



From Solo Process Improvement to a Workflow Breakthrough

(You May Only Get One Shot at This)

**North Jersey SPIN
November, 2007**

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The Three Points for Today

- **Sometimes you need to “Go Solo” with Process Improvement**
 - *Your organization may not be “wired” for it*
- **Your project planning and process improvement activities can be spun to look irresistible rather than a “compliance thing”**
 - *Even modest efforts can seem like a quantum leap*
- **You will be better prepared for the Golden Opportunity to Optimize and Automate your organization’s workflow**
 - *The catch: You may only get one shot at this*

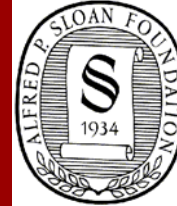
Agenda

- **Background of WebCampus – the Online Learning Unit at Stevens Institute of Technology**
- **Running the Shop**
 - *From Pioneer Mode to Settler Mode*
 - *Formalizing Core Processes*
 - **Process Charting and Metrics Reporting**
- **Workflow Breakthrough: WebCampus.edu 2.0**
 - *Project Vision, Requirements & Charter*
 - *Vendors, Procurement, and Discovery*
- **Running the Project**
 - *Design & Development*
 - *Testing & Rollout*

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Background of Stevens Institute of Technology

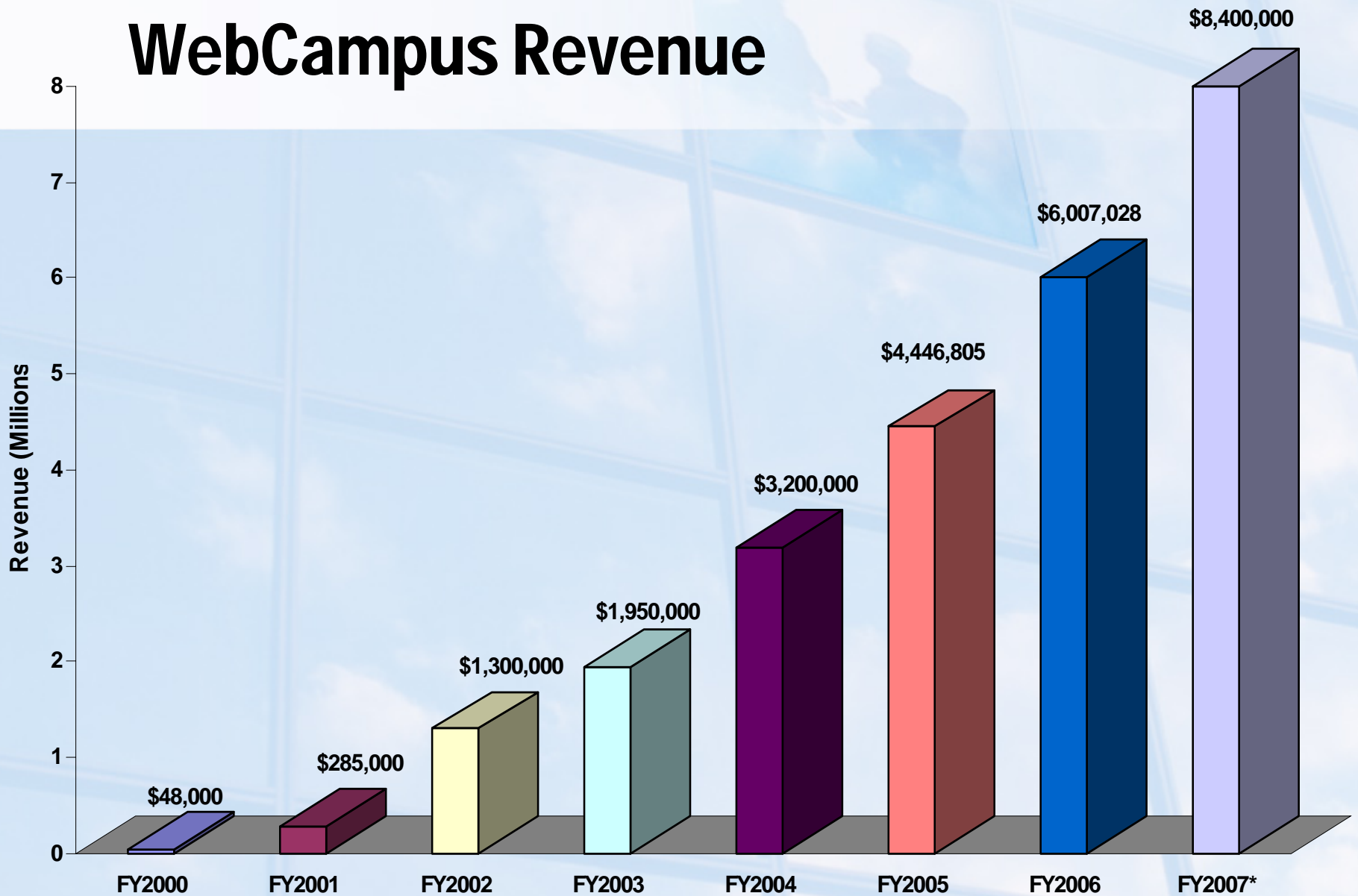


- **First Engineering School in the U.S. (1870)**
- **WebCampus Launched in 2000**
- **Faculty**
 - *Average of 25 years of industry experience*
- **Recent Accolades**
 - *USDLA 2006 Bronze Award for Best Online Program*
 - *USDLA 2005 21st Century Best Practices award*
 - *Sloan Consortium Award for “Best Online University”*
 - *Princeton Review Award for “Most Connected Campus”*
 - *Project Management Institute Certification*

About WebCampus at Stevens

- **Extensive portfolio of online engineering, management, and IT courses**
 - *16 Masters degrees*
 - *39 Graduate Certificates*
 - *MBA with 5 concentrations*
- **Instructor-led courses using Synchronous and Asynchronous technologies**
 - *WebCT, Interwise, TurnItIn, ACE*
- **Fall 2007 semester**
 - *~1500 graduate enrollments*
 - *~720 “way-off-campus” (45%)*
 - *Includes 80 enrollments outside US.*
 - *30 states and 10 countries represented*

WebCampus Revenue



* Projected

NJSPIN - November, 2007

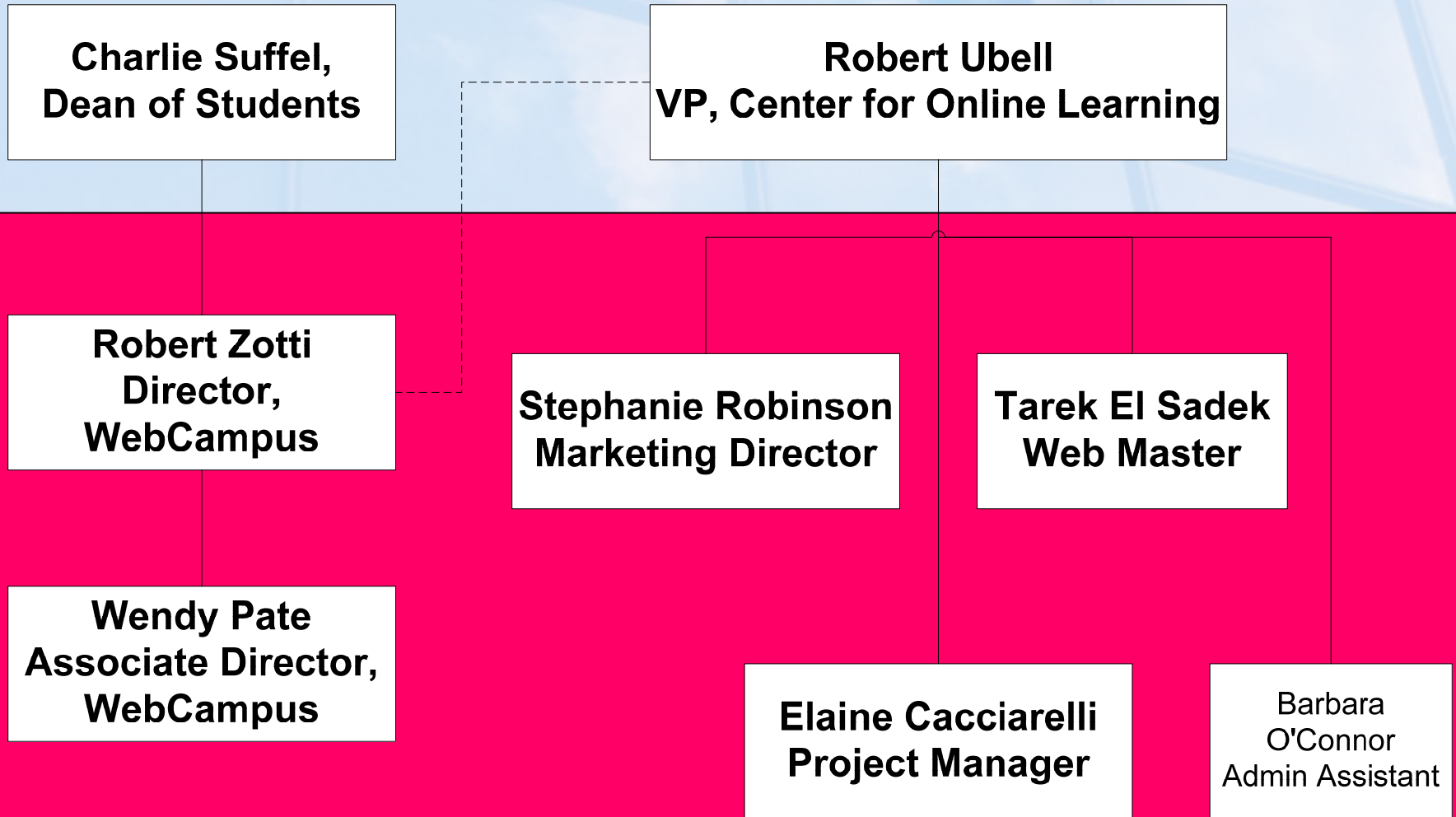


Running the Shop

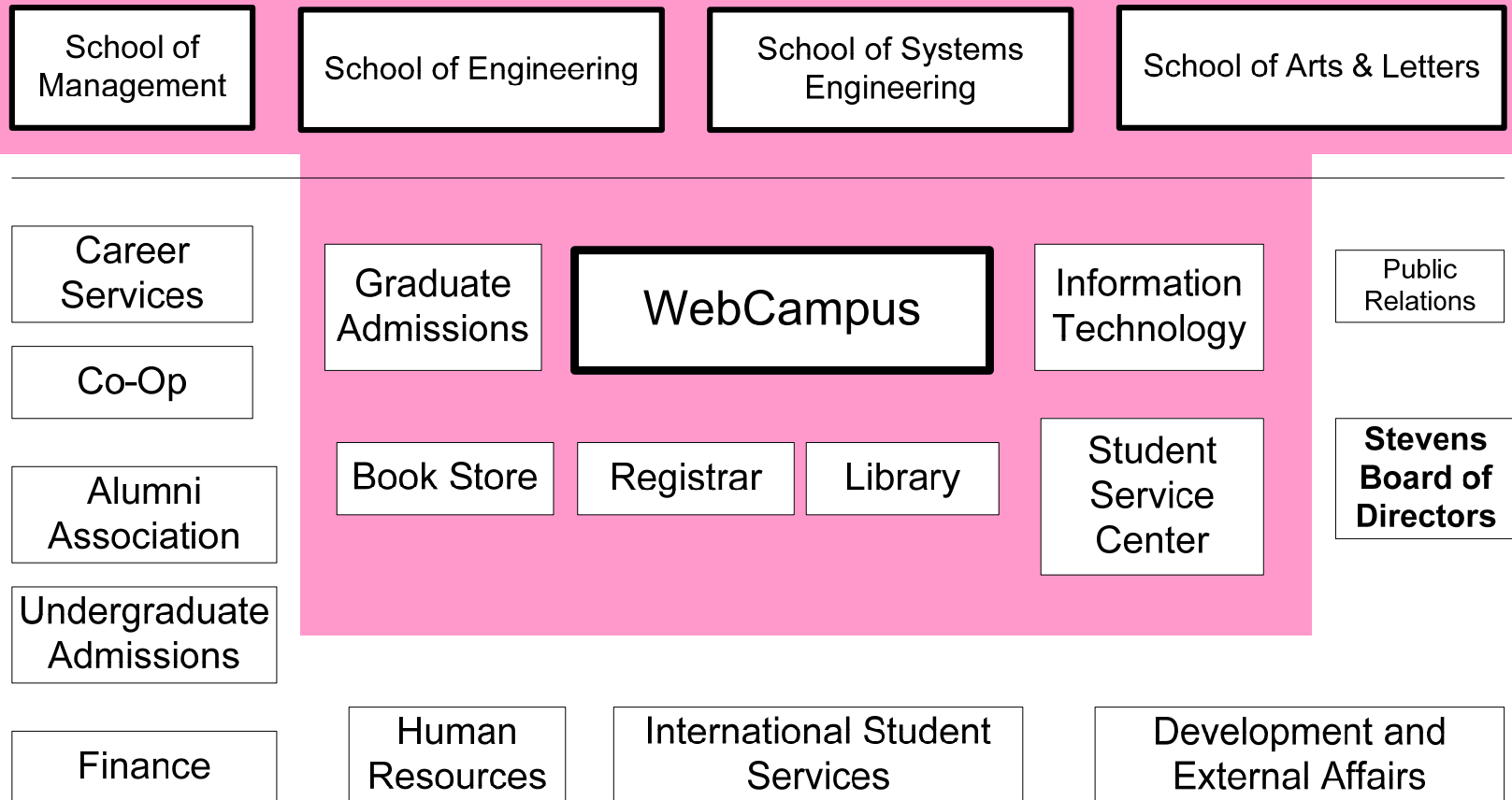
The Build-Up

- **Relatively new area**
 - ***Transition from Pioneer Mode to Settler Mode***
 - **Processes that worked well when managing 100 students inadequate for managing 1500**
- **Numerous technical and non-technical projects**
 - ***Fast-paced***
 - ***Short-handed***
- **Numerous dependencies on other areas**

WebCampus Staff



Areas most connected with Online Learning at Stevens



Flashback -- NJSPIN August 2005: Just Enough Process Improvement

The gradual introduction of project and process management techniques into an organization that is indifferent or hostile towards the CMM/CMMI

Applicable for small organizations that don't have the firepower for large CMM/CMMI implementations

The subversive element – prepare to throw away the rule book from time to time

Core Processes

- **Scheduling & Deploying Online Classes**
 - *Coordinating with academic departments*
 - Encouraging new program development as well as maintaining current programs.
 - *Training of Faculty/Instructional Design*
 - *Coordinating with IT, Registrar (SIS, WebCT)*
 - *Supporting additional technical infrastructure (Interwise, ACE...)*
- **Sales & Marketing**
 - *Maintaining the school websites*
 - *Building & managing relationships*
 - *Distributing materials (catalogs, postcards, emails...)*
- **Back Office Processing**
 - *Maintaining Contracts, Conducting Admin & Tech Support, Paying Royalties/Commissions, Gathering Student Feedback, etc*

Key Actions

- **Charting existing processes**
 - ***Good conversation starter***
 - Example: “Here’s what I know about registering for a class so far. Tell me what is missing from the picture.”
 - Effort began as a solo exercise
 - ***No more total reliance on “training by word of mouth”***
- **Fanatical recording of metrics**
 - ***Reports actively used for multiple tasks***
 - Example: enrollment & revenue summaries also used as course readiness matrices (a risk management exercise).
- **Promoting high levels of communication and collaboration between divisions**
 - ***Can still be a challenge***

Key Actions (continued)

- **Refining the WebCampus strategy and aligning it with overall goals of Stevens**
 - *Board of Director Meetings*
 - *Corporate Advisory Meetings*
- **Being an active leader in Online Learning Best Practices**
 - *Sloan Foundation Conferences*
 - *Chief Learning Officer Conferences*
 - *US Distance Learning Association Conferences*

Comparing Notes, “Talking Shop”

Some Good News, and Some Bad...

- **Over time, the WebCampus division built and maintained critical (and repeatable) processes, created and supported new infrastructure, and formed valuable internal and external relationships where none had existed before**
 - *Fundamental shift from Pioneer to Settler mode*
- **The effort was getting increasingly difficult with each semester.**
- **Workflow needed to improve in order to maintain a high level of performance and momentum**



***The Golden Opportunity for Process
Improvement and Workflow Breakthrough***

WebCampus.edu 2.0

The Old WebCampus WebSite

- **Originally Built in 1999-2000**
 - *Course, Program & Instructor Info*
 - *Admissions, Tuition Info*
 - *Online Student Resources*
- **Static HTML pages**
 - *Number of pages grew to over 250 over the years*
 - *Updates/additions more time consuming each semester*
 - *One person in charge of 99% of all site updates*
 - *Hard to keep up with new information – especially during “registration season”*
- **Design obsolete by 2005**

The New WebCampus Web Site

- **Business requirements list developed over the course of several months, discussed with potential web design vendors**
- **Procurement director shocked at the detail of the RFP and resulting proposals**
 - *Procurement Office made timely and valuable contributions to the project*
 - *Project kickoff in January 2007*
- **Project Mission/Vision, critical metrics, and process descriptions available from the first day.**
 - *Vendor was shocked at the volume and quality of information made available*
 - *Vendor was shocked by the fact that their client had a detailed usability test plan ready before*

Projected Life Expectancy of New Site

Ten Years

“We only have one shot at this.”

Project Documentation

- Charter
- Questionnaires
- Concept Document
- Project Schedules
- Business & System Requirements
- Site Map/Architecture
- Wireframes
- Mock-ups
- Test Plan
- Training Plan

Web Site Project Overview

- **Design overhaul – contemporary look & feel**
 - *New features for prospective and current students*
- **Integration of content management system**
 - *Vastly improved workflow for modifying content*
 - *Website updates no longer dependent on one person*
 - Content easily maintained (particularly schedules)
- **Attract more traffic by providing value-added services**
 - *Events calendars, integrated webinars, etc.*

Benefits of “Just Enough Process Improvement”

- **The use of just a few project & process management best practices goes a long way**
 - *Transition from a loosely structured operation to a more reliable structure*
 - *Getting cross-functional projects done*
 - People take notice of well thought-out projects. This helps when assistance is needed from other areas.
- **The angst associated with an organization-wide implementation of CMM/CMMI standards is totally absent**
 - *Yet you may still get others to follow your lead.*

Project Status to Date

- **Development nearly completed**
 - *Old content updated and migrated*
 - *New content being prepared*
 - Library staff developing special resources for online students
 - “WebCampus Radio” web conferences
- **Testing to begin shortly**
- **Rollout scheduled for November 16, 2007**
 - *Which brings us to...*

The first-ever continental hands-on SPIN project, where members can take part in an actual usability test aimed at a real-life workflow breakthrough!

Request for Usability Test Volunteers

- **Stevens is looking for a few good usability testers from the North Jersey SPIN to put its new WebCampus web site through its paces!**
- **Volunteers will receive a test package from the WebCampus Division with instructions for performing several user scenarios**
- **Usability tests should take about 45-60 minutes**
- **Volunteers will receive a \$20 Barnes & Noble gift card in appreciation of their time and effort**

To volunteer, contact...

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The new arms race

“From the moment a software product is released, the race against time and aging begins...As the pace of technology development increases, so too does the pace of technology obsolescence”

- Conrad, Plakosh, Lewis, 2003

“Modernizing Legacy Systems”

Manager: “Does anyone know how this whole system works?”

Programmer: “Yeah, but they’re all dead.”



Questions?



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