

# Horizons SWD Process Improvement Services

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CMMI Process Improvement Consultant

# Agenda

This presentation demonstrates the Horizons Project Management & Software Development Suite: a set of processes, tools, training and consultation services

Introduction

What is CMMI?

Service Catalogue

# Horizons Software - Profile

- Established in 1999 in Cairo, Egypt
- Experienced in implementing CMMI Level 3
- Personnel certified in PMP, ITIL Foundation, Six Sigma and Microsoft Certifications
- **Products**
  - Strategy Architect (balanced scorecard product)
  - Process Architect (business process management product)
  - PMO Management System
  - TFS Add-On & Customization
- **Services**
  - Strategy Development & Management
  - Enterprise Architecture
  - PMO Establishment
  - CMMI Training, Assessment, Design, & Implementation Assistance

# The CMMI Consultant – Eng Hany Omar

- 18 years of Experience
- Managing software projects since 1998
- International and Regional Experience (USA, Egypt, SA, and UAE)
- Lead CMMI-3 certification efforts and re-certification since 2005 (2 successful CMMI Level 3 appraisals)
- Lead CMMI related consultation and training in SA and UAE
- Certifications: PMP, ITIL & Six Sigma Green Belt

# Background

- Horizons Software Development Process Services include:
  - A library of SWD Processes, Policies, Information Templates, and Org Structure
  - SWD Supporting Tools,
  - CMMI-Based Training
  - Assessment, and implementation assistance
- Benefiting Organization:
  - Organizations looking to attain CMMI Level 2 or Level 3
  - Organization planning for a sizable improvement in its Software Development Practices.

# What is CMMI?

- The Capability Maturity Model Integration (CMMI ®) provides guidelines for improving engineering processes, one of which is the software process.
- It addresses practices that cover the product's lifecycle from conception through delivery and maintenance.

# What is CMMI?

- CMMI was developed by the Software Engineering Institute (SEI) of Carnegie Mellon University in Pittsburgh, Pennsylvania

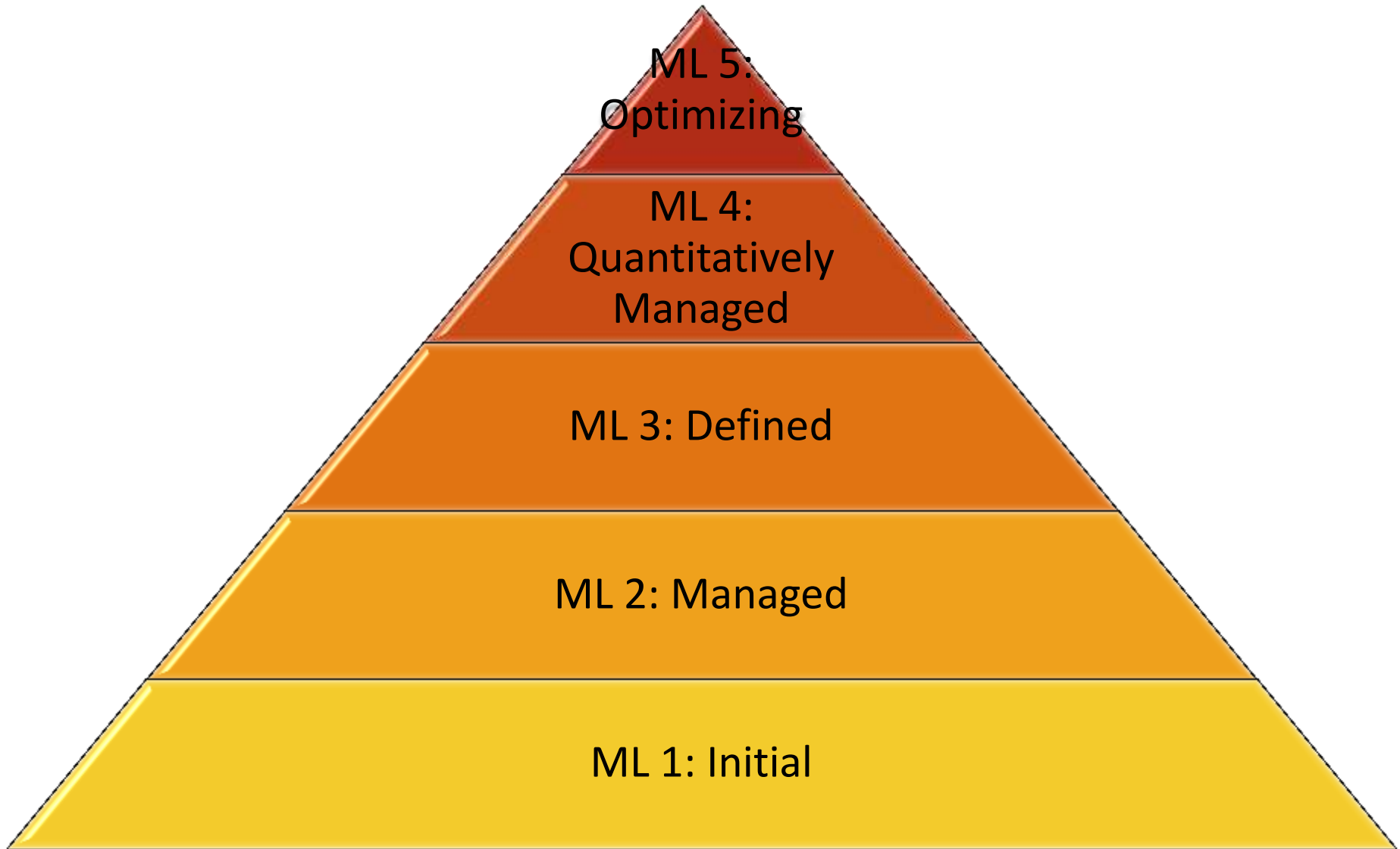
# Benefits of CMMI to Organizations

- Today, many organizations recognize the importance of quality processes.
- For example, after implementing CMMI, some organizations have reported
  - an average 62% increase in productivity, and
  - a customer satisfaction improvement of 14%
- Increasing market opportunities and attracting shareholders

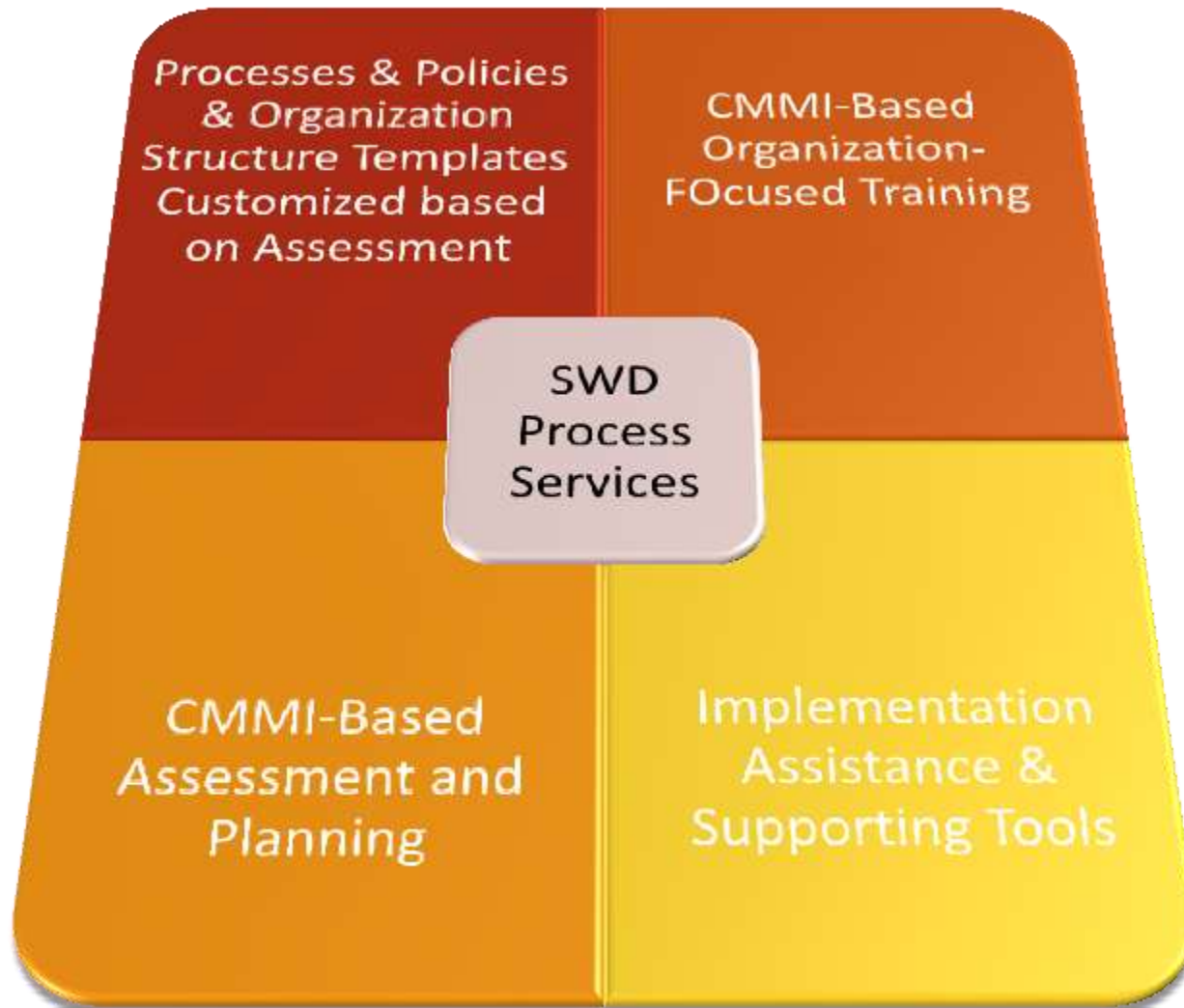
# Benefits of CMMI to Organizations

- Increased visibility to senior management on the status of projects
- Sharing knowledge and experience among employees
- Continuous improvement

# CMMI Maturity Levels



# Service Catalogue



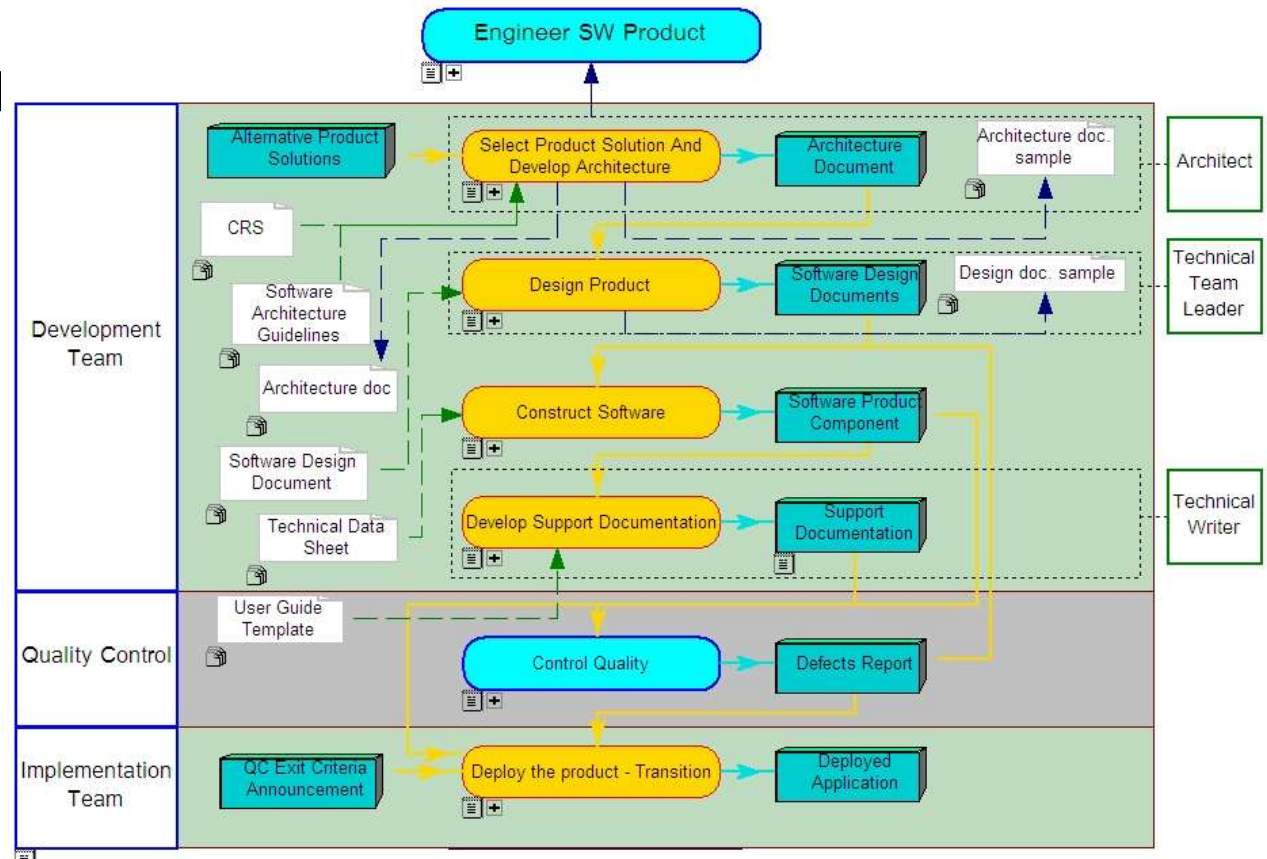
# Software Development Process Design

The following components reflect several years of practice and experience, and were actually used to achieve CMMI Level 3.

- Process Architecture (Value Chains)
- Process Workflows
- Process Policies
- SWD Principles
- Implementation templates
- Supporting Software Tools

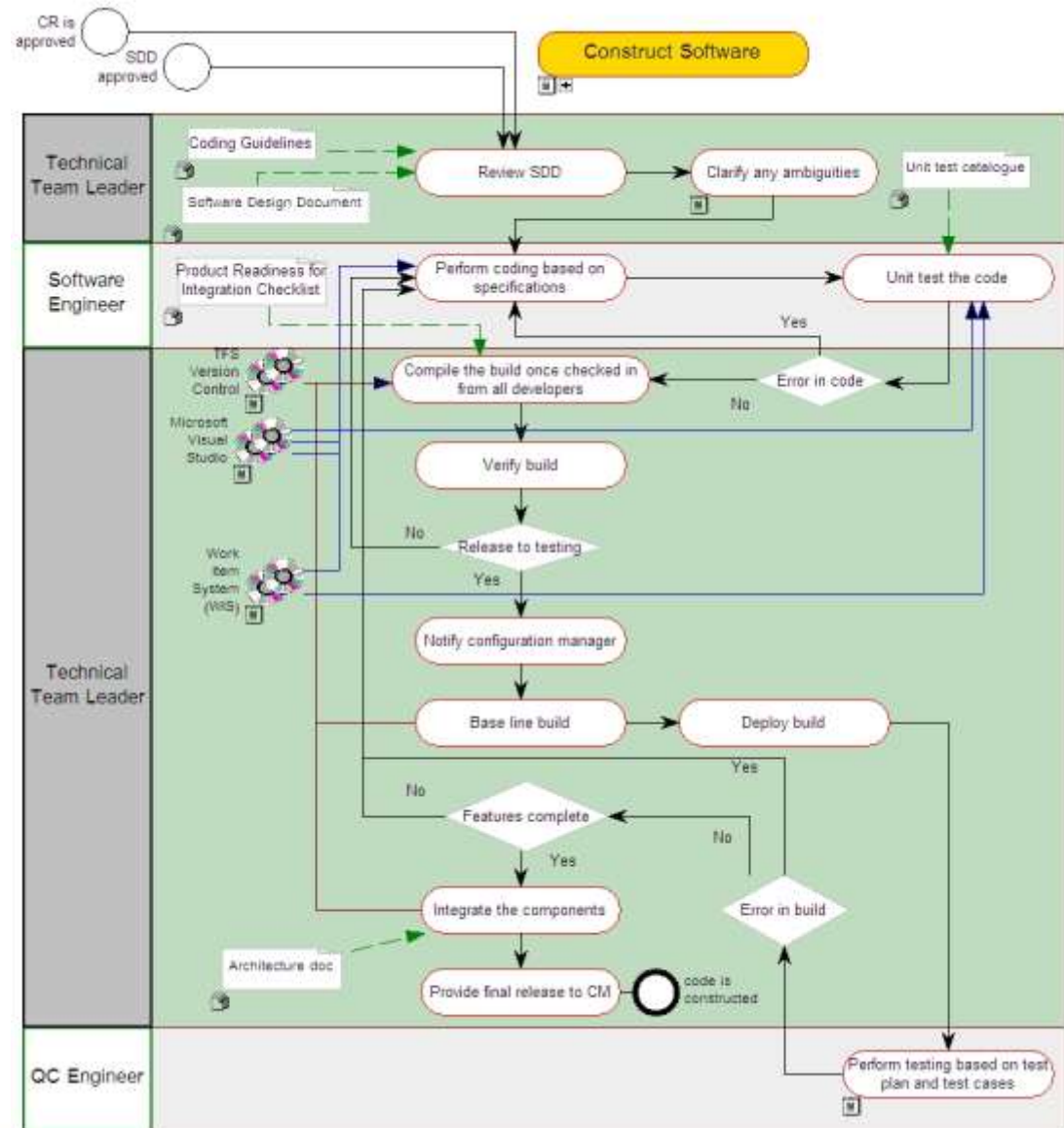
# SWD Process Design & Documentation

- Process Documentation use international Business Process Modeling
- All work is published in Web Portals



# SWD Process Design & Documentation

- Detailed Workflows
- Customization of PM activities for SWD based on PMI
- All work is published in Web Portals



# SWD Process Design & Documentation

- Policies Design and Documentation



<b>Policy:</b> Solution Selection 			
<b>Description:</b> Available solutions should be studied, and the most suitable one selected			
Policy ID	Policy Category	Responsible Party	Policy Information Source
	<ul style="list-style-type: none"> <li><a href="#">Software Engineering Policies</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Development Team</a></li> </ul>	
<b>Purpose</b>			
<ul style="list-style-type: none"> <li>The purpose of this policy is to make sure that when defining the product architecture, different alternatives should be considered, then the most appropriate alternative is chosen and for it the architecture is developed</li> </ul>			
<b>Processs It Applies To</b>			
<ul style="list-style-type: none"> <li><a href="#">Engineer SW Product</a></li> </ul>			
Original Approval Date	Last Review Date	Next Review Date	



# CMMI Training

- Horizons Software provides onsite training in CMMI with durations that can be tailored to suit your organization's needs.
- What makes the training stand out is that it is loaded with practical examples and exercises in order to help you better understand how CMMI can be applied in real-life projects.

# CMMI Training

- The following training courses are available:
  - Horizons Introduction to CMMI
  - CMMI Level 2 Training
  - CMMI Levels 2 and 3 Training

# CMMI Level 2 Training Covers...

- **Project Management Processes:**
  - Project Management
  - Software Sizing & Estimation
  - Supplier Agreement Management
- **Engineering Processes:**
  - Requirements Engineering

# CMMI Level 2 Training Covers...

- **Support Processes:**
  - Configuration Management
  - Quality Assurance
  - Measurement & Analysis

# CMMI Levels 2 & 3 Training Covers...

- **Project Management Processes:**

- Project Management \*
- Software Sizing & Estimation
- Risk Management
- Supplier Agreement Management

- **Engineering Processes:**

- Requirements Engineering \*
- Product Engineering
- Verification & Peer Reviews
- Quality Control & Testing

\* more extensive than in Level 2 training

# CMMI Levels 2 & 3 Training Covers...

- **Process Management Processes:**
  - Organization Transition (managing process improvement)
  - Organizational Training
- **Support Processes:**
  - Configuration Management
  - Quality Assurance
  - Measurement & Analysis
  - Decision Analysis & Resolution

# Other Consultation Services

- Assessment of current situation and Gap Analysis Report
- Designing SWD Process Improvement Plans
- Assisting with Implementation Plans (Auditing Visits, Tools installation and training, Customizing Information Templates)
- CMMI-2/CMMI-3 Appraisal Certification Assistance

# CMMI Level 2 or 3 Gap Analysis

- In this 3-day visit, the consultant assesses existing:
  - software engineering and project management processes
  - best practices
  - tools
  - other capabilities within the organization.

# CMMI Level 2 or 3 Gap Analysis

- The gap analysis is based on a method known as SCAMPI Class C
- This method aims to quickly collect information via interviews with organization personnel and some document reviews.
- At the end of the gap analysis, the consultant conducts a presentation of the findings & recommendations.

# THANK YOU

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