

## Software Engineering in Puerto Rico

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## Rock Solid Technologies


[www.rocksolid.com](http://www.rocksolid.com)

- Software development and implementation firm
- About 30 Colegiales
- Offices
  - San Juan
  - Austin, TX
  - St. Michael, Barbados




## What is software?

- Programs
- Documentation
- Manuals
- Help files
- Licenses



## Software engineering definition

- ... is concerned with software systems which are built by teams rather than individual programmers, uses engineering principles in the development of these systems, and is made up of both technical and non-technical aspects...

## Trade-offs Triangle



## Tradeoff Matrix

	Fixed	Chosen	Adjustable
Resources	✓		
Schedule		✓	
Features			✓

## What is software engineering – my version?

- Marketing
- Proposals
- Economic Analysis
  - ROI
  - TCO
- Sales
- Legal – Contracts
- Licensing
- Requirement Definition
- Prototype
- Risk Management
- Design
- Coding
- Testing
- More testing
- Training
- Implement
- On-site Support
- Help Desk
- Maintenance
- Enhancements
- Re-negotiate



## Well engineered software

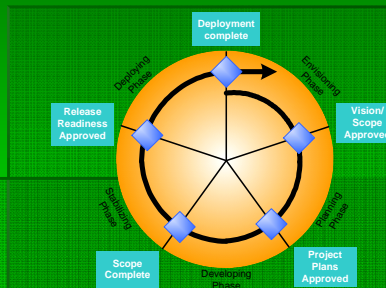
- Functional
- Maintainable
- Reliable
- Efficient
- Appropriate user interface
  - User-friendly
  - Expert-friendly

## Software Models

- Waterfall model
- Iterative waterfall model
- Prototyping
  - Works well for us in government
- Others



## MSF Process Model



## Software Engineering here?



## Or here?



## I prefer here!



## Puerto Rico Software Development Map

- Multiple local companies doing Software Development
  - Rock Solid – government and private sector
  - Softek, DevNet Systems, Invid
  - CRG, Infotech, Eventec, Nagnoi
  - Your Company – Become an entrepreneur!
- Multinationals
  - SAP
  - ORACLE
  - Microsoft
- Others
  - Insurance
  - Banking

## The key to good Software Engineering – Knowing what the customer wants!

 What the user asked for	 How the analyst saw it
 How the system was designed	 As the programmer wrote it
 What the user really wanted	 How it actually works

## How to improve your chances?

- Learn to write
  - Not just software code
  - Spanish and English
- Learn to listen
- Learn to speak
- Networking: Student and Business Orgs
- Focus on learning the business
- Become a well rounded professional
- Give back to your community, \$chool, etc.



## Action Items

- Create your profile at:
  - [www.s2bprogram.com](http://www.s2bprogram.com)
- Register in DreamSpark
  - Get free Microsoft software
- Assemble your team for the Imagine Cup
  - Poland
  - \$25k



## Q&A

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**Rock Solid**  
technologies