

People CMMI



A BLUEPRINT FOR BUILDING PEOPLE CAPABILITY MATURITY MODEL

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This Presentation About(need analysis):



- To What extend does the human factor affects ICT industry?
- What efforts exerted by companies to empower its workforce?
- Is there defined practices or standards for Human capital development?

This Presentation About (solution and actions):



- What is PCMM?
- What are the main areas addressed by PCMM?
- How to implement PCMM?

- Is People CMMI only for IT organizations?

This Presentation About(Future work):



- Future Research.



To What extent does the human factor affects ICT industry?

Needs of Work Force Empowerment



- “After product size, **people factors** have the strongest influence in determining the amount of effort required to develop a software product.”
- Quality of human capital **has direct and tangible effects on all software phase** : requirements , design , implantation , testing ,and deployment :
- All software quality **metrics directly affected** by quality of human workforce : **sizing , estimation , quality of code, number of bugs and amount of rework.**

Needs of Work Force Empowerment



Business impact of empowered workforce:

- Increase the ability of senior management to provide **higher (bigger) business commitments**.
- **Smooth execution** of day to day activities. and ease of deadline commitment.
- **retention of employees** and turnover rate.



What efforts exerted by companies to empower its workforce?

Needs of Workforce Empowerment process definition



- “When I was junior developer in a relatively small company (20 developer) , me and my colleges identified our need of J2EE course . We contacted a training center and arranged for the course. All this were done without referring to company management. We suggested contacting the management to get permission to use the company meeting room in the training instead of going to the training center. When we requested this from company manger , he agreed on this. He also decided to cover the cost from company budget ”
- Conclusion: management in this company is willing to support workforce development actions but do not have clear plans.

Needs of Workforce Empowerment process definition



- **As a result of various findings in SW markets it was concluded that:**
 - there is understanding for the need of workforce empowerment
 - there is no good understanding for the needs of having workforce empowerment program and policies.
 - There is a lack of the knowhow which affects the implementation of such programs.

Needs of Workforce Empowerment process definition



Is there
specifications or standards
to identify
best practices
Of
Workforce Empowerment?

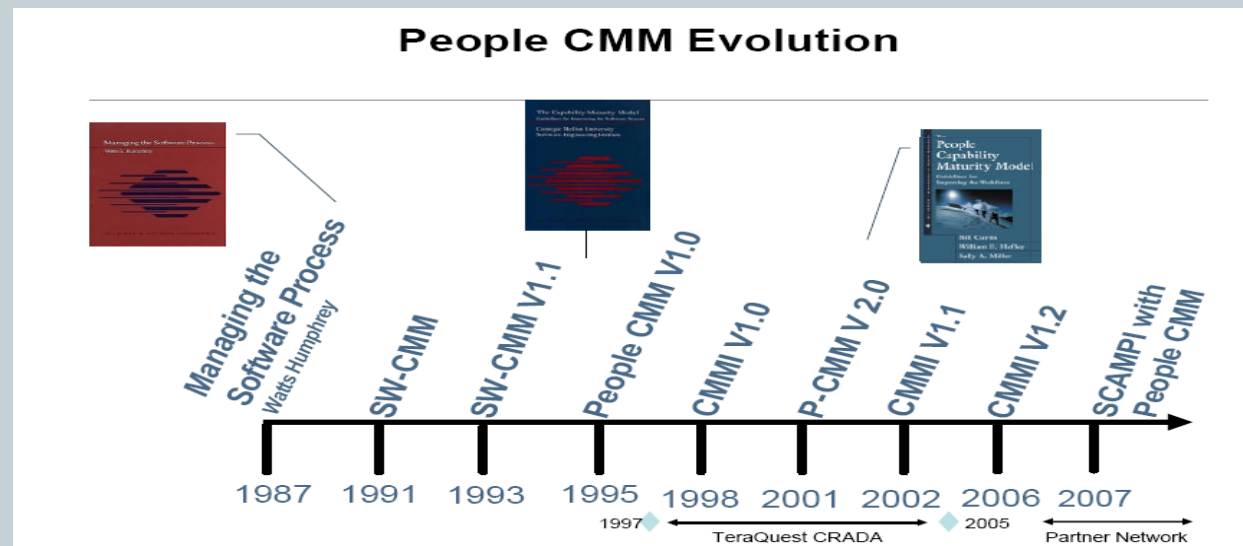
This Presentation About (solution and actions):



What is PCMM?

OVERVIEW OF PEOPLE CMM

- (People CMM) is to provide a roadmap for implementing workforce empowerment practices.
- First published at 1995 by SEI.



OVERVIEW OF PEOPLE CMM



- PCMM was designed to achieve four main objectives:
 - Developing Competency.
 - Building workgroups.
 - managing performance.
 - shaping the workforce.
- PCMMI Levels : initial, managed, defines, predictable and optimized.

OVERVIEW OF PEOPLE CMM



People CMM Objectives and Their Supporting Process Areas				
Levels	Developing Competency	Building Workgroups and Culture	Navigating and Managing Performance	Shaping the Workforce
5 Optimizing	Continuous Capability Improvement		Organizational Performance Alignment	Continuous Workforce Innovation
4 Predictable	Competency Based Assets Mentoring	Competency Integration Empowered Workgroups	Quantitative Performance Management	Organizational Capability Management
3 Defined	Competency Development Competency Analysis	Workgroup Development Participatory Culture	Competency Based Practices Career Development	Workforce Planning
2 Managed	Training and Development	Communication and Coordination	Compensation Performance Management Work Environment	Staffing

PCMM LEVEL 3



PCMM₃ is the defined capability . It includes:

- competency analysis to identify knowledge, skills and abilities required from workforce to perform their business activities.
- Develop culture of professionalism.
- Develop policy to manage workforce based on competency analysis.
- Develop processes for : career development, competency development



How to implement PCMM₃?

PCMM LEVEL 3



PCMM₃ Practices:

- Workgroup Development:
- Competency Analysis:
- Competency Development:
- Workforce Planning:
- Competency-Based Practices
- Career Development:
- Participatory Culture:

PCMM LEVEL 3



PCMM₃ Practices:



IMPLEMENTATION OF PCMM LEVEL



PCMM₃ Action plan:

- **Formation of Competence Modeling Group.**
- It role is to come up with the various workforce competencies required to carry out the business of the organisation. The group consists of people from different functions in the organisation with good logical and analytical skills.

IMPLEMENTATION OF PCMM LEVEL

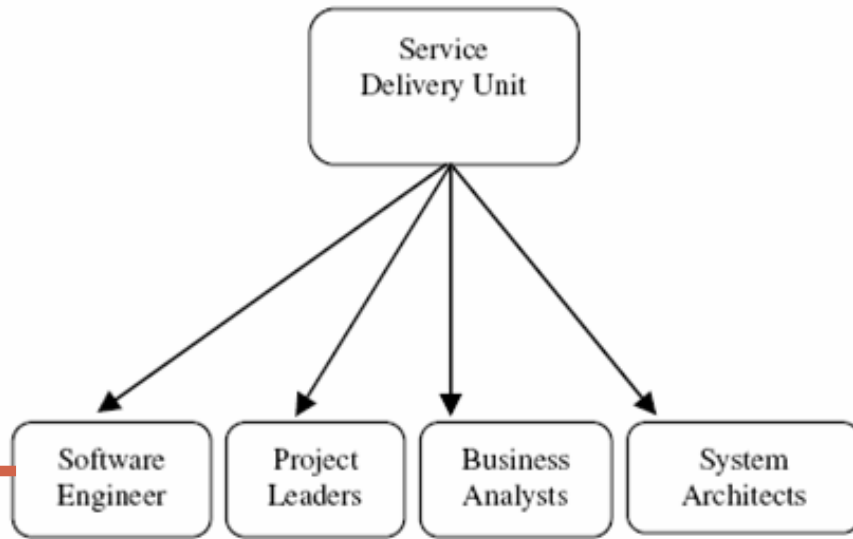


PCMM₃ Action plan:

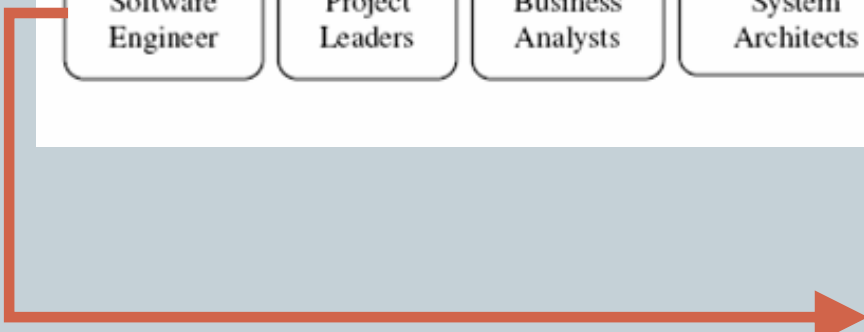
- **Competence Definition**
- The first task for CMG is to define the workforce competencies (the competencies required to run the business of the organisation).
- E.g.: Quality Assurance is a workforce competency and Auditing, Metrics are competencies required to perform Quality Assurance.

IMPLEMENTATION OF PCMM LEVEL

3



		Competency	Knowledge	Skills	Process Ability
C	Ob	Competency	Knowledge	Skills	Process Ability
	Ob	Object Oriented Design	Object Oriented Analysis and Design, UML	Ability to use tools like Rational Rose, Together J etc	Design process Review process Familiarity of templates, guidelines etc.



IMPLEMENTATION OF PCMM LEVEL



PCMM₃ Action plan:

- **Competency Collection**
- **Competency profiling**

IMPLEMENTATION OF PCMM LEVEL



PCMM₃ Action plan:

- **Competence Development Plan (CDP)**
- In addition to the ordinary training, many activities and tools could be included in CDP:
 - Knowledge exchange sessions
 - Using pair programming techniques.
 - Provide e learning repository.
 - Revise development of individuals on periodic base.

PCMM SUCCESS STORIES AND RETURN ON INVESTMENT



- **Competency Based Practices :**
 - Recruitment.
 - Training.
 - Deployment.



What are success stories about PCCM ?

Needs of Work Force Empowerment



India is one of most countries concerned with PCMM.

This is due to:

- India's belief that their **highly skilled workforce is the greatest asset**
- For **outsourcing business**, many Indian companies are using the **People CMM to demonstrate** that they have proper practices **retain the staff** serving their clients retention of employees and turnover rate.



Who are the potential consumer of PCMM?

PCMM SUCCESS STORIES AND RETURN ON INVESTMENT



- Many organizations managed to potentially develop its workforce competencies by implementing PCMM. These organizations include:
 - The Boeing Company
 - Lockheed Martin Corporation
 - Computer Sciences Corporation
 - Intel Corporation
 - Novo Nordisk A/S
 - Tata Consultancy Services
 - Infosys Technologies Ltd.
 - Wipro Technologies
 - the U.S. Army,
 - the Federal Emergency Management Agency.



Is PCMM only for ICT organization ?

PCMM IN NON IT ORGANIZATIONS



- Indian confederation of industry is implementing a program for implementing PCMM in all industries in India.
- Software Engineering Institute (SEI) : type of organizations using PCMM includes: Hospitality, Construction, Insurance, US Government Agencies, Banking, Financial Services, Information Technology, Consulting, Defense Contracting, Pharmaceuticals



Future Work



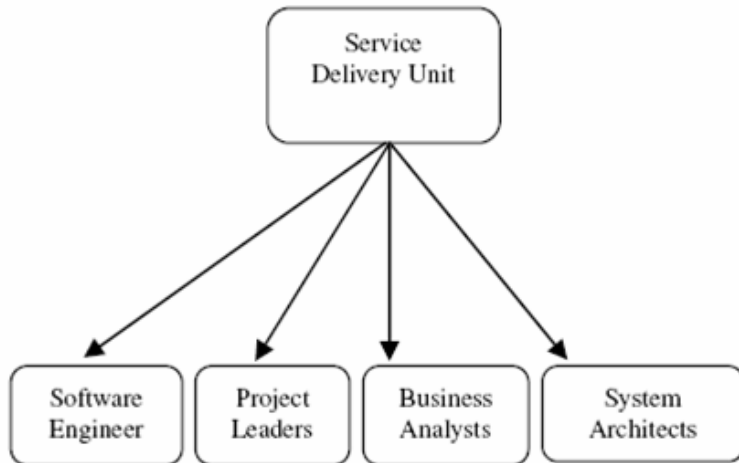
What after this presentation ?

Future Work



“A predefined workforce competencies for Enterprises
and educational institutes”

FUTURE WORK




	Competency	Knowledge	Skills	Process Ability
Object Oriented Design		Object Oriented Analysis and Design, UML	Ability to use tools like Rational Rose, Together J etc	Design process, Review process, Familiarity of templates, guidelines etc.

FUTURE WORK



The Generic Competency



Competency	Knowledge	Skills	Process Ability

FUTURE WORK

Your Spasific Competency

Competency	Knowledge	Skills	Process Ability

YOUR CONTRIBUTION MAKES DIFFERENCE



- Name (if affordable):.....
- Profession field:.....
- Position :.....
- Contact info (if affordable):.....

Generic Competency :

Form your point of view , What are the skills / knowledge **required generally** from all workforce individuals:

.....
.....
.....
.....

Spasific Competency : for your point of view , what are skills and knowledge required in your profession to fulfill business demand ?

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Thanks for contribution