So what ...

... are you going to do now?
Who is Timothy Fitz?
Continuous Deployment is the practice of shipping your code as frequently as possible. While relatively straightforward when applied to a production deploy as is common for websites and services, when applied to traditional client side applications there are three big problems to solve: the software update user experience, the collection and interpretation of quality metrics, and surviving the chaos of the desktop environment.

The first problem with Continuous Deployment for downloadable client software? It's a download! Classically, the upgrade process is: The user decides to update, finds the software’s website again, downloads the newer version and runs the installer. This requires the user to remember that the software can be upgraded, find a need for it to be upgraded and determine it’s worth the effort and risk of breaking their install. When OmniFocus was in beta the developers were releasing constantly, many times per day! While the upgrade was manual and you had to remember to do it, the whole process worked well because the selected users were software-hip and often software developers themselves. I have nothing but praise for the way The Omni Group rapidly developed and deployed; plus they published a bunch of statistics! Still, there are clearly better ways to handle that stream of upgrades.

Software Update Experience

For successful Continuous Deployment, you need as many users as possible on your most recent deploy. There are a few models for increasing upgrade adoption, and I’ll list them in order of effectiveness.

Check for updates on application startup

When you run the software, it reaches out to your download servers and checks for a new version. If available, it provides an upgrade prompt. These dialogs are most useful when they can sell the user on the upgrade, then it feels like a promotion rather than an annoyance.
So what’s new?
Integration was (and is) the enemy …

… but technology is only part of the solution
Extreme Discoveries (CI)

Extreme Success?
NASA Recognizes ORA for Hubble Work
December 13, 1993

ORA Receives NASA Public Service Group Achievement Award

Read more...

Optical Research Associates (ORA®), Pasadena, CA, announced that they have received the prestigious NASA Public Service Group Achievement Award this year. The award was presented at a ceremony held at JPL on May 2, 1995, by Dr. Edward C. Stone, Director of JFL, and Dr. Jurgen Rahe, Director of Solar System Exploration Division, NASA Office of Space Science. The award, signed by NASA Administrator Dr. Daniel S. Goldin, is "in recognition of outstanding contributions in the area of optical design and engineering in support of the Jet Propulsion Laboratory and NASA's space exploration missions."

Together, NASA and JPL cited ORA for nearly 30 years of successful cooperation on numerous projects. Specifically, ORA was recognized for the critical role that their CODE V® optical design software and engineering services group played in the success of the Hubble Space Telescope repair mission. ORA's contribution to several other NASA projects was also acknowledged, including the Cassini spacecraft Narrow and Wide Field camera, television optics used for the Apollo-Soyuz linkup, and an objective used in the Skylab project.

Only six such awards were presented by NASA this year, the other five all went to groups at NASA facilities, making ORA the only
“By driving development with automated tests and then eliminating duplication, any developer can write reliable, bug-free code no matter what its level of complexity. Moreover, TDD encourages programmers to learn quickly, communicate more clearly, and seek out constructive feedback.”

This book lays out the fundamentals of Agile Software Development, which is effectively a subset of Lean Software Development. This is walk-before-you-run territory: if agile is still a foreign concept, start here instead of Lean Software.

“Every team can improve. Every team can begin improving today. Improvement is possible—beyond what we can currently imagine. Extreme Programming Explained, Second Edition, offers ideas to fuel your improvement for years to come.”

What is Agile, really?
Continuous Learning

Customer Development

Customer Discovery ➔ Customer Validation ➔ Customer Creation ➔ Scale Company

Data, Feedback, Insights

Hypotheses, Experiments, Insights

Problem: Unknown

Solution: Unknown

Source: Eric Ries
http://startuplessonslearned.blogspot.com
Big Measures; Big Learning

The future of retail

CD as a competitive tool
So what’s next?
Context and Constraints

How can you use CD?

How will it help?

What’s going to stop you?
How will CD help?

- Web Startup
- Large Company
- Medical Device

fewer constrains

more constrains
How will CD help?

Web Startup
(few constraints)

fewer constrains

more constrains
How will CD help?

Less constrains:
Large Company
(big value)
(big constraints)

More constrains:
How will CD help?

Medical Devices
(continuous readiness)

fewer constrains

more constrains
So what’s the sell?
Are you proud of your last sell?

EJB, XML, ESB, DSL, ...
How well have we delivered (compared to what we sold)?
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How can we sell with integrity?</td>
<td></td>
</tr>
<tr>
<td>Who is the market?</td>
<td></td>
</tr>
<tr>
<td>What is the offer?</td>
<td></td>
</tr>
<tr>
<td>What’s the plan?</td>
<td></td>
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</tbody>
</table>
Evidence is our best sales tool

(units sold, # users, lives saved, …)

Stop selling tools and technology
So what ... 

... are you going to do?
How close are you to CD?

What do you want to change?

Who will see the value and how?

What is going to stop you?