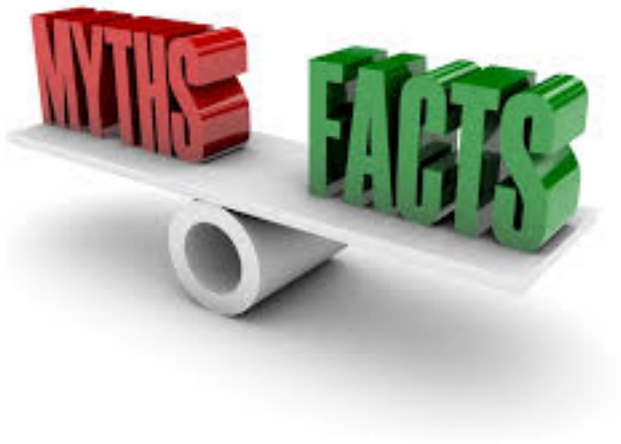

Shattering the Myths about CMMI® and Extra-Small Companies

Seven Myths that will re-shape your understanding of CMMI

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Shattering the Myths about CMMI and Extra-Small Companies

Few things frustrate us small business owners more than finding out that the big Request for Proposal (RFP) from the government or large manufacturer requires a "CMMI Level Three" rating. It's a multi-million dollar technology or services contract, and we're qualified to do the work. But, without the rating we can't even bid.

Too many of us become overwhelmed by what we have heard about CMMI and perceived as just too high a hurdle to leap over. We just throw up our hands and decide to "no-bid" the contract rather than go through the process of becoming Rated. (The CMMI Institute does not use the term "certified," though it's commonly used in the federal contractor community.)

CMMI has a reputation of being big, heavy, expensive, and hard to achieve. Because of that some have questioned the value of going through the process to begin with.

But these are myths that are based on stories of disastrous implementations, ineffective consultants, and twelve-month death marches, most of which took place at large-scale early adopters, not with small companies like ours.

Before you do decide to abandon that transformative sales pursuit and lock yourself out of those lucrative long-term contracts, spend a few minutes here to understand the most common myths about CMMI and extra-small companies. We'll share some ideas that might change your perception about the CMMI and how it is easily within your reach.

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Myth #1. The government is trying to lock small businesses out of the contract

They only ask us to be CMMI Maturity Level Three because they don't want to give the contract to a small business!

There are billions of dollars available to procure products and services from qualified small businesses. But there are also hundreds, and sometimes thousands, of companies vying to win the deals.

Large-scale buyers like the federal government or automotive companies need a way to differentiate between the most qualified suppliers, and the CMMI is one of the tools they use. . They use the CMMI because it is, in its simplest form, a model for how great product and service companies perform.

There is nothing about large companies that make them inherently "better" at delivering than we are, and there is nothing about the CMMI that requires the infrastructure that only a large company can afford. In fact, the CMMI can help us "perform like the big guys" by bringing a stable framework to the way we deliver services – the kind of framework that the large buyers have come to expect.

Does that mean we have to act like we're Lockheed-Martin? No way! Our strength is in our agility and our ability to quickly adapt to our customer's needs. But we DO need to do that in a predictable way. The CMMI can really help us do what we already do, just a little bit better. It's a scaleable model that was designed to be molded around your business goals and objectives. In other words, there are many ways to implement important business processes, and the only limitation is your imagination.

Don't fall for the idea that the government only awards contracts to companies that behave like Boeing; it's a myth!

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Myth #2. CMMI is only for really big companies

CMMI was designed for big companies, and has no place in a small business!

The CMMI is often referred to as a process improvement model, but it is more akin to a context-driven behavioral model. It's a set of practices that guides you to adopt the behaviors of a great company in the context of YOUR business goals and objectives.

In other words, if your goal is to be a small, agile software company, then CMMI guides you towards doing that. It doesn't demand that you act like something you are not, only that you be the best that you can be.

For instance, if you use agile retrospectives to take a look at how you could make the next sprint better on your scrum project, you're probably executing a number of CMMI practices related to collecting and analyzing lessons learned from projects. The word "retrospective" may not be in the CMMI model, but that doesn't mean that it's not a good fit for you. The CMMI guidance is looking for lessons-learned for sure, but it does not prescribe how they are to be captured – just that they be done in a way that makes sense within the context of your business. Another example is peer reviews. If you're performing routine maintenance on proven code, you might use a simple work-flow based approach, but if you're writing code for a re-entry algorithm on a space vehicle, a Fagan Inspection might make more sense. Both can be considered a peer review.

CMMI adoption is on the rise in the small business community. In fact, according to the CMMI Institute's data, almost two-thirds of CMMI adopters last year were organizations smaller than one hundred people. You can see the data (and a lot more) yourself at: http://bit.ly/1d9WsTx.

Don't fall for the idea that CMMI is only for big companies; it's a myth!

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Myth #3: CMMI is too expensive

CMMI will bankrupt my company – it's too expensive to implement!

We have created a company, and it's our baby. We have put everything we have into it, hired the best people, trained them ourselves, and we have the best team in the business. What else can CMMI do for us? We're already great!

If you consider the fact that the CMMI is about being as great a company as you can be, we need to ask the question – what will it cost if we DO NOT implement CMMI? As leaders in our industry, we understand the need to invest in building a foundation that can support quality operations and business growth.

What will the CMMI "make you do" that you don't already want to be doing? Will you suddenly start planning? Estimating? Testing? Code Reviews? You're probably already doing those things (and if you're not, well … you might want to start just to make yourself competitive).

Is there a cost to being a great company? Sure. We need to establish a "company way." We need to train people. We need to make sure people are doing a quality job every day. But these are things that we, and CMMI, are already focused on! All the CMMI does is codify some of these practices and provide a way for us to have them independently verified. There is no reason to spend a hundred thousand dollars.

It doesn't have to be big. It doesn't have to be heavy. It just needs to be something that helps us get what we are already striving for – to be the best and to get even better.

Don't fall for the idea that CMMI costs a lot of money if you're a small company; it's a myth!

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Myth #4: Agile and CMMI don't go together

We're small and agile – and that's what our customers like about us. CMMI and Agile don't play well together!

In the last decade or so, the software engineering community has begun to embrace a set of iterative and incremental delivery methods known collectively as "Agile." The specific methods include names like Scrum, Extreme Programming (XP), Spiral, and some distant cousins, including Kanban.

From the beginning, Agile teams had a clear message: We're different, we don't use process.

The Agile movement is indeed very different, but the notion that they don't use "process" is in itself a myth. Of course they do. Process is just a nickname for "how we work." Agile enthusiasts have come up with some new and innovative ideas for how work gets done (see "Alternative, or just Innovative" at: http://bit.ly/1d9WsTx) but for the most part, they are new ways of doing the same thing.

The great thing about CMMI is that, since both CMMI and Agile are frameworks for improving delivery, it is very effective at improving your agile implementation! The CMMI is not a process, and there isn't a single rule for "how work gets done." CMMI chooses instead to leave the implementation (and innovation) to you. You can learn more about the relationship between CMMI and Agile here (http://bit.ly/1aLmvkM) and here (http://bit.ly/1f7RdQX).

There is a CMMI practice for improving every Agile technique, and there is no conflict between the two, other than a failure of imagination.

Don't fall for idea that CMMI and Agile can't work well together; it's a myth!

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Myth #5: CMMI is all about Documents

CMMI is just about creating a pile of documents. All we need to do is produce them, and we'll be Maturity Level Two or Three.

At the beginning of a recent CMMI class I was teaching, I heard one of the students say to his tablemate, "I understand this model; it's all about the documents. Just give everybody a template and we're golden."

Not so much.

Templates (and documents) are useful for helping people understand what is expected of them, and for recording the outputs of those actions, but neither templates nor documents drive behavior.

Consider this. If you're given an estimating template to fill out, you could easily go to your desk, fill in the cells of the spreadsheet with your "best guess," and return it to the boss. Done right? Not so fast.

How was the estimate arrived at? Was it compared to other projects (the best indicator of effort and time)? Was there any method, formula, or data used to complete it? Was it reviewed by anyone before you signed up the company for that big project? These are all questions that the template does not answer. But, they are behaviors that are usually present in a great company – and, you've got it, the CMMI is helps us define those behaviors.

Just because we want our people to behave in a way that is best for our business, doesn't mean everything has to be in a document. What about white boards, sticky notes, yellow pads, and emails? How about delivering an estimate in a photograph taken from a smartphone? These are all good, low-overhead methods for working through a problem, sharing information, and storing it in a useful place for use at a later date.

Don't fall for the idea that templates and documents are all you need; it's a myth!

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Myth #6: We will need a lot of consultants

We will need to spend a lot of money on consultants to get a CMMI Rating!

Helping companies achieve a level of CMMI has become a cottage industry, especially in the federal government sector in Washington, D.C. You can't throw a rock without hitting a CMMI "consultant" in D.C. But, but even if you don't know everything about CMMI, you don't need to spend a lot of money on a consultant.

A good consultant with leadership, facilitation, and organizational change management skills can really help if you have a business problem to solve. Sometimes that can make the difference between success and failure. In a smaller company, those skills, while valuable, may not be what you need the most.

As small business owners, we know how to do our work, and we know what we want people to do. A consultant can help us solve a thorny problem, but we don't need one to tell us what we already know – our team members need to be competent, do a complete job, and behave ethically and professionally at all times.

Believe it or not, if you do those things, you have got a large portion of the CMMI covered! Sure, there are nuances, but those things will become obvious.

The biggest problem a small company experiences with CMMI is visualizing how the model fits into their business. Much of the language is arcane, and seems to be written for the large-scale user. There is also confusion about the meaning of the process areas and practices, and how to prepare for an appraisal so that it is successful.

If you're building software products, do you elicit your customer needs? Do you design and test your products? Do your team members know how you want them to do these things? That's right – these are all in the CMMI.

In fact, there is very little in the CMMI that we, the business owners, don't already know about, and don't already expect our team members to be performing.

In short, there may not be much to do other than align some practices and start doing some things you may not be doing today.

For small businesses with less than 20 people, there are lower cost virtual solutions such as CMMIxs that are tailor-made for the small company. For more information about CMMIxs, go to http://www.CMMIxs.com.

Don't fall for the idea you need to spend a lot of money on consultants to achieve a CMMI Rating; it's a myth!

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Myth #7: There is nothing useful about CMMI for me

CMMI doesn't provide us with any value beyond winning that government contract.

Whenever a government agency or customer requires a "certification" or "rating" to win or maintain a contract, some companies are motivated to focus on the wrong goal – achieving that rating without tying it to the reason they are asking for it – high quality delivery of services.

Achieving a certification often BECOMES the project. The true meaning behind receiving the certification is to be the best performing team we can be.

Is it possible to receive a certification without improving the team's performance? Absolutely. Does it make sense? Absolutely not.

The reason for this is that it's actually easier to do it right – and get the performance improvements – than it is to prepare for and "pass" an appraisal without actually doing it right!

The CMMI is full of hints, tips, and guidelines for improving performance, and there is very little in the model that isn't useful to you. Sure, there are some things that are more important than others, but that's OK. You don't need to execute every practice as if the volume knob is turned up to "11." Some of them only need to be turned up to "1." But there are some enterprising consultants out there that figure if you max out every process, you have to "pass" an appraisal. That's just false, and it's a myth!

Don't fall for the idea the CMMI is just about "getting a level" without adding any value to your business; it's a myth!

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About CMMIxs

CMMIxs is a solution offering from Broadsword Solutions Corporation that gives extra-small companies an opportunity to be part of the CMMI "club" through lower-cost virtual tools, accelerated workshops, and a set of proven templates and samples for you to start with. You can learn more about CMMIxs at http://www.CMMIxs.com.

About Jeff Dalton

Jeff is Broadsword's President, Certified Lead Appraiser, **CMMI** Instructor, ScrumMaster and author of "agileCMMI," Broadsword's leading methodology for incremental and iterative process improvement. He is Chairman of the CMMI Institute's Partner Advisory Board and President of the Great Lakes Software Process Improvement Network (GL-SPIN). He is a recipient of the Software Engineering Institute's *SEI Member Award for Outstanding Representative* for his work uniting the Agile and **CMMI** communities together through his popular blog "Ask the **CMMI** Appraiser." He holds degrees in Music and Computer Science and builds experimental airplanes in his spare time. You can reach Jeff at appraiser@broadswordsolutions.com.

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