



accenture

*High performance. Delivered.*

***CMMi level 3 - why bother and so what?***

Mark Smith, Accenture

**CMMi Made Practical**  
**1<sup>st</sup> May 2008: London, UK**

# accenture *Presentation Abstract*



**Over the past three years Accenture have vigorously adopted the CMMi model and used it as the headline banner for transforming the way that software engineering projects are delivered. Over these three years this program has been our biggest single investment spend and culminated in achieving CMMi level 3 recognition after undergoing, arguably, the world's biggest ever CMMi assessment in late 2007.**

**This presentation talks candidly about the difficulties that were encountered in maintaining momentum and commitment during this multi-year program and describes exactly what changes have been made and what the benefits of a post CMMi L3 world now look like. Finally attention will be turned to the future with a look at what is involved in standing still at CMMi level 3 and what the business case is for moving further up the CMMi maturity ladder.**

# accenture *About Accenture*



- **Accenture is a global management consulting, technology services and outsourcing company and we offer the following core services:**
  - **Management Consulting**
  - **Technology Consulting**
  - **Systems Integration**
  - **Application Outsourcing**
  - **Infrastructure Outsourcing**
  - **Business Process Outsourcing**
  
- **We help deliver innovation that enables our clients to become high-performance businesses. For non-Governmental organizations, high-performance businesses outperform industry peers over the long term and....**
  - **Over economic cycles**
  - **Over industry cycles**
  - **Over generations of leadership**
  
- **Our Clients: Global (2006)**
  - **Served 87 of the FORTUNE Global 100, two-thirds of the FORTUNE Global 500 and government agencies in 24 countries**
  - **Accenture serves approximately 2,500 clients that span the full range of industries around the world**

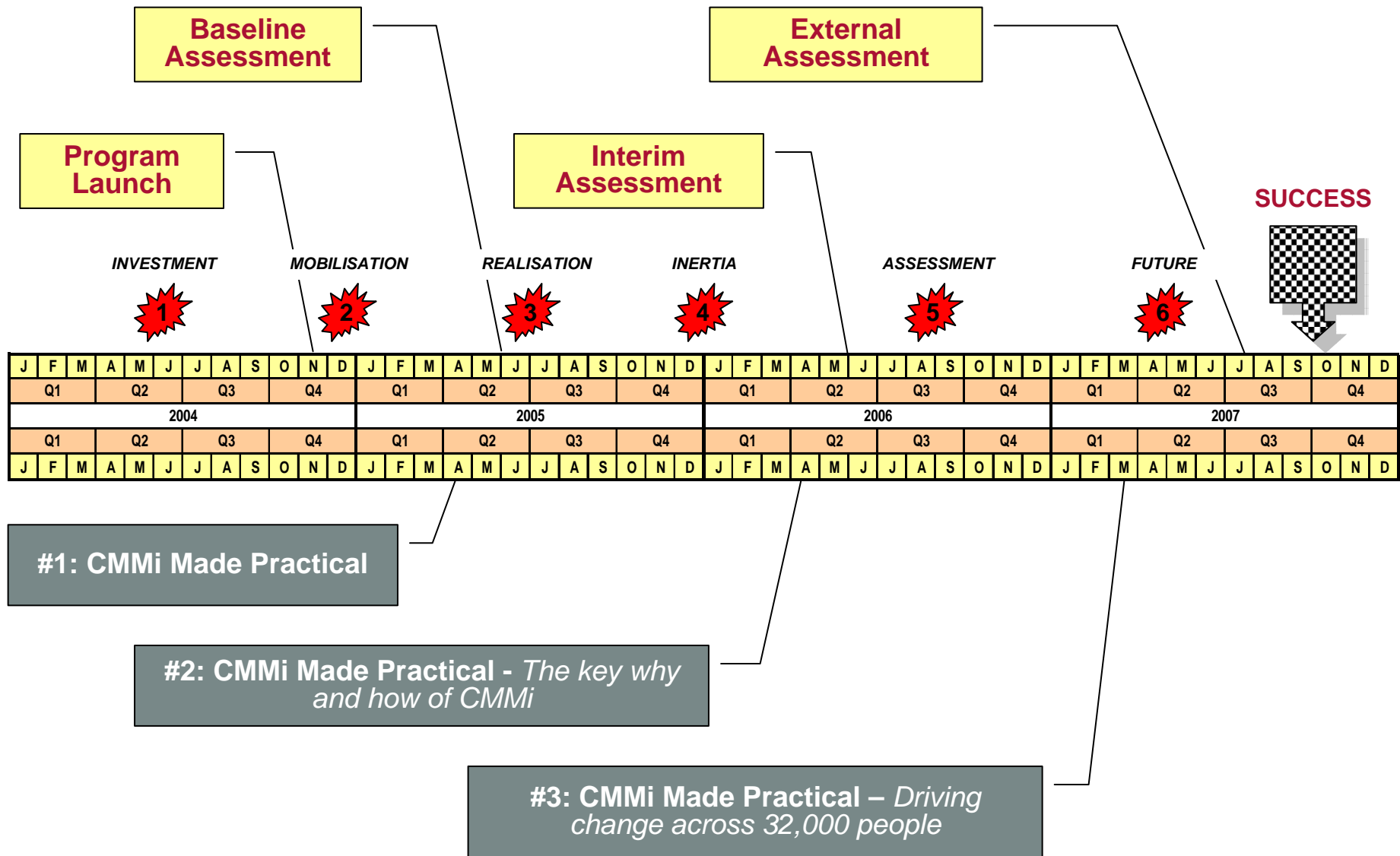
# accenture *Accenture across the world*



- **Revenue in FY07 ... \$19.7 billion (year to 31-Aug-07)**
- **People worldwide ... 170,000 + and growing**
- **Accenture has offices and operations in more than 150 cities in 49 countries**
- **Global brand, global leadership, global network, global workforce**



# accenture *Maintaining confidence and commitment*

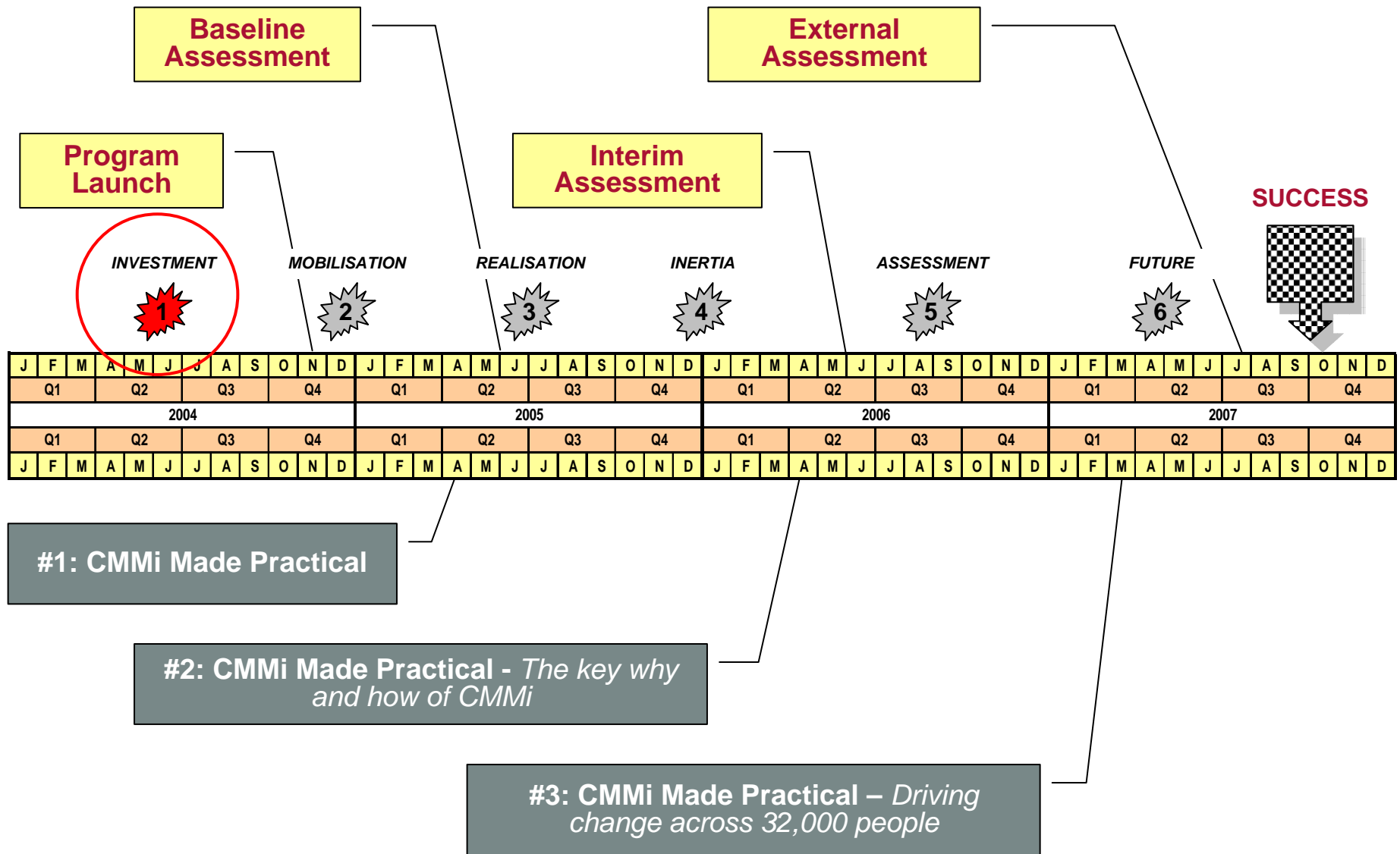


# accenture *“Crunch” points*



1. **INVESTMENT**
  - Request to fund the biggest single investment program
  
2. **MOBILISATION**
  - Appointing the best staff whilst promising future value
  
3. **REALISATION**
  - Understanding exactly how much change was needed
  
4. **INERTIA**
  - Motivating an initiative weary management team
  
5. **ASSESSMENT**
  - Conducting (probably) the world’s largest ever assessment
  
6. **FUTURE**
  - Determining what would happen next

# accenture *Maintaining confidence and commitment*



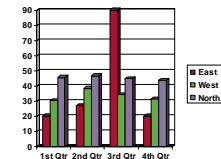
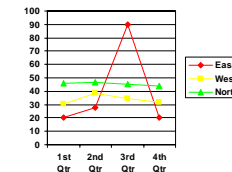
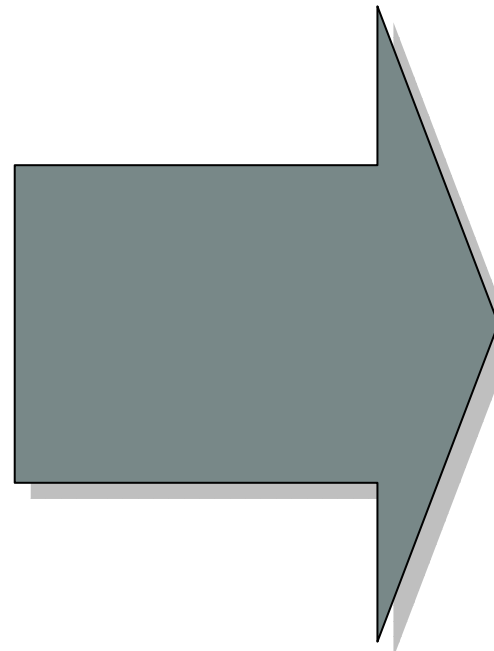


*Request to fund the biggest single investment program*

**Difficulty Rating: VERY HIGH**

## ▪ SUCCESS STRATEGY

- **Language of investment**
  - Business case
  - Assume “no favours”
- **Tell it straight**
  - Don’t undercut
  - Don’t oversell
- **“Envision success”**
  - Personalise
  - External credentials
- **Anecdotal examples**
  - Positive
  - Negative



\$ Profile	FY 1	FY 2	FY 3	FY 4
Wave 1	Xxx	Xxx	Xxx	Xxx
Wave 2	Xxx	Xxx	Xxx	Xxx
Wave 3	Xxx	Xxx	Xxx	Xxx
Wave 4	Xxx	Xxx	Xxx	Xxx
Wave 5	Xxx	Xxx	Xxx	Xxx



# accenture *INVESTMENT - key support slide*



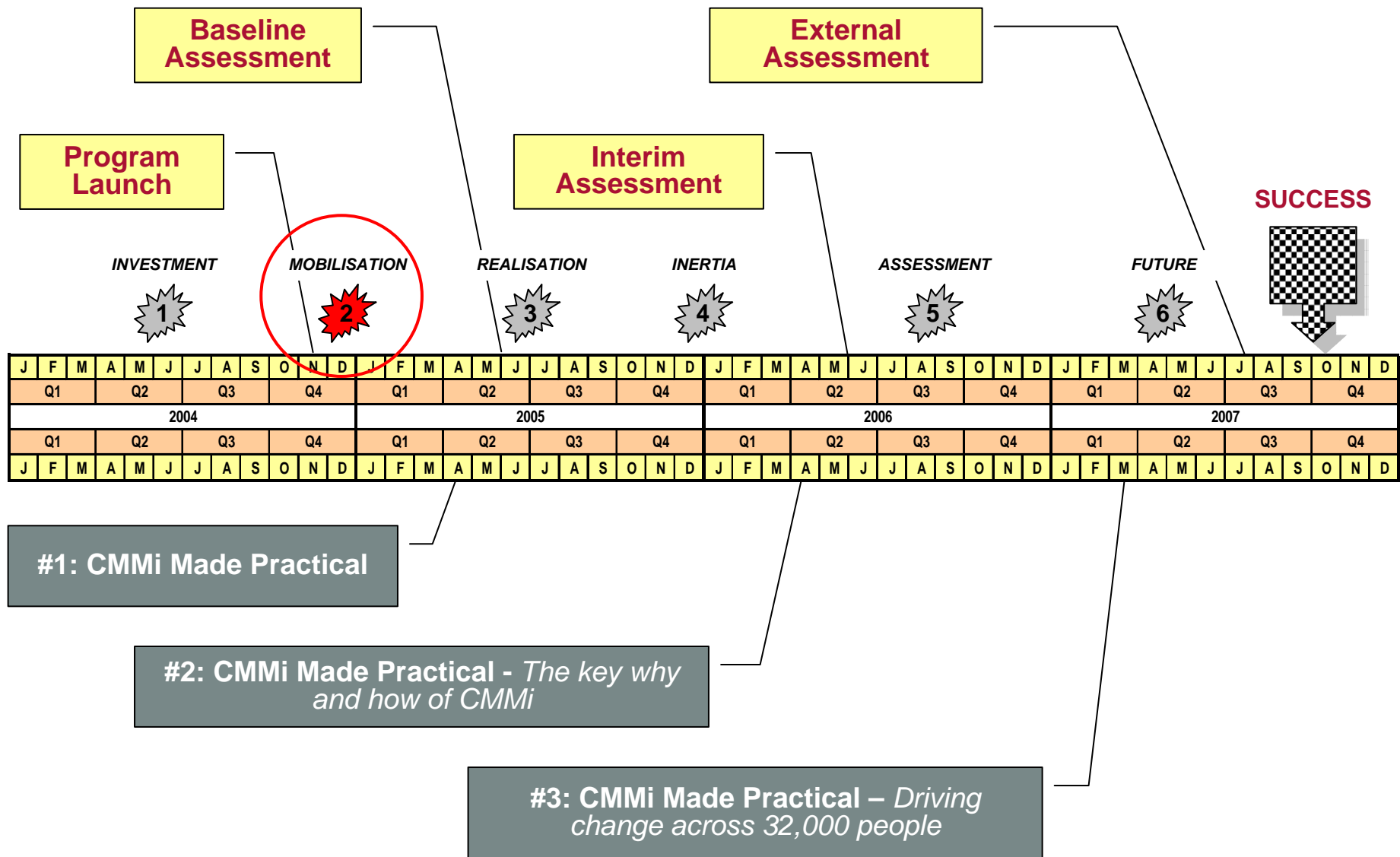
Process Maturity Level	Requirements	Design	Construction	Functional Test	System Test	Field Use	PHASE
		10%	40%	50%			
5	5%	20%	40%	20%	10%	<5%	Fault Detection Distribution
4	3%	12%	30%	30%	20%	5%	
3	0%	2%	20%	38%	32%	8%	
2	0%	0%	3%	30%	50%	17%	
1	0%	0%	2%	15%	50%	33%	

On average, it is ten times more costly to fix a problem in a subsequent phase of work - cost to fix a problem by phase:

REQUIREMENTS \$1      DESIGN \$5      CODING \$20      TESTING \$50      MAINTENANCE \$100 (Post Production)

Sources: Rakitin, Steven R., Software Verification and Validation for Practitioners and Managers, Norwood, MA: Artech House 2001, pgs 45-49; and Boehm, B.W., Software Engineering Economics, Englewood Cliffs, NJ: Prentice-Hall, 1981.

# accenture *Maintaining confidence and commitment*



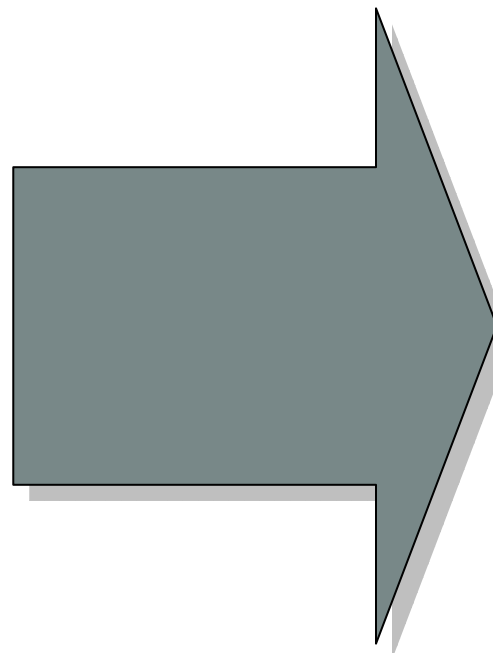


*Appointing the best staff whilst promising future value*

Difficulty Rating: **HIGH**

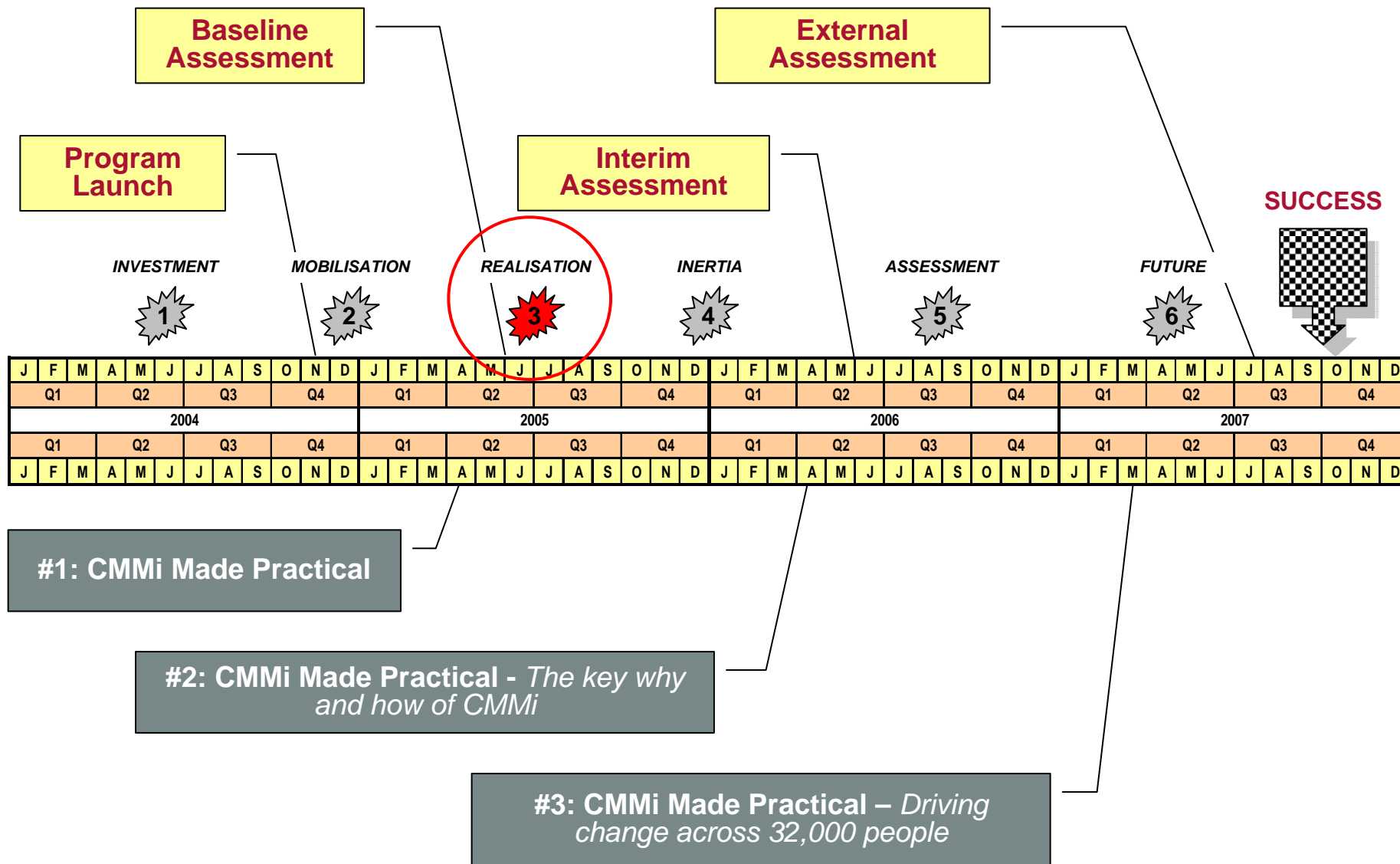
▪ **SUCCESS STRATEGY**

- **Move rapidly**
  - Support team first
  - Harvest strong believers
- **Prioritise deployment**
  - Low hung improvement fruit
  - Friendly territory
- **Make credible quickly**
  - Widespread communication
  - Anecdotal success and support
- **Leverage investment support**
  - High profile backing
  - Senior management accountability



**Create  
momentum  
+  
“Know your  
enemy”**

# accenture *Maintaining confidence and commitment*



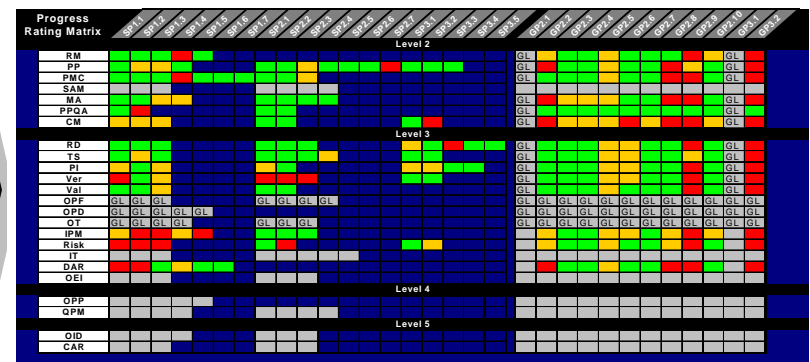
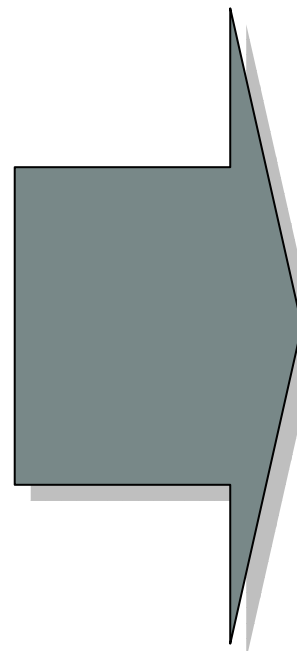


*Understanding exactly how much change was needed*

**Difficulty Rating: LOW**

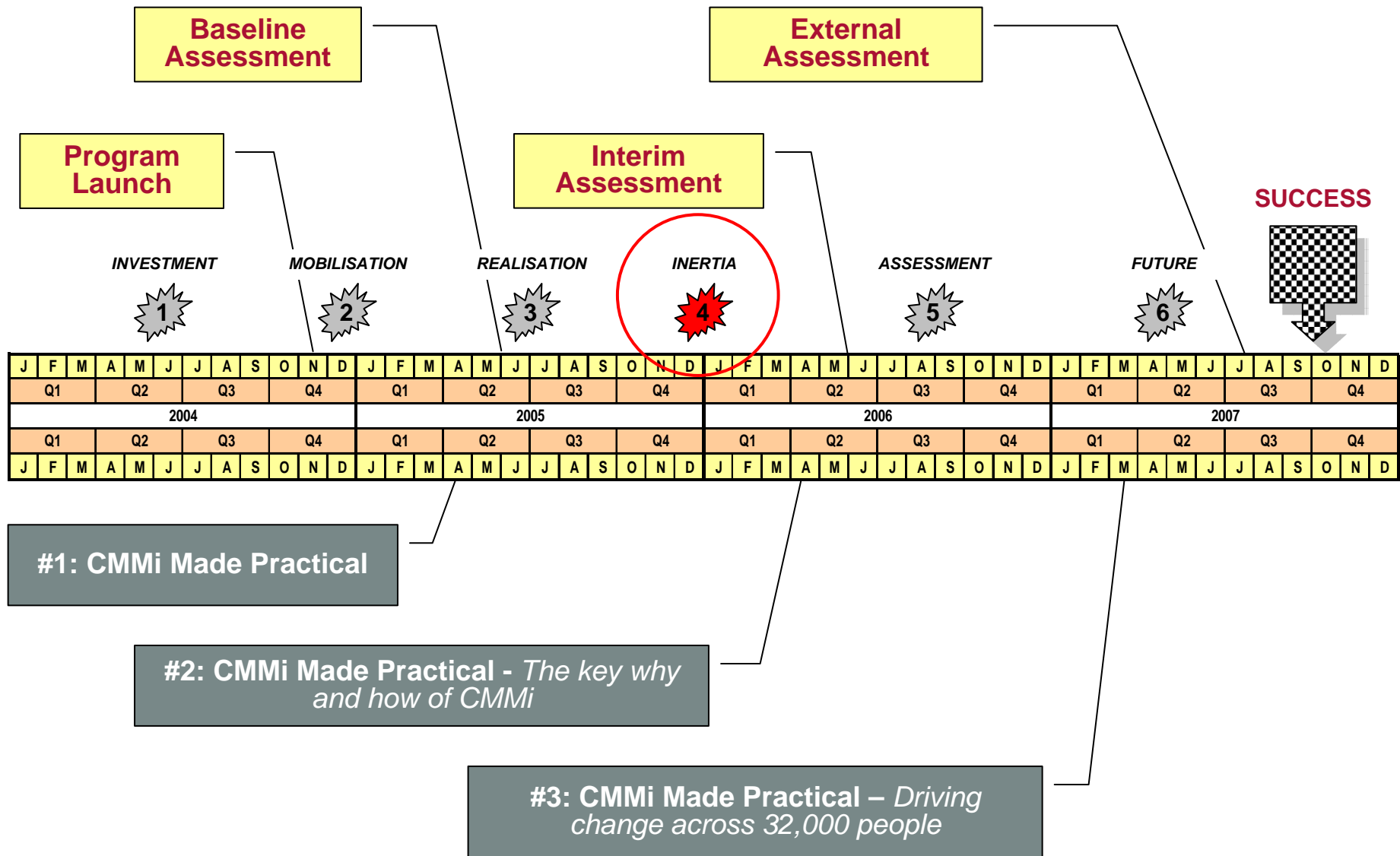
## ▪ SUCCESS STRATEGY

- **Data is your friend**
  - o Be transparent
  - o Quantify
- **Process view**
  - o Use CMMi model
  - o Link to real world
- **Ready-prepared solutions**
  - o Plan for major failure points
  - o Potential power of sharing
  - o Robust tailor process
- **Link to business priorities**
  - o Line management accountability
  - o Consolidate heat maps



**HEAT MAPS**

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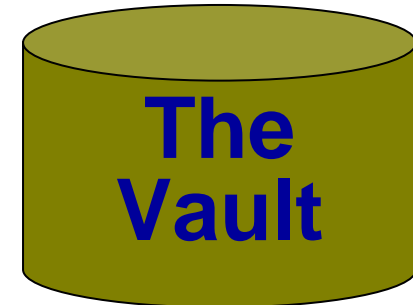
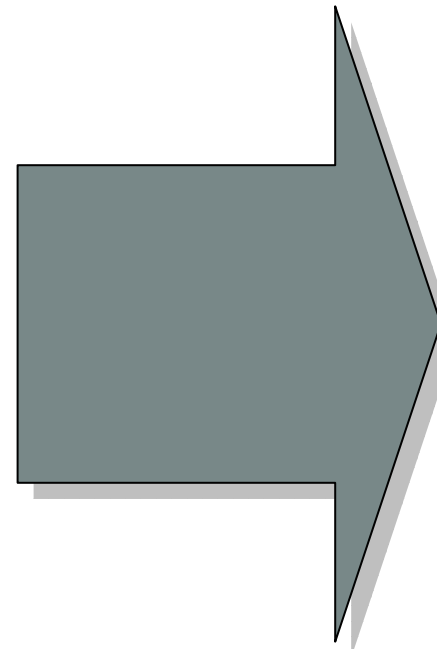


**Motivating an initiative weary management team**

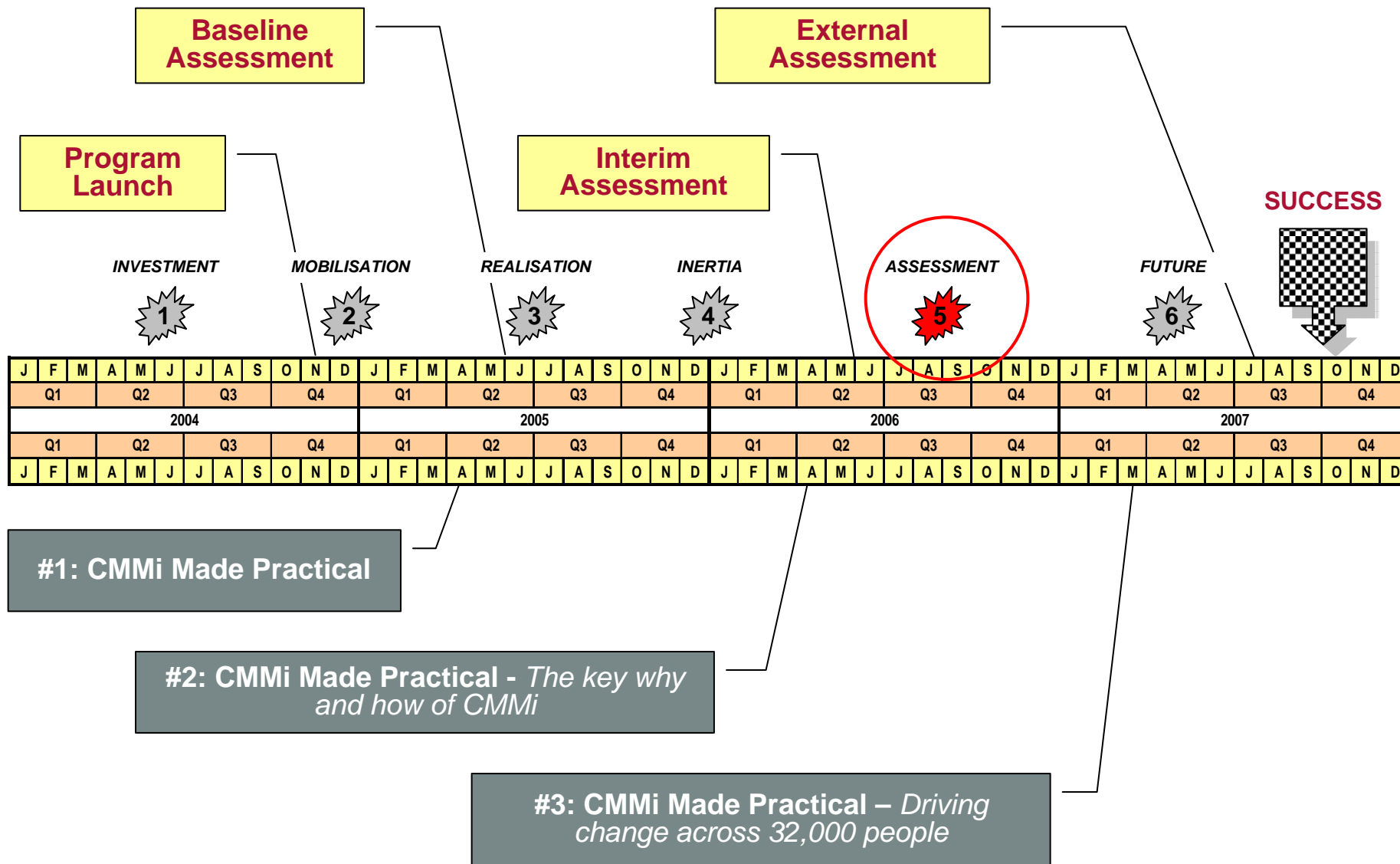
**Difficulty Rating: MEDIUM**

▪ **SUCCESS STRATEGY**

- **Interim goals**
  - o Business driven
  - o Personal accountability
  
- **Give something back**
  - o Quantitative management reporting
  - o SPI and CPI variance
  - o Show asset based value
  
- **Feel good campaign**
  - o Endorsement communications
  - o #1 intra-firm competition
  
- **People dimension**
  - o Improved people satisfaction
  - o Increased professionalism



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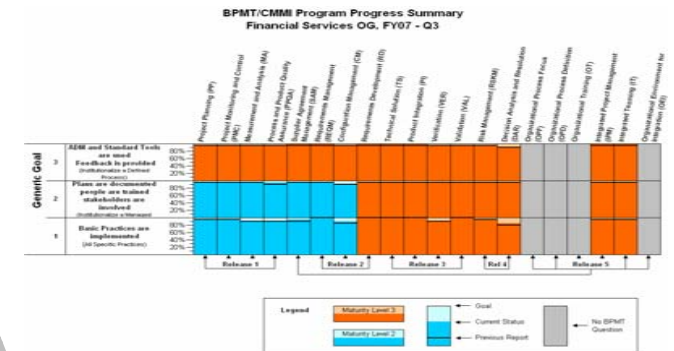
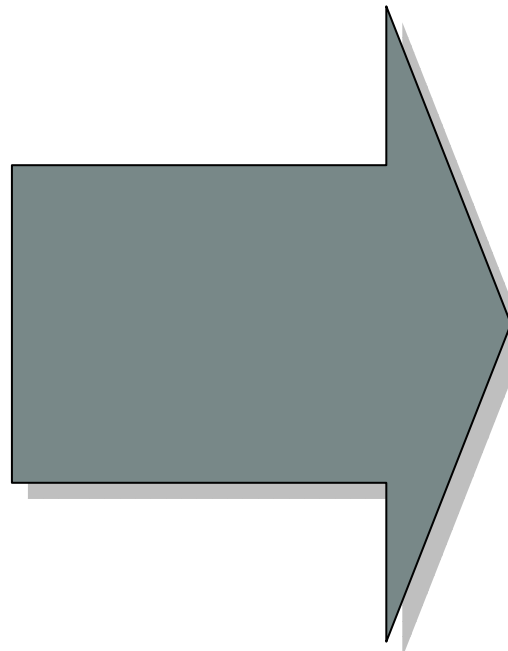


Conducting (probably) the world's largest ever assessment

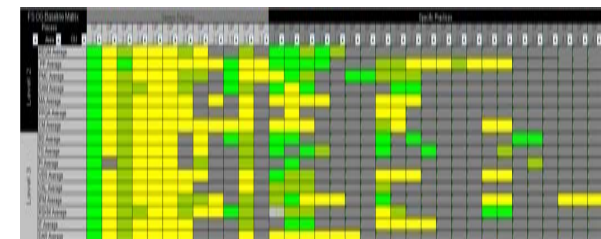
Difficulty Rating: **HIGH**

## SUCCESS STRATEGY

- **Prequalification criteria**
  - o Slightly higher than needed
  - o Monitored and tracked
  - o Increase "fear of failure"
- **Reduce duplication**
  - o Innovate
  - o Centralised mini-teams
  - o SEI endorsement
- **Plan and plan again**
  - o Assessment team building
  - o Common interpretation
  - o Micro manage success

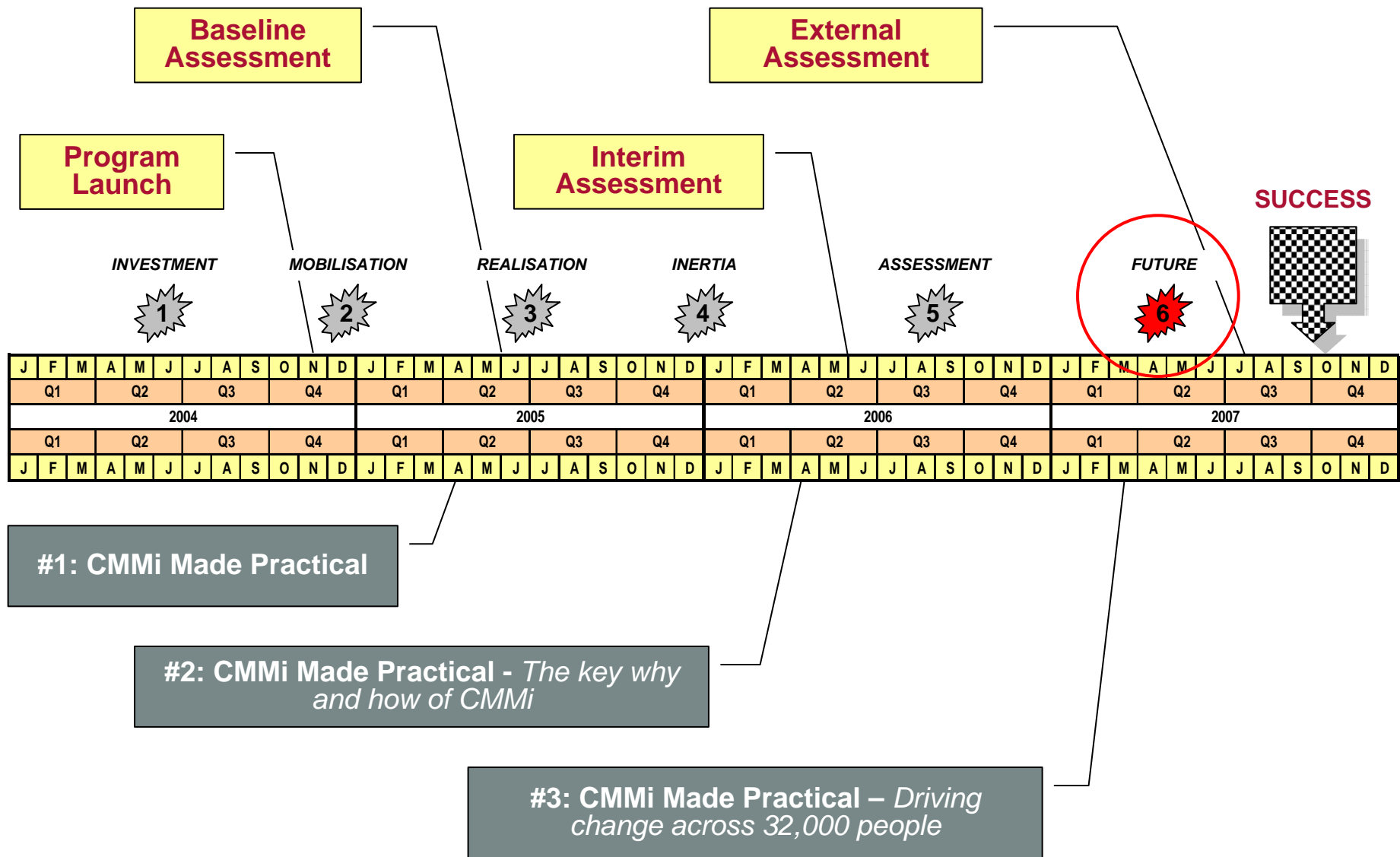


	FE Overall	Operating Units							Thresholds			
		ASIAN	Asia Pacific	FSSG	Gulf	IGEM	North America	SPALIA	UKI	Green	Yellow	Red
<b>AS OF December 15, 2005</b>												
<b>Strategic Objectives Coverage &amp; Headcount</b>												
Strategic Objectives												
Strategic Objective Coverage (Headcount)	78.1%	88.9%	92.9%	91.4%	85.1%	77.3%	53.9%	87.4%	77.8%	>=80%	80 - 75%	<=70%
<b>Manage Projects</b>												
Percentage of BPMTs Processed	84.6%	100.0%	76.9%	100.0%	81.0%	87.2%	81.0%	87.5%	78.0%	>=80% BPMTs processed	75 - 80% BPMTs processed	<=70% BPMTs processed
BP Compliance (with signed Project >=3rd Milestones)	82.0%	93.0%	89.0%	100.0%	89.0%	83.0%	93.0%	72.0%	88.0%	>=75%	80 - 74%	<=70%
Difference to Target BP Compliance	6.4%	1.7%	-3.0%	7.0%	-1.1%	14.1%	2.0%	-5.6%	6.0%	>=20% MVBs processed	80 - 50% MVBs processed	<=50% MVBs processed
Projects > 3 mos.	77.4%	100.0%	59.3%	100.0%	73.7%	75.0%	79.5%	93.3%	41.2%	>=20% MVBs processed	80 - 50% MVBs processed	<=50% MVBs processed





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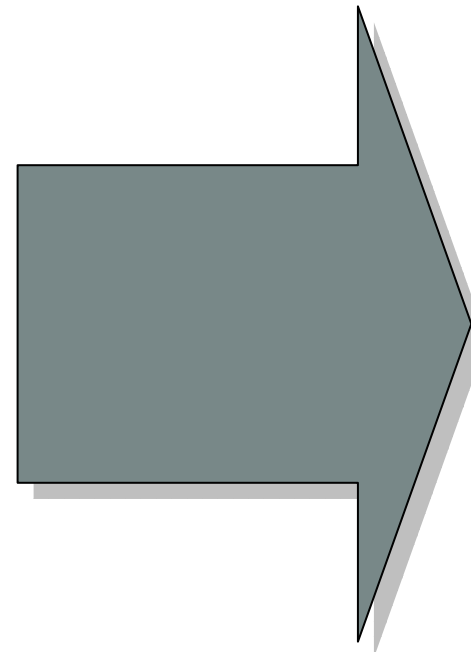


*Determining what would happen next*

Difficulty Rating: **LOW**

▪ **SUCCESS STRATEGY**

- **“No surprises”**
  - o Pre-qualification criteria
  - o Wealth of trend data
  - o Deployment finished *T minus 7 months*
  
- **Lessons learned**
  - o Scale of challenge
  - o Benefits realised
  - o “Channel” usefulness
  - o Scope expansion
  
- **CMMi level X**
  - o 3 year window
  - o Annual retention audits
  - o Market awareness
  - o Client reaction



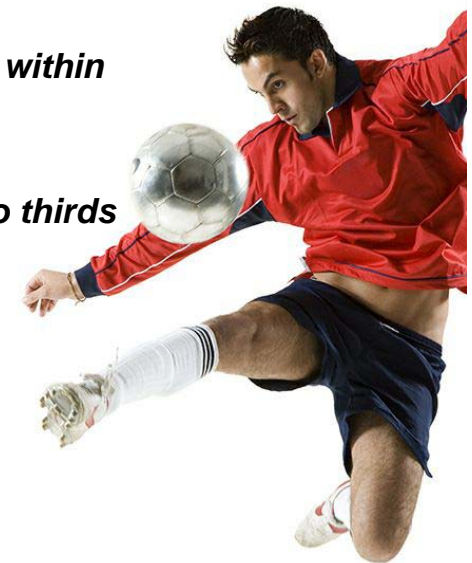
*Does four  
follow  
three?*

# accenture *FUTURE* – Key support slide

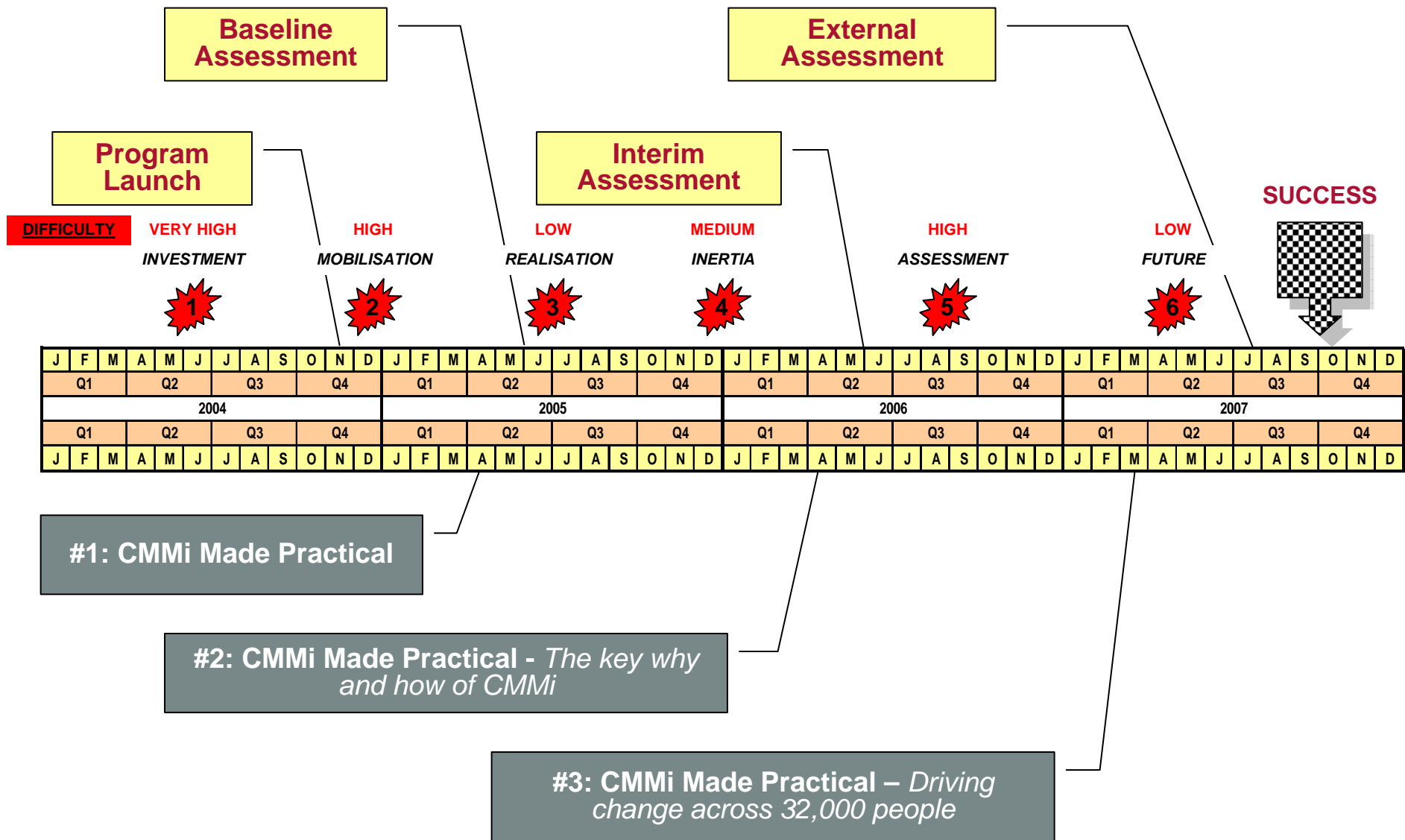


PRODUCTIVITY METRICS	Performance (Averaged)	
	Measurement Unit	Pre vs Post CMMI/L3 Performance
Requirements Management	person days	50% Reduction
Impact Assessment	days per work object	43% Reduction
Design Reverse Engineering	person days	33% Reduction
Test Coverage	cases per drop	300% Increase
Regression Testing Efforts	days per drop	80% Reduction
Unit Level Testing	days per work object	50% Reduction
Code Review Effort	days per work object	33% Reduction
Code Freeze Duration	days prior to a drop	80% Reduction
Work Objects per drop	number	67% Increase
Drop Frequency	drops per month	No restriction

- **Task level planning and monitoring for both effort/cost and schedule**
  - *Reduced delivery schedule variability*
  - *Improved cost predictability*
- **Vastly improved forecasting and estimating**
- **Better early warning, intervention and escalation**
- **Majority of projects now within +/- 10% plan**
- **Cost of failure cut by two thirds**



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accenture *Thank You*



# Any Questions?

**Mark Q. Smith**  
**Global Director of Quality,**  
**Financial Services Operating Group,**  
**Accenture**

[mark.q.smith@accenture.com](mailto:mark.q.smith@accenture.com)

**Tel. + 44 (0) 207 844 5846**

[www.accenture.com](http://www.accenture.com)