CREATIVELY APPLYING CMMI-SVC IN A VERY SMALL CONSULTING FIRM

Bill Smith, CEO
Leading Edge Process Consultants LLC
www.CmmiTraining.com
Objective of This Presentation

To provide a glimpse into how one very small company is, little-by-little, adopting key principles from the CMMI for Services (CMMI-SVC) to dramatically improve its bottom line.
Agenda

- Background
- Making the Decision
- Improving Our *Marketing*
- Improving Our *Training Delivery*
- The Future
- In Conclusion
Who Are We, and Why Do You Care? (Or Not.)

Background
Who Are We?

- **Leading Edge Process Consultants** is a well-established, world-class provider of process improvement consulting, appraisal, and training services.

  - Eventually…
  - Dec. 2007!
  - Some day…
  - BINGO!

A slightly exaggerated statement, depending on the day, really.
About “Public” Training...

To appreciate this presentation, you need to understand why we put so much time and energy into public training (other than the fact that I personally love it)

If you don’t get it right... If you do get it right...

...you could lose your shirt! ...you don’t have to eat this every night

Net income from 1 public training class can be equivalent to 3 to 4 private classes. Alternatively, you may not break even.
### Growth of Our CMMI Training Business

“Cinderella story… outta nowhere…” [Caddyshack, 1980]

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Google rank - “cmmi training”</strong></td>
<td>NA</td>
<td>Fell asleep before finding</td>
<td>#3 (after 2 SEI pages)</td>
</tr>
<tr>
<td><strong># Intro to CMMI students taught</strong></td>
<td>0</td>
<td>89</td>
<td>223 (projected) (191 thru 11/6)</td>
</tr>
<tr>
<td><strong>Average public class attendance</strong></td>
<td>NA</td>
<td>11.3</td>
<td>25.4* (thru 11/6)</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>Negative</td>
<td>x</td>
<td>15x (projected) (10x thru 11/6)</td>
</tr>
<tr>
<td><strong>% of income from CMMI classes</strong></td>
<td>NA</td>
<td>100% (CMMI-DEV)</td>
<td>100% (CMMI-DEV, -SVC)</td>
</tr>
</tbody>
</table>

* Includes three space-constrained “sell-outs”
But... How Are We Doing It?

A BIT
“Just try harder”?

SOME
Natural business growth?

Insanity: doing the same thing over and over again and expecting different results.
- A. Einstein

In this economy?

YES!
Get better?

Using the CMMI for Services as a guide.

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2009: The Year in Review

Improvement cycle 1: Marketing
- Made CMMI-SVC decision
- CmmiTraining.com goes live
- Developed marketing system
- First public class in over 5 months

Improvement cycle 2: Training
- Straining my availability
- Moved to larger public training space

CMMI-SVC Process Areas appearing on this slide are representative samples; elements of other PAs have also been addressed.

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"CMMI in a One-Person Company? Are You Crazy\*?"

Making the Decision

*Those who know me already know the answer.*
Making the Business Decision (1)

- Shouldn’t we practice what we preach – the CMMI?
- But… we need to focus on making money right now
- Time/resources available to dedicate to long-term improvement: zip, zilch, nada, none
Making the Business Decision (2)

- No money, no problem!
  1. Pick an organizational pain point
  2. Address the pain, using guidance from CMMI-SVC as appropriate
  3. Repeat steps 1 and 2 as needed

- Focus on near-term tasks for just-in-time process improvement

- If it ever looks like CMMI-SVC = wrong business decision, then simply STOP

“Tell me where it hurts…”
Making the Business Decision (3)

CMMI for Services Diary

“We're adopting the CMMI for Services to become more efficient and more effective... so we can do things better, cheaper, or faster... for competitive advantage.

“Another way of saying this -- and let this sink in -- is that we're doing it for legitimate improvement, not for a ‘level rating’.”

Pinpointing Our Pain (1)

Training?

High levels of student satisfaction

NO PAIN

Marketing?

Inadequate number of students to cover costs of public classes

PAIN!

BTW, a trip through the CMMI glossary (service, product, end user, etc.) confirms that marketing may indeed be considered a “service.”
Pinpointing Our Pain (2)

☀ Key marketing issues:
  • Ad hoc, reactive
  • $25,541 on Google Ads in 2008: *money pit?*
  • Web site not sufficiently... *compelling*
  • Personally, still a relative “unknown”
  • *I could go on...*
Improving Our Marketing

Not Hard to Do, Because Last Year It Stunk
Creating a **Marketing Service System**

- Researched *marketing practices*
- Identified *components and subcomponents* of my target service system
- Identified *current and desired states* of each
- Estimated development *effort*
- Drafted implementation *schedule*
- Began developing components

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**Top Level Components**

1. Me  
2. My Websites  
3. My Blogs  
4. Social Networking  
5. E-Mail Marketing  
6. Press Releases  
7. Videocasts  
8. Publications  
9. Speaking/Networking  
10. Directories  
11. Search Advertising  
12. Search Engine Optimization  
13. Viral Marketing  
14. Link Campaigning
Developing CmmiTraining.com (1)
(Marketing Service System Component 2.2)

The goal: “Increase my conversion rate
(ratio of website visitors to registered students)”
[from Student Attraction Strategy 2009, 1/5/2009]

Key features:
• Course catalog and schedule*
• Online student registration**
• Secure credit card transactions**
• Differentiators (why us?)*
• Search engine optimized*
• Google ad-optimized*

* new or improved versus prior website
** by Amplify Software, www.amplifyllc.com
Developing CmmiTraining.com (2)

Old, money-sucking website  →  Spiffy new money-making website  →  Classroom of eager CMMI students

Feb
- 2/7/09
- 30-day web development “sprint”

Mar
- 3/9/09
- 6 weeks promo time

Apr
- 4/23-4/25/09
Developing CmmiTraining.com (3)

Critical Success Factors
- Stop “working” so much!
  - Suspended class deliveries to focus on this
- Agile development methodology
- Accurate effort estimate, based on
  - Size (# web pages)
  - Complexity (of each page)
  - Reuse (existing website)
- A Validation Team!
  - 3 former students, 2 business associates

They rocked!

PROJECT PLANNING
- SP 1.2 Establish Estimates of Work Product and Task Attributes
- SP 1.3 Define Project Lifecycle
- SP 3.2 Reconcile Work and Resource Levels

SERVICE SYSTEM DEVELOPMENT
- SP 1.1 Develop Stakeholder Requirements
- SP 2.2 Develop the Design
- SP 3.4 Validate the Service System
Measuring Our Marketing Results

2009 vs. 2008
Google Ad Dollars -26%
Click-thru Rate +260%
Avg Time on Website +44%
Public Class Size +61%

Given our corporate vision, this may have been the difference between staying in business… and not.

Comparison of 4 weeks prior to 10/27-10/29/09 and 11/11-11/13/08 classes. Unable to compare all of 2008 vs. all of 2009 because not all of this data was captured in 2008.

Sorry, percentages only! The actual data is proprietary.
Moving Toward Quantitative Management

- Random variation, or “special cause”?
- If special cause, eliminating it could be worth tens of thousands of dollars
- I have a hunch, but lack the correct data to verify
- Collecting that data now, but may not know for another year!
We Now Have Flying Monkeys… and More!

Improving Our Training Delivery
August, 2009. A frighteningly busy Sept/Oct was looming:

- 5 Intro to CMMI classes in a 7-week period
- 2 of these public, requiring tons of work; the other 3 out-of-town

How to stay organized?

- Created procedures and checklists just-in-time, because I really needed them
- Better solution than constantly re-creating to-do lists!

Why “just-in-time”?

I rarely say to myself “I’m looking for something to do right now, so I think I’ll write a procedure.” Just-in-time works for me.
Documented Procedures Help Us to Grow (2)

- Thanks to procedures, checklists, & mentoring, somebody else now:
  - Creates/prints certificates
  - Creates/prints name tents
  - Enters data from SEI evaluations into spreadsheets
  - Assembles handout packets
  - Packs student bags (CMMI, student notebook, freebies)
  - Restocks inventory

- He’s 12

Connor Smith
Manager, Special Projects
Leading Edge Process Consultants

SERVICE DELIVERY
GP 3.1 Establish a Defined Process
Getting Better, Constantly (1)

We introduced an explosion of new classroom ideas this fall…

How are these used in class? Give us $1190 and three days of your time, and you can find out!
Getting Better, Constantly (2)

...which we piloted in class before becoming part of our standard process.
Measuring Our Training Delivery Results (1)

WHAT WE LOOK AT

• Standard SEI Class Evaluations, aggregated for each class
• Our own, more customized web survey (using Survey Monkey)

MOST IMPORTANT QUESTION

Would you recommend our version of the Introduction to CMMI training to a friend or colleague?

INITIAL RESULTS

Since doing this for 3 classes, everybody has replied “yes.”
“Got to admit, it’s getting better” [Lennon, McCartney]

The Future
2010 and Beyond

- Use our 2009 gains as a foothold for continued improvement
- Keep a watchful eye on the competition
- Add more structure to our process improvement program
  - Still grounded in business value
  - More proactive, a bit less “just-in-time”
Planning Our Improvements

- Another planned improvement cycle in early 2010
- How to find the time?
  - “Skipping” a public class on our calendar
- Harsh business reality:
  - Sometimes you need to make less money now so you can make more money later

<table>
<thead>
<tr>
<th>Date</th>
<th>Course</th>
<th>Location</th>
</tr>
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<tbody>
<tr>
<td>Dec 8-10, 2009</td>
<td>Introduction to CMMI v1.2 (CMMI-DEV)</td>
<td>Reston, VA</td>
</tr>
<tr>
<td>Mar 9-11, 2010</td>
<td>Introduction to CMMI v1.2 (CMMI-DEV)</td>
<td>Reston, VA</td>
</tr>
<tr>
<td>Mar 12, 2010</td>
<td>Services Supplement for CMMI v1.2</td>
<td>Reston, VA</td>
</tr>
<tr>
<td>April 13-15, 2010</td>
<td>Introduction to CMMI v1.2 (CMMI-DEV)</td>
<td>Reston, VA</td>
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## A Sampling of Future Improvements (1)

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<th>Issue</th>
<th>Improvement</th>
<th>Business Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received several requests for private training in Aug-Oct that we lacked the availability to handle. Some consulting/appraisal requests also. But how many? What’s the business value of opportunities missed?</td>
<td>Formally track requests for services other than public training.</td>
<td>If indicated by demand (e.g., missed opportunities), increase income by expanding or simply raising prices. Perhaps reduce expenses by decreasing marketing budget.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consider new services, if we don’t offer what several people are asking for.</td>
</tr>
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A Sampling of Future Improvements (2)

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<th>Issue</th>
<th>Improvement</th>
<th>Business Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>What if our instructor gets sick and can’t deliver a public class for which 30 students are enrolled, half of whom have flown into town to just for the occasion?</td>
<td>Preemptively take mega-doses of Vitamin C. More realistically, have a back-up instructor.</td>
<td>A public training class is a $30K+ revenue event – tons of money for a small company like ours. Refunding this money could be crippling – and the customer dissatisfaction hit could be severe.</td>
</tr>
</tbody>
</table>

IRP vs. SCON: Which One?
Though some might say this issue is about IRP, it’s so potentially serious that we believe we’ll benefit more from applying the principles of SCON to it. Hey, whatever works!
Parting Words of Wisdom Experience

In Conclusion
Conclusions

- We’ve begun applying the CMMI for Services to our Marketing and Training Delivery processes.
- Our process improvement initiative is solely about business value. We have no current plans to attain a Maturity Level rating.
- We’ve achieved a significant net income gain in the past year. We unquestionably attribute much of that gain to our adoption of key CMMI-SVC principles.
- Given our success, we’ll continue adopting the CMMI for Services through 2010.
Recommendations
for the Ultra Small Organization (1)

1. Don’t Panic!

Yes, we realize the CMMI can seem overwhelming. It doesn’t have to be that way, though. Relax and take a deep breath before you proceed…
Recommendations
for the Ultra Small Organization (2)

2. View the CMMI as an Encyclopedia of Good Stuff

It’s chock full of good ideas. Probably too many for you. Some of them will quickly benefit your organization. The others? Ignore them for now.
Recommendations for the Ultra Small Organization (3)

3. Focus on Your Pain

Show immediate benefit by using an iterative -- or “agile” -- process improvement approach. (Need a detailed example? Check out the CMMI Survival Guide.)
Recommendations
for the Ultra Small Organization (4)

4. Abandon Your “Compliance” Mindset

It’s nice to be compliant but it’s way nicer to make money. Focus on using pieces of the CMMI to achieve your business goals. Measure your success with dollars, not a Maturity Level.
Recommendations for the Ultra Small Organization (5)

5. Avoid the “Big Bang” Approach at All Costs!

Seriously, do you want to spend the next two years documenting processes? And then gathering evidence? And then shelling out tens of thousands of dollars for an appraisal? And still not know whether you truly got better? Um, neither do I.
Recommendations
for the Ultra Small Organization (6)

6. Use a Just-in-Time Approach to Process Documentation Whenever Possible

You’ll end up with process descriptions more rooted in reality, and more immediately useful.
Recommendations
for the Ultra Small Organization (7)

7. At Some Point You May Need to Reconsider the First 6 Recommendations

Someday you may no longer be “ultra small.” Your informal communication channels may break down, and the written word will become more important. You can’t always generate process documents “just-in-time.” You may need to demonstrate compliance to external customers, or even yourself.

*Still, you may never want to abandon Recommendation 1.*
My Other Presentations This Week

- **An Overview of CMMI-SVC for CMMI-DEV Enthusiasts**
  - Wednesday 11/18
  - 8:45-9:15 a.m.
  - Wind Star Room

- **CMMI in the Social Media (for the Social Media-Challenged!)**
  - Wednesday 11/18
  - 10:45-11:30 a.m.
  - Grand Mesa F
Any Questions?

Website: www.CmmiTraining.com
Blog: www.CmmiForServicesDiary.com
Twitter: CmmiRox
LinkedIn: www.linkedin.com/in/billsmithleadingedge

Upcoming Public Classes In Reston, VA (DC Metro Area)

SEI Introduction to CMMI
- Dec 8-10, 2009
- Mar 9-11, 2010
- Apr 13-15, 2010

SEI Services Supplement for CMMI (CMMI-SVC)
- Mar 12, 2010

Private Classes?
- Bill@CmmiTraining.com