



# PROGRAM MANAGEMENT PUBLIC AND PRIVATE AGENCIES

- Program Management: Revised Definition
- The Organizational Fit for Program Management
- Intersection of Project, Process and Program Management
- Challenges in Industry and Academia

- Portfolio (Davis & Hieneke, 2005, pp. 1-36)
  - Strategic business unit organized around its own assets
  - Profit or funding center
  - Tends to have financial statements
    - Assets
    - Liabilities
    - Equity
  - Aligned to strategies and associated objectives
- Programs
  - Oriented on a specific set of strategic business unit goals and measurable, non-financial and financial objectives

	Business Environment										
Strategies	Revenue	Market	Capacity	Reduce Cost	Admin	Regulatory	Other				
	Business Unit										
Assets	Labor	Facilities	Equipment	Materials	Supplies	Vendor	Capital				
	Portfolios										
	1	Programs									
Evacution	2	а	Drainets & Drasassas								
Execution	3	b									
	4	С	Projects & Processes								
	5	d									

- Portfolios (typically) have self-contained assets assigned
- Programs support portfolios and strategies
- Projects are how programs accomplish objectives within portfolios

- Programs (Continued)
  - Accomplishes objectives through capital and production projects
  - Projects produce:
    - Product
    - Service
    - Capability
  - Turnover project outcomes to operations or continues on to manage production
  - Production and distribution becomes process driven
- Projects
  - One-time effort that results in a unique outcome

- Projects (Continued)
  - Managed by a program
  - Composed of unique:
    - Scope
    - Schedule
    - Cost

Dekker, Lird

- Financial Prospectus
- Production Project One funded by an outside source (Customer)
- Capital Project One funded internally by the host business unit (National University, 2008)
- Used at the introduction of a product or service lifecycle
  (Useralla & David 2005, pp. 4.20)

(Hieneke & Davis, 2005, pp. 1-36)

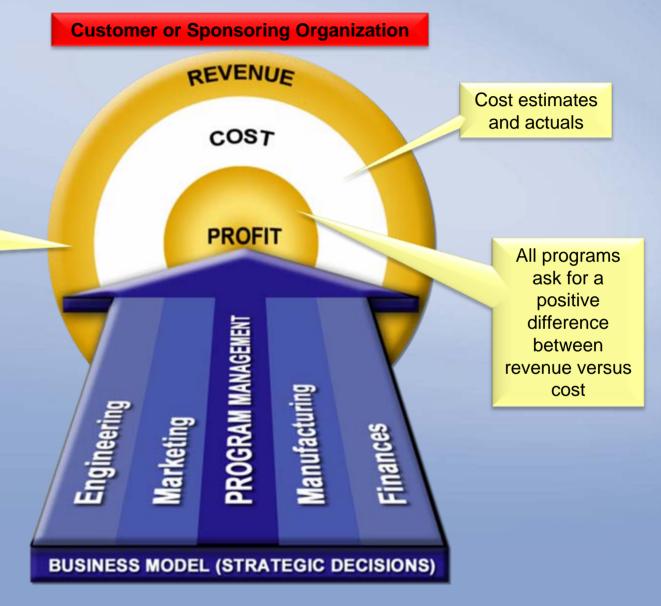
#### **Strategic Program Management**



#### **Business 101: Chase The Revenue**

Finance cost versus revenue...

Revenue can also be funding profile...



# Presented at the 2010 ISPA/SCEA Joint Annual Conference and Training Workshop - www.iceaaonline.com Program Objectives Achieved Through **Projects**

**Programs** have horizontal goals and objectives

**PROGRAM MANAGEMENT** 

#### **PROGRAM**

Project Management Project 02 Project 03 Project 04 Project 01

Process Management Process 02 Process 03 Process 01

Projects are how program goals and objectives are realized...

(Milosevic et al, 2007) (Revised)

Programs can own processes too!



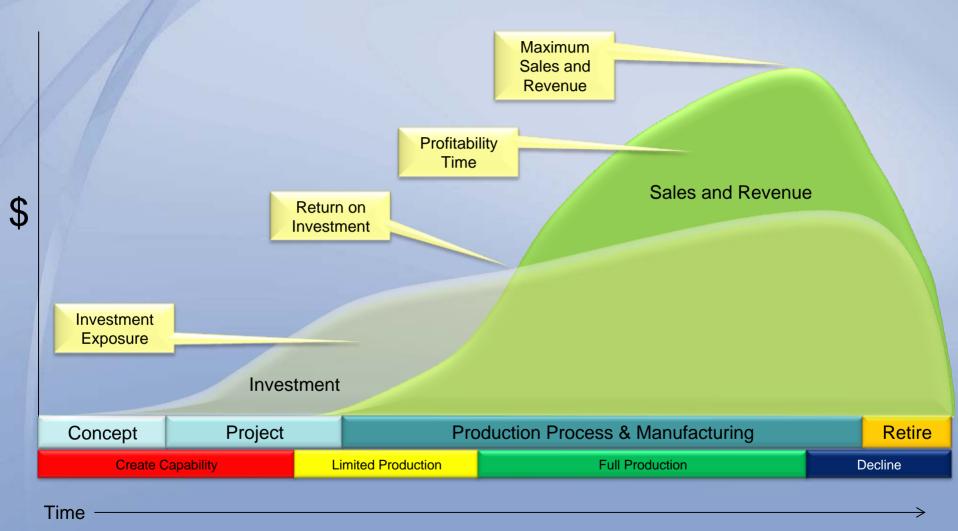
## **Strategy to Tactics**



(Milosevic et al, 2007) (Revised)

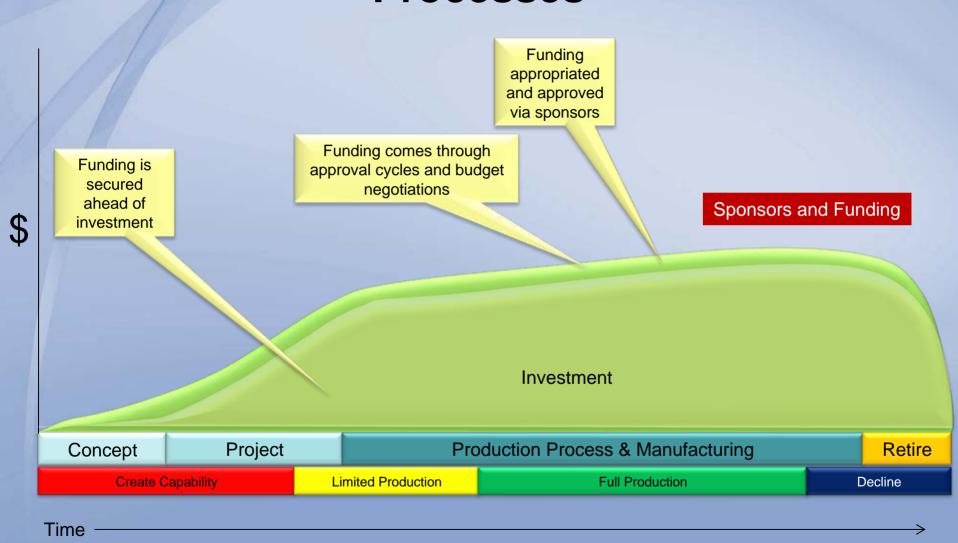


# Presented at the 2010 ISPA/SCEA Joint Annual Conference and Training Workshop - www.iceaaonline.com Commercial Programs: Projects and **Processes**

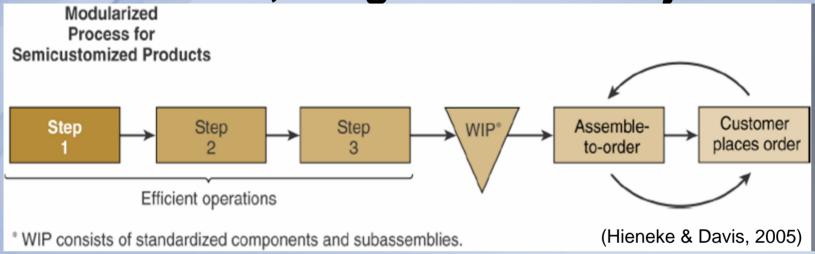




# Presented at the 2010 ISPA/SCEA Joint Annual Conference and Training Workshop - www.iceaaonline.com Public Programs: Projects and **Processes**







- Process Management
  - Highly repetitive
  - Very short time durations
    - No more than weeks
    - Down to seconds
  - Used to mass produce and distribute
    - Products
    - Services
    - Capabilities

#### **Project Versus Process**

#### **Process**

- Extremely short term durations
  - Repair services
  - Manufacturing process
- Durations: Weeks, Days, Minutes, Seconds
- Executed over and over again - repetitive
- Produces a product or a service by routinely
- Expected outcomes known and highly measureable

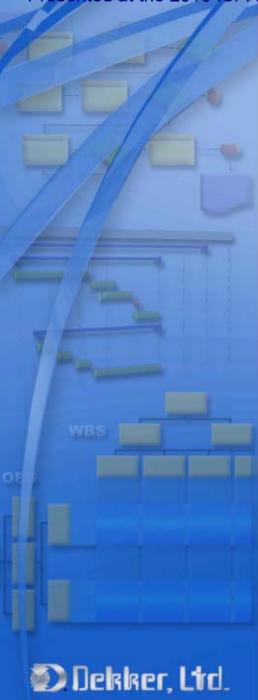
#### **Project**

- Long term efforts
- Discrete objectives
- Used to derive a process
  - Product
  - Service
  - Used early in product/service life cycle
- Lasts for months or years (3-5 years common)
- Done one time...

### **Program Management**

Drogram	Project	Coope	Schedule	Cost	Finance	Risk		M Cupport	Davanua	Market	Canacity	Padusa Cast	Admin	Pogulatory
Program	Project	Scope	Scriedule	Cost	rillalice	Internal	External	M-Support	Revenue	Market	Capacity	Reduce Cost	Aumm	Regulatory
PRG1		1 /4							<b></b>	<b></b>				
	P1		1000	1000	2000	1985	1981	1000	<b>↑</b>	<b>^</b>	<b>1</b>			
	P2	1965		796			1000	1000	<b>↑</b>	<b>^</b>		<b>1</b>	<b>1</b>	
	P3					Total Control	1000			<b>↑</b>				
	Pn					The Co			<b>↑</b>	<b>1</b>	<b>1</b>	个	1	
PRG2	7 13								1	<b>1</b>	<b>1</b>			
1	P1										71	$\downarrow$		
	P2	1000	1000					1000	71	<b>1</b>	<b>1</b>	<b>1</b>		
	P3	100		1000	1000	1000								
	Pn	I		I	1986	1980					$\downarrow$	$\downarrow$		
PRG3	200											个	1	
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	Pn	1985		1980		The C		The second						
PRG4													1	<b>1</b>
	P1		The state of										1	1
	P2												<b>1</b>	1
	P3					The state of							1	1
- 16	Pn												1	1

- Align programs and their projects to strategies
- Measure project performance in terms of scope, schedule, cost, financial performance, and risk



#### **PROGRAM TYPES**

- Emerging Strategy of the Whole Product Concept
- Finite or Road-Mapped Programs
- Parallel Programs
- Spiral Programs
- Programs and Sub-Programs

#### **Whole Product Concept**

- Programs are oriented to the whole product concept
  - Products
  - Services
  - Capabilities

Capture the Ecosystem of the Market/Sponsor In Which Business Unit Operates

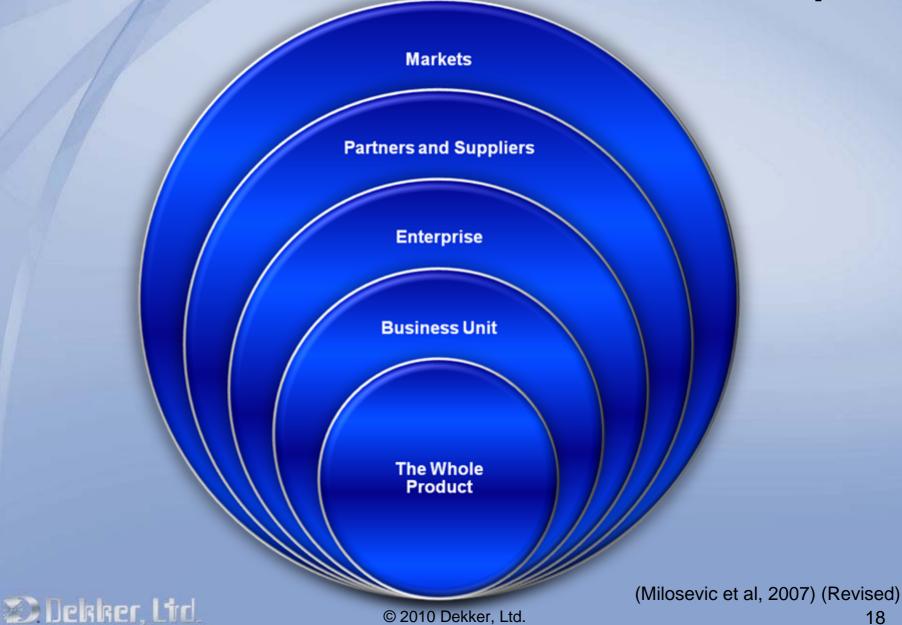
- Concept incorporates everything from sponsor/customer backwards
  - Concept
  - Design
  - Production
  - Distribution

Administration



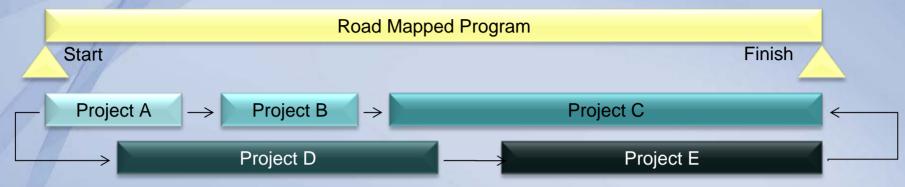
(Milosevic et al, 2007) © 2010 Dekker, Ltd.

# Stakeholders In Whole Product Concept



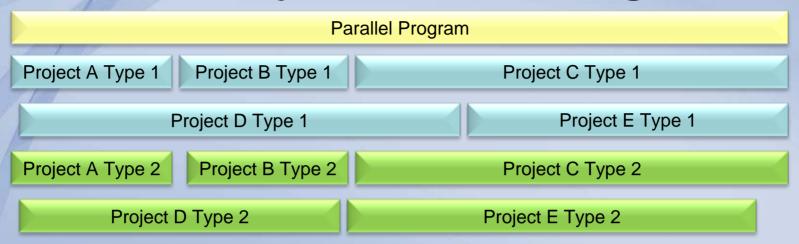
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## Integral Projects (Program Roadmap)



- Program has a discrete start and finish
- Program has interrelated projects that program objectives
- One project deliverables are required by preceding project deliverables
- Program transfers objectives to operations
- Example: Office building complex where every building is a project

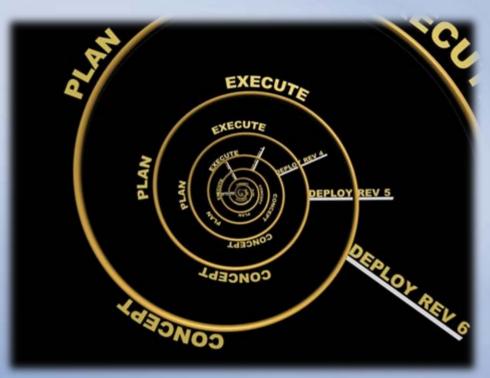
#### **Parallel Project Oriented Programs**



- Program focuses on types of project based on core competencies
- Program goes on for as long as projects are active
- Projects are not Interdependent and are typically oriented on individual customers/sponsors
- Program transfers project deliverables to customers or sponsors
- Example: Custom software development or services Dekker, Lird

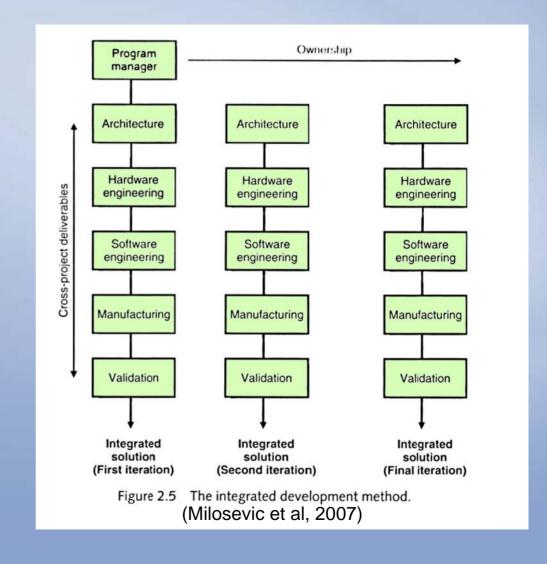
## **Spiral Development Projects (Continued)**

- Stages of project review
- Cyclic for each project revision
- Each release is a project
- Projects go through similar steps
- Used to enhance a product
- Examples: Automobile
  - Automobile models by year
  - Software enhancements
  - Continuous product improvements...



## Cyclic Approach or Spiral

- Integrated development method
- Each "iteration" builds off the previous one
- Examples
  - Software Releases
  - Automobiles
- Could go on infinitely





#### **PROGRAM MILESTONES**

- Gateway Decisions
- Critical Decisions
- Go Forward Decisions
- Management & Sponsor Approval

## **Program Milestones**



- Many names for program milestones
- Program Milestones
  - Management decision points for every project to continue or cancel project
  - Covers Project:

<ul> <li>Definition</li> </ul>	Strategic Planning
<ul> <li>Planning</li> </ul>	Project Planning
<ul> <li>Execution</li> </ul>	Project Management
<ul> <li>Initial Delivery of New Asset</li> </ul>	(PM ->Initial Process)
<ul> <li>Sustain New Asset and Operations</li> </ul>	(Process)

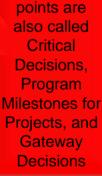
 Each step requires management approval to next phase and represents a funding profile

## **Program Milestones/Decisions**



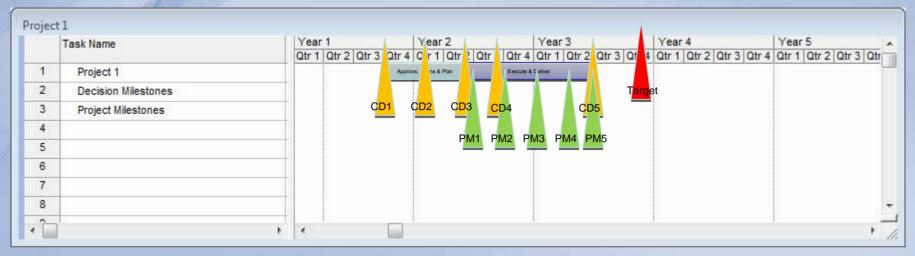
Note investment and expected ROI or other non-financial advantages

- Note program steps Each project goes through program steps as programs last a very long time
- Do not confuse project milestones with **Program Milestones**



**Decision** 

### **PM Versus PrgM Milestones**



- Project has...
  - Preliminary/Proposal phase
  - Execution phase
  - Baseline dates for start and finish
  - Projected dates for start and finish
  - Critical decision points or gateways management milestones
  - Project Milestones project manager and customer milestones
- Project will also have target dates
  - Drop dead date imposed by management or program
  - Closer project end date encroaches on target date, the more risk
- Drill down into detailed schedule if problems occur

#### **Program Dimensions**

#### THE WHOLE PRODUCT **Enclosure** Software Manufacturing **System Test Circuit Board Deliverables Deliverables Deliverables Deliverables Deliverables Program Management** Define Plan **Implement** Launch Sustain Project Management Project Management Project Management Project Management Project Management Circuit **System Enclosure Software** Manufacturing **Board Test**

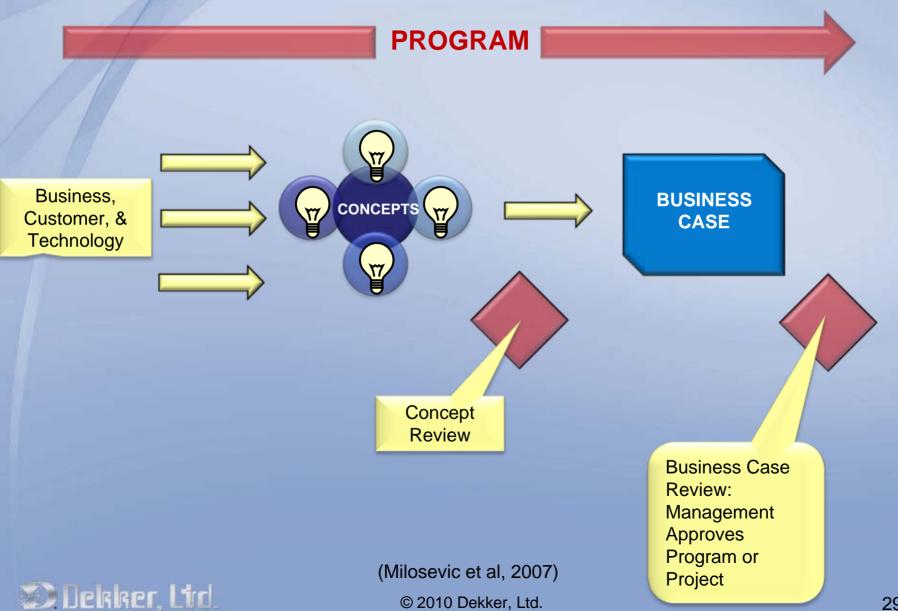
Cross-

project deliverables (Milosevic et al, 2007)

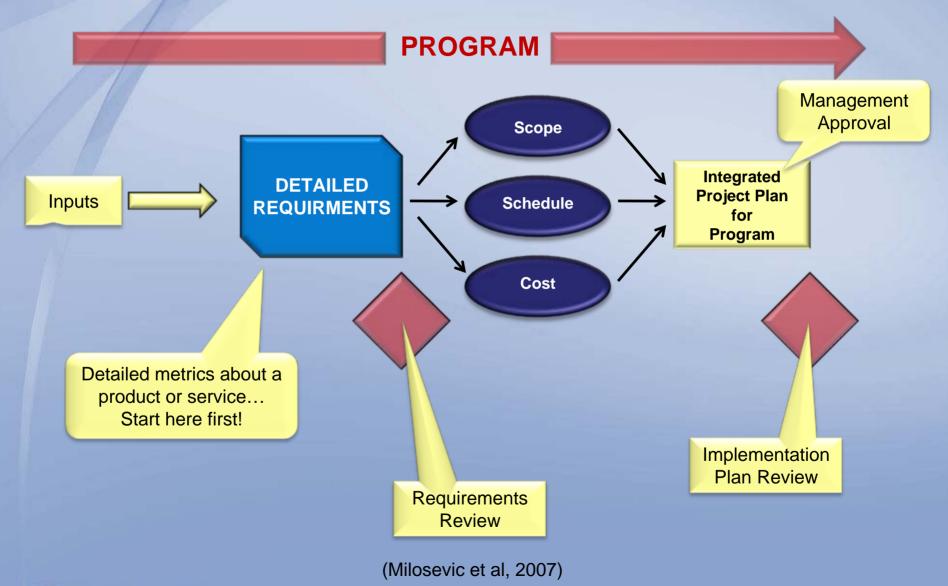
#### **Management Decision Gateways**

- Project proposal kicks off a definition stage
- Definition stage contemplates worthiness of a new project proposal
- Proposal reviewed and presented to management If approved project moves to next stage
- Planning Stage: Starts with scope and leads to project schedule, resource, and cost plan; project funding approved by management
- Implementation: Project execution
- Launch: Limited deployment
- Sustain: Project provides product or service to operations
- These steps and approval cycles are program milestones

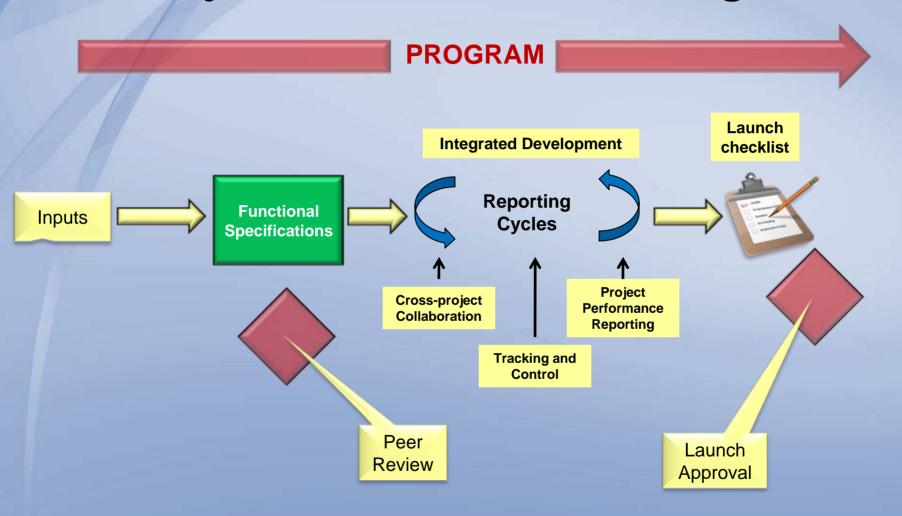
### **Defining a Project**



### **Planning Phase**



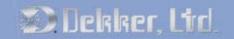
#### **Project Execution Within Program**



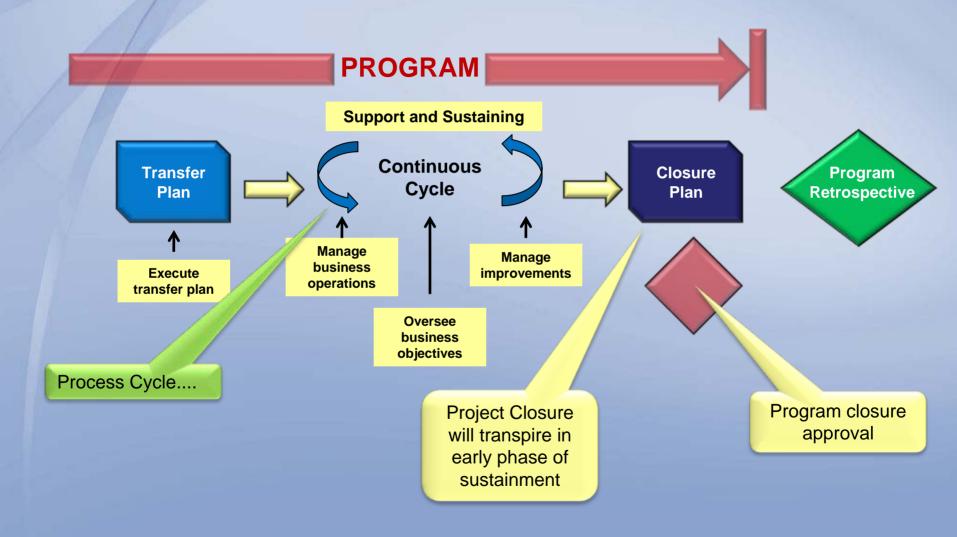


### **Program/Project Launch**





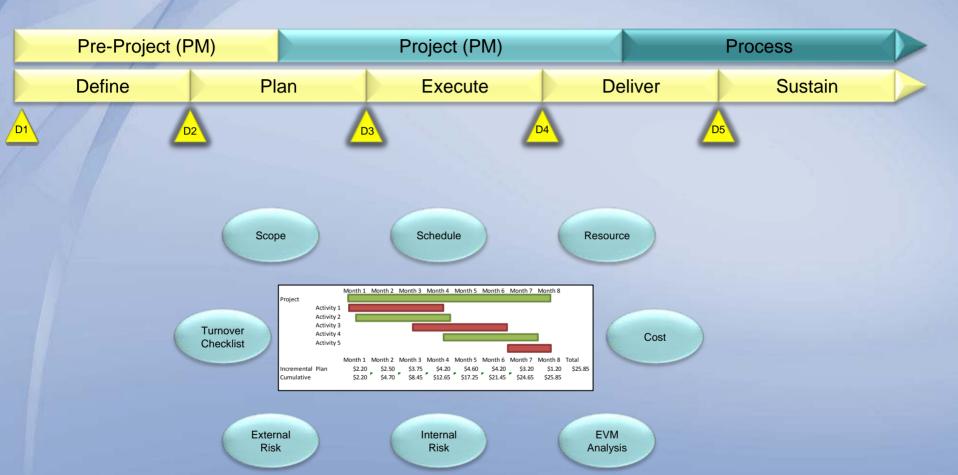
### **Program/Project Sustainment**





(Milosevic et al, 2007)

### **Program Milestones**



## **Additional Program Costs**

Project & Act	ivities	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	
Project										
	Activity 1									
Activity 2										
Activity 3										
Activity 4										
	Activity 5									
Description		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Total
Incremental		\$2.20	\$2.50	\$3.75	\$4.20	\$4.60	\$4.20	\$3.20	\$1.20	\$25.85
Cumulative	Dlan									
	Plan	\$2.20	\$4.70	\$8.45	\$12.65	\$17.25	\$21.45	\$24.65	\$25.85	
MR	Pian	\$2.20	\$4.70	\$8.45	\$12.65	\$17.25	\$21.45	\$24.65	\$25.85	\$2.07
		\$2.20	\$4.70	\$8.45	\$12.65	\$17.25 \$1.06	\$21.45	\$24.65 \$0.74	\$25.85 \$0.28	\$2.07 \$5.95
MR	is .	-	·	·	·	·		·	·	
MR Program Cost	is .	-	·	·	·	·		·	·	\$5.95

### **Strategy to Tactics**

Board of Define Directors and strategic C-Level goals and **Executives** associated objectives Strategic **Objectives** Programs are initiated by **Program Manager** Programs are organizational typically goals and organized directives Program strategy around and success criteria strategic Can be business Program requirements and interdependent or Work Breakdown Structure units... integrated projects Program Plan (integrated project plans, schedules, budgets) **Individual Projects Project Management Process Mgt** And **Processes** Project B **Project C Project D Process A Process B Project A** Project Plan Project Plan Project Plan Production Production Project Plan Success Success Success Plan Plan Success Criteria Criteria Distribution Criteria Distribution Criteria Deliverables Deliverables Deliverables Maintenance •Maintenance Deliverables **Program** Management **Process Management in** addresses product -oriented process programs can last for management

decades...

too...

#### References

- Mark M. Davis & Janelle Heineke (2005). Operations Management: Integrating Manufacturing and Services (5<sup>th</sup> Ed.). Mc-Graw-Hill Irwin: Boston, MA. ISBN: 978-0-07-294824-0
- Jack R. Meridith & Samuel J. Mantel, Jr. (2006). Project Management: A Managerial Approach (6<sup>th</sup> Ed.). John Wiley & Sons, Inc.: Hoboken, NJ. ISBN: 978-0471-715375
- Dragan Z. Milosevic, Russ J. Martinelli & James M. Waddell. (2007). Program Management for Improved Business (1<sup>st</sup> Ed.). John Wiley & Sons, Inc.: Hoboken, NJ. ISBN: 978-0-471-78354-1

Best book on Program Management to date....

