Cost of delay is known and it changes behavior vis-à-vis schedule

Schedules take time to create, require team participation & iterative modeling to gain "grasp"

Customer driven, not resource driven schedules

KEY PRINCIPLES OF FTTM SCHEDULING Organize around the work vs. structure the work around the organization

Top-down & bottom-up reconciliation

Incremental work-break-down; short interval near term schedules

□ Continuous schedule pull-in & scrubbing..."Refresh Planning"

Product strategy and project deployment are connected

Customer driven WBS vs. functional WBS

## **ACCELERATING THE SCHEDULE**

#### □ Do we have to "make" it (i.e. design, develop, build)?

- Could it be "bought"
- (i.e. purchase the intellectual property, license the technology, etc.)?
- Could we establish a development/alliance partner to leverage the technology?

□ Is it possible to change the product definition and/or de-feature

- what is our voice-of-the-customer data telling us about trade-off alternatives?
- □ How about re-use and/or the use of common parts?

## **ACCELERATING THE SCHEDULE**

#### □ Let's challenge the base technology assumptions?

- Are they absolutely required to meet the customer's requirements?
- □ Is there/should we set a common "reference architecture?
- □ Could we eliminate (non-value) activities in our plan?
- Could we make more activities in the plan take place concurrently?
- Could we realistically reduce the duration estimates we made?
  - Could we find more resources internally?
- Could we find contract resources outside (i.e. individuals and/or companies)?

#### FTTM Scheduling Methodology



#### Balance Between Speed and Control



#### Stages in Cycle Time Improvement



#### **SUCCESS FACTORS**

□ KNOW WHEN TO USE FTTM

**KNOW THE COST OF DELAY** 

□ DRIVE THE CRITICAL PATH ON YOUR PROJECT

**LEARN TO MAKE MS PROJECT DANCE** 

□ MANAGE THE HOST ENVIRONMENT

□ LEARN TO READ A GANTT CHART

## **GANTT CHARTS???**



#### **SUCCESS FACTORS**

#### **BALANCE THE 4 TRADE-OFFS**

**MAKE YOUR SCHEDULE REFLECT REALITY** 

#### **ORGANIZE AROUND THE WORK**

□ TRAIN, SUPPORT AND REWARD FAST TEAMS

□ CHALLENGE ALL ASSUMPTIONS

**DPULL IN SCHEDULES BEFORE THEY SLIP** 

#### WANT TO COMPLETE PROJECTS FASTER?

# START FEWER PROJECTS... AND FINISH THEM

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#### AN ITALIAN SAYING

# "Tra il dire E il fare C'e di mezzo il mare"



#### LATERAL WORK SYSTEMS (LWS) METHODOLOGY -NEAL MITCHELL

DEVELOPING PRODUCTS IN ½ THE TIME – DON REINERTSEN (CAL TECH)

- □ PMI = PROJECT MANAGEMENT INSTITUTE
- STANFORD ADVANCED PROJECT MANAGEMENT CERTIFICATE PROGRAM – BILL KERN WITH IPS
- □ VITE CORPORATION DR. RAY LEVITT
- □ JOSEPH H NEIPP JHN & ASSOCIATES (408) 721-5169

### **ADDITIONAL SERVICES**

#### □ CONDUCT OR FACILITATE SCHEDULING WORKSHOPS

✓ 2 DAY WORKSHOP TO GENERATE SCHEDULE, COST OF DELAY, & PLAN FOR RISK MANAGEMENT

#### □ CONDUCT FORMAL, "HANDS-ON" FTTM USER AND PARTICIPANT TRAINING ON THE SOFTWARE

✓ ON SITE 4-6 HOURS

- □ FACILITATE "SCRUB" SESSIONS
- FOLLOW UP WITH 1X1 CONSULTING/COACHING ON LWS OR MS PROJECT TOOL USAGE
- WORK WITH TEAM LEADERS TO ASSESS AND IMPROVE TEAM PROCESSES

□ ASSESS AND IMPROVE INTERNAL REVIEWS

CONTACT: JOE NEIPP (408) 721-5169

#### **PARTICIPATING COMPANIES- ORIGINAL STUDY**

- Amdahl Corporation
- □ Compression Labs
- Cypress Semiconductor
- □ Tandem Computers
- Network Equipment Technologies
- □ LSI Logic
- □ Tektronix

- □ 3Com Corporation
- □ IBM Corporation
- □ Cadence Design Systems
- □ Sun Microsystems
- Philips Semiconductors
- Philips Electronics
- Seagate (Conner Peripherals)