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## Which CMMI Model Is for You?

Do you wonder how to improve your business? The answer can be found in CMMI models. These models define practices that businesses have implemented on their way to success. Practices cover topics that include collecting and managing requirements, formal decision making, measuring performance, planning work, handling risks, and more.

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### CMMI BENEFITS YOUR BUSINESS

Businesses that use these CMMI models are from over 70 countries all over the world, including the U.S., Germany, Italy, Chile, India, Australia, Egypt, Turkey, and Russia. Companies that use CMMI number over 5000. Here are just a few...

- BAE Systems, a global defense and security company centered in the United Kingdom
- Dalian Sunyard Software Co., Ltd., an software development and technology services company centered in China
- Cinq Technologies, a software development and IT solutions design company centered in Brazil
- SRA International, Inc., a problem solver for government organizations serving the national security, civil government, and global health markets
- ADACEL Technologies Limited, a developer of advanced simulation and control systems for aviation and defense centered in Australia

Regardless of your company's profile, these CMMI models can help you diagnose problems and improve performance. Released in November 2010, these models provide specific help for organizations focused on acquisition, development, and services but can be helpful to others as well.

Sometimes it's easy to diagnose a business problem and solve it, but other times the problem or solution is not so obvious. CMMI models enable you to examine practices over a wide range of topics to discover where your organization could improve and where it is doing just fine.

Businesses that adopt CMMI experience significant improvements in performance. Many improve their on-time delivery, error detection rates, and accuracy

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of work estimates. Others reduce overhead rates and increase productivity. Because CMMI covers a wide range of activities and it works hand-in-hand with business objectives, improvements focus on the needs of the business.

### **More Than One CMMI Model**

There are three CMMI models. Part of each model shares nearly identical practices with the other two models because these practices apply to any business. However, each model also has practices that are unique because each model has a different focus.

*CMMI for Acquisition* is designed for businesses that focus on working with suppliers to assemble a product or deliver a service. This model delves into creating effective solicitations and supplier agreements, effectively gathering and communicating requirements to suppliers, monitoring supplier activities and artifacts, and ensuring the results of supplier work meet the needs of end users.

Process areas unique to CMMI for Acquisition are Agreement Management, Acquisition Requirements Development, Acquisition Technical Management, Acquisition Validation, Acquisition Verification, and Solicitation and Supplier Agreement Development.

This model may be the best one for your if you find that (1) you spend much of your time solving problems with suppliers or (2) you worry about your suppliers and whether they are doing what you expect.

*CMMI for Development* is designed for businesses that focus on developing products and services. This model delves into detail about converting customer requirements into requirements used by developers, effectively integrating product components into the final product or service, performing the technical analysis and development work to design the product or service, and ensuring that development work meets the needs of the end users and the specifications formulated during design.

Process areas unique to CMMI for Development are Product Integration, Requirements Development, Technical Solution, Validation, and Verification.

This model may be the best one for your if you find that (1) you focus on eliminating defects in products and services or (2) you're challenged with designing a product or service that gives you the edge over the competition.

*CMMI for Services* is designed for businesses that focus on establishing, managing, and delivering services. This model delves into detail about planning and managing service capacity and availability, handling complaints and problems,

planning for service interruptions, and deciding which services to provide, and ensuring everything is in place to deliver a service, including people, processes, consumables, and equipment.

Process areas unique to CMMI for Services are Capacity and Availability Management, Incident Resolution and Prevention, Service Continuity, Service Delivery, Service System Development, Service System Transition, and Strategic Service Management.

This model may be the best one for you if you find that (1) you focus on aligning resources to meet service demand or (2) you're challenged with maintaining a consistently high level of customer service.

### Which Model to Choose

It could be that all of these models apply to your business, but if you see your business objectives centering on managing the supply chain, use the CMMI for Acquisition model. If developing products or services is a focus, CMMI for Development is your model. Or, if providing superior service is a challenge, CMMI for Services is the best choice.

There is no right or wrong answer for which model you select. However, if you focus on the business issues and challenges that concern you and your staff, you'll select one or more models that best fit your needs.

Because there are so many common areas in the three CMMI models, any model you select will provide guidance in configuration management, causal analysis, decision making, planning, process management, training, risk management, and quality management.

### Using More than One

The SEI is currently researching ways for businesses to easily use multiple CMMI models, leveraging their commonality while benefitting from the breadth of their coverage. In fact, some businesses are already using more than one CMMI model to improve their performance.

These models are based on work centered at the Software Engineering Institute (SEI) at Carnegie Mellon in Pittsburgh, PA. The SEI has researched and worked with partners in industry and government to develop a collection of practices in areas that range from software engineering to management to disaster recovery.

To learn more about CMMI, attend an introductory CMMI course. The complete list of CMMI courses is on the SEI website at <http://www.sei.cmu.edu/training/find/courses.cfm?category=CMMI>.

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