

### BUSINESS ARCHITECTURE FOR THE AGILE ENTERPRISE

Agile India Conference Pune 19<sup>th</sup> August,05



## AGENDA

- · The changed business landscape
  - New business drivers
- Agility in Diversity
  - Worship "work" not the "process"
- Agility "astras"
  - WBS
  - BVI
- · Steering Business Value Creation
  - UNIVERSAL MEASUREMENT FRAMEWORK
- · The Final say





## The changed business landscape

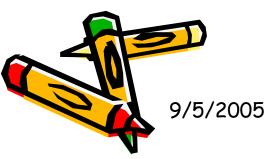
- India's cost advantage?
  - 6% p.a. hit on bottom-line
    - Exchange rate and salary increase
    - Other countries can offer the mandatory 30-35% outsourcing benefit
  - Overdoing Quality (CMM)
    - · The Chinese certainly think so.
    - "On an average it takes a company 1.5 years to move from one CMMi level to the next."
    - "There is, as yet, no convincing evidence that higher rated companies produce better quality software."



## New Drivers of BUSINESS VALUE



- Increased RISK sharing
  - Fixed bid, Joint venturing
  - Uncertainty and Change
- Time-to-Market
  - All LIFE-CYCLES Opportunity windows, Product, Technology, People skills, are getting shorter.
    - CYCLE TIME REDUCTION
    - RETURN on CAPITAL EMPLOYED
  - BUSINESS VELOCITY
    - · The rate at which the business adds value
- · AGILITY is the key!



### AGILITY in DIVERSITY

- FLEXIBILITY required Because WORK appears in all shapes and sizes
  - Variety of SERVICE TYPES
- PROCESS FRAMEWORK thinking is sometimes counterproductive
  - "the practices and procedures in CMM sometimes would make information systems development too rigid and structured"
  - "The complexity (of CMM) makes it difficult to tailor the model for specific projects."
  - MORAL OF THE STORY: Don't force fit work products, to suit the process!
- · AGILITY
  - The flexibility to deliver BUSINESS VALUE, in DIVERSE and DYNAMIC situations.



# FLEXIBILITY is IMPLEMENTING THE RIGHT METHODOLOGY

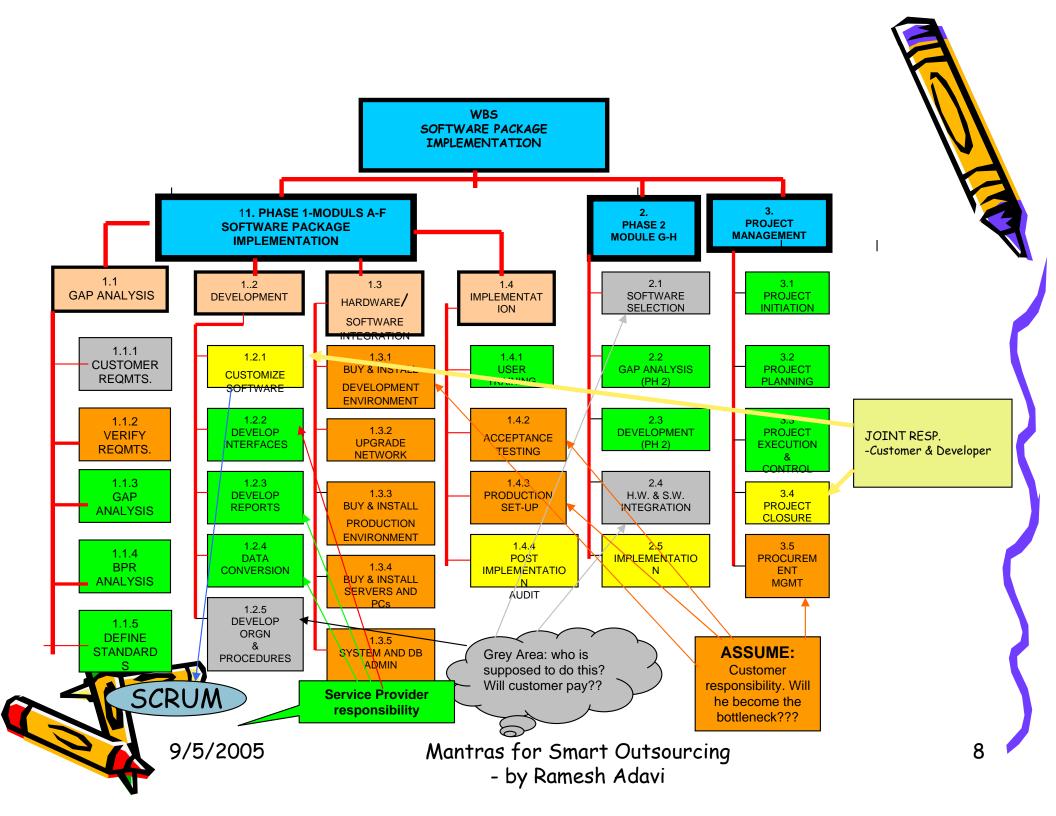
SERVICE TYPE	KEY BUSINESS DRIVERS	SUGGESTED METHODOLOGY XP		
PRODUCT DEVELOPMENT	Time-to-market  XP GIVES 25 to 80% improvement over RUP.(Source: Riefer Consultants)  Product Quality  Extreme testing is inherent in XP.			
SUPPORT (BUG FIXES)	PRODUCT QUALITY and CUSTOMER SATISFACTION  Daily SCRUM review (and frequent status updates to customer) will increase customer satisfaction.	SCRUM		
CUSTOMIZATION (Change Requests, Enhancements)	Fast turnaround Reliable delivery forecasts,	SCRUM		
APPLICATION PACKAGE IMPLEMENTATION.				

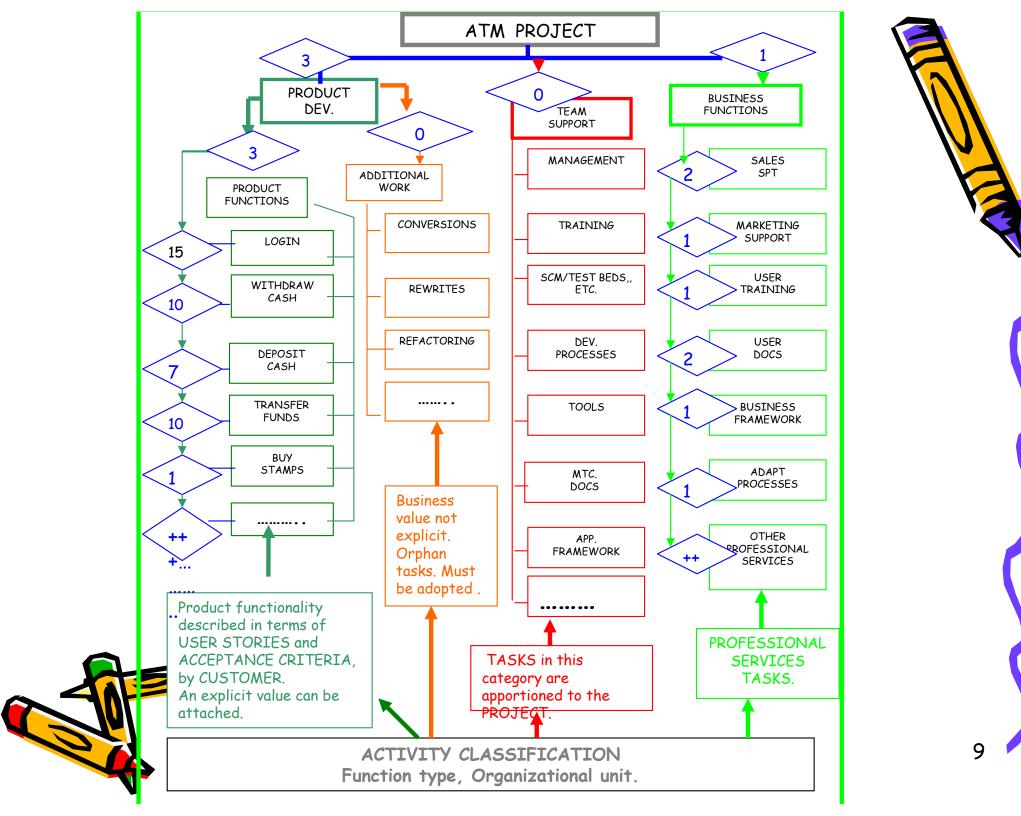
### WBS - The first "astra"

- The power of WBS
  - Reconciles THE DEVELOPER'S EFFORT PERSPECTIVE and THE CUSTOMER'S BUSINESS VALUE PERSPECTIVE.
    - A weak customer interface is the single biggest reason for project failures!
      - COMMON PAGE understanding of SCOPE
      - Mutual NEGOTIATION of VALUE
      - Clear RESPONSIBILITY fixing
        - » Make CUSTOMER responsibility EXPLICIT.
    - Clean CONTRACTS!
  - WBS Templates (versus PROCESS TEMPLATES)
    - WBS templates must map to SERVICE TYPE
    - · Re-usability the power of templates.
    - Design the TREE STRUCTURE to map the organization and business context
      - Level code
        - » Level 0 > Customer, SBU, ......
        - » Level 1 > Organizational Units, Functional units
        - » Level 2 > Business Value Nodes (Buckets) Financial Milestones
        - » Level 3 > Task units
  - Two WBS examples
    - Application Package Implementation "PROJECT" methodology
    - Product Development An "AGILE" methodology
      - Used for further discussion on BVI (the second "astra").

Smart PM
techniques can
convert RISK
into
OPPORTUNITY,
and make FIXED
BID more
profitable than
T&M!







### BUSINESS VALUE INDEX - "astra no 2

(concept borrowed from Net Objectives)

- Business Value of Project [BV(Project)]. Typically contract value.
- The WBS is a parent-child hierarchy of "buckets"
  - Each child (bucket) inherits it's own business value [BV(bucket)] in proportion to relative weights [wt(bucket)] the parent assigns to each of it's children.
    - The sum of BVs of children equals that their parent.
- The BVI of a bucket is calculated recursively, by traversing a top-down path. It denotes the % of the total project's business value [BV(Project)], assigned to the bucket [BVI(bucket)]. The BVI of the root is 1.
- EQUATIONS!
  - 1. [BVI(bucket)] = BVI(parent)  $\times$  { wt(bucket) / (summation of wt(buckets) of all siblings at the same level}.
  - 2. [BV(bucket)] = BV(Project) x BVI(bucket).



# The UNIVERSAL MEASUREMENT FRAMEWORK

- The Color of MONEY is UNIVERSAL
- All buckets are "trackable" units and have:
  - Business Value
  - Cost
- Planning & Tracking to ensure:
  - Maximize BUSINESS VELOCITY
    - Maximum VALUE ADDITION within given time.
- Tools:
  - Burn-down chart
  - Business Value Generation plan
  - Cost plan
  - Business Velocity (derived from PROJECT VELOCITY)
- Visibility:
  - The ability to "drill-down" and "roll-up" the TREE.
  - Bucket codification (level identifier) must be smart!



### A BVI Case study - Sample Data

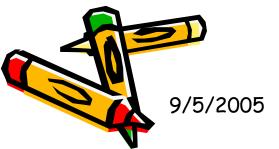
#### ATM PROJECT PLANNING DATA

**PROJECT VALUE (in INR)** 

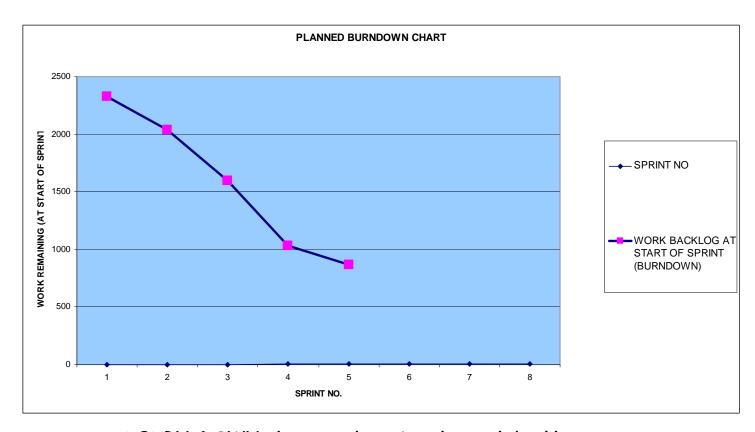
2000000

BUCKET	BUCKET DESCRIPTION		BVI	ESTIMATED	PLANNED	BUSINESS VAL	
ER. NO	LEVEL 1	LEVEL 2	LEVEL 3		EFFORT	COMPLETION IN	WHEN DONE
100	PRODUCT DEV.						
110		PRODUCT FUNCTIONS					
111			LOGIN	0.262	150	1	524000
112			WITHDRAW CASH	0.174	200	2	348000
113			DEPOSIT CASH	0.122	220	2	244000
114			TRANSFER FUNDS	0.174	300	3	348000
115			BUY STAMPS	0.018	100	3	36000
116						-	
120		ADDITIONAL WORK					
121			CONVERSIONS	0	200	5	0
122			REWRITES	0	300	5	0
123			REFACTORING	0	250	5	0
124							
200	TEAM SUPPORT						
211			MANAGEMENT	0	120	5	0
212			TEAM TRAINING	0	40	1	0
213			SCM / TEST BEDS	0	30	1	0
214			DEV. PROCESSES	0	20	1	0
215			TOOLS	0	20	1	0
216			MISC. DOCS	0	30	1	0
217			APP. FRAMEWORK	0	0	1	0
218							
300	BUSINESS						
311			SALES SPT.	0.0625	80	4	125000
0.40			MADKETING CURRORT	0.00405	20	4	62500
312			MARKETING SUPPORT	0.03125	80		20522
313			USER TRAINING	0.03125	30	3	62500
314			USER DOCS BUSINESS	0.0625	60	3	125000
245			FRAMEWORK	0.02425	20	2	62500
315			ADAPT PROCESS	0.03125	20	2	60500
316			ADAPI PROCESS	0.03125	80	3	62500
	Ti	HE ATM PROJECT - FULL	& FINAL		2330		2000000

Using the ATM Project WBS and BV and BVI equations.



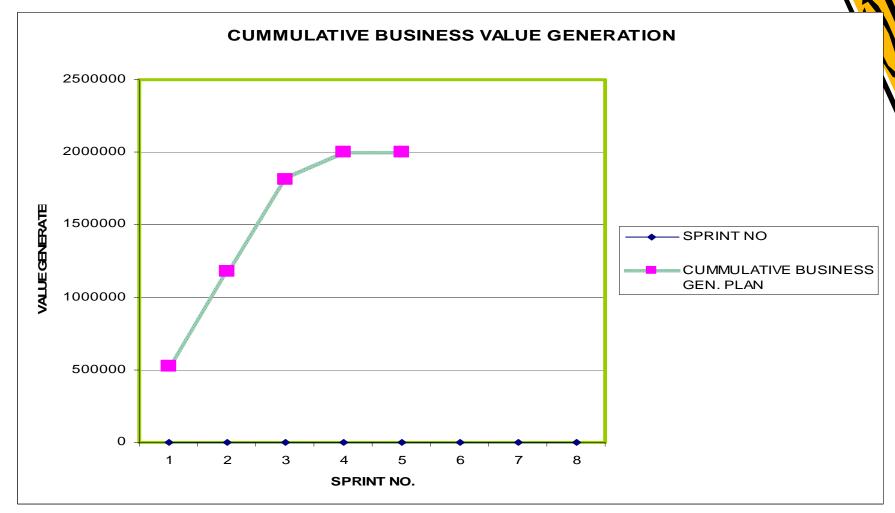
### BVI Case Study - Planning



- A BURN-DOWN chart used to size the work backlog.
- Iteration plan (Sprint cycle):
  - Feasibility / Capacity Constraints
  - Dependencies
  - Prioritization (BVI / Planned Effort)
- PROJECT BUFFER not assigned at start Rewrite, Refactor, etc.

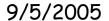


### BUSINESS VALUE GENERATION PLAN

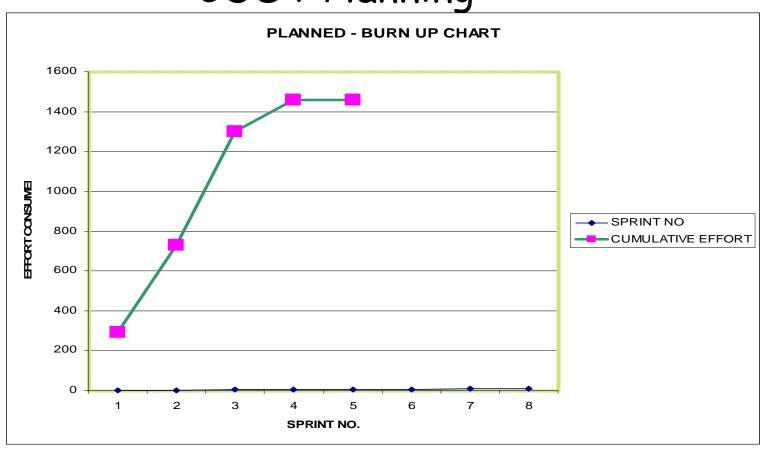


#### THE XP WAY

- Try to maximize BUSINESS VALUE in early stages.
- Take RISKS!
- Deliver something quickly!
- Hope customer accepts without any changes.
- Accept CHANGE REQUESTS gracefully.



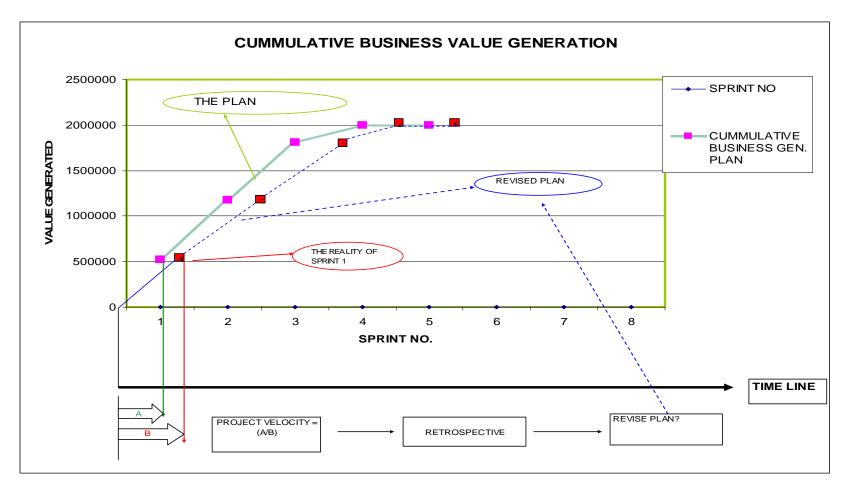
### COST Planning



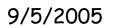
- BURN-UP chart to view the mounting costs!
- · Attach "orphans" to non-zero BVI items
- · Indirect PROJECT COSTS (e.g. TEAM SUPPORT), apportion in proportion to ACTUAL EFFORT.



### A BUSINESS VELOCITY review



- PROJECT VELOCITY of each cycle indicates BUSINESS VELOCITY:
  - BUSINESS VALUE constant.
  - COST proportional to elapsed time.
  - PROJECT VELOCITY reflects team capability.
  - RETROSPECTIVE and re-baseline the remaining work.
  - For PROJECTS, Earned value analysis (CPI, SPI, EAC) provides indicator of BUSINESS VELOCITY.



### The FINAL SAY

- The color of money is UNIVERSAL and can be attached to any work unit, irrespective of DELIVERY METHODOLOGY.
- WBS and BVI provide the basis for planning measuring and steering the AGILE business.

#### ABOUT RAMESH ADAVI

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- Enjoys providing the BUSINESS perspective, to TECHNOLOGY solutions.
- In the last two years, specially focused on SERVICES OUTSOURCING
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#### ABOUT SARVETRA

- Deliver on the "promise of RFID"
- For IT & ITES companies apply AIDC technologies for AUTOMATED SECURITY and ACCESS CONTROL. With a WEB based platform.
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# QUESTIONS ???



