

## **PRODUCT DEVELOPMENT REVOLUTION**

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### **Summary of Research**

Dr. Raffo and his team have developed a breakthrough simulation tool that supports rapid performance modeling of *new product development* including *systems and software development*. Currently, there is no comparable technology available in the market. The tool addresses a wider variety of problems more quickly and at a dramatically lower cost than previously possible.

Rapid results are possible using the tool's unique approach to: (1) leveraging industry standard process templates and data; (2) utilizing a new architecture that enables models to be quickly created and modified (patent filed by PSU); and (3) utilizing a novel user interface that dramatically reduces the level of expertise to run and use these models. NASA and Bosch, GmbH are currently using beta products.

### **Potential for Commercialization and Job Creation**

The tool has been presented at various software conferences and has encountered great interest. It is estimated that there will be 10 clients in the first year of company existence.

Dr. Raffo plans to launch a company with PSU as an equity partner in 2005. One job has been created and more people will be hired when there is increasing business. The people who will be hired will have either business or IT background.

### **Total Research Funding**

Dr. Raffo and his team have generated \$1.3 million over a 10 year period. Funding sources include: the National Science Foundation (NSF), the Software Engineering Research Center (SERC), NASA, IBM, Tektronix, Motorola, Robert Bosch, GmbH, and Northrop-Grumman.

### **Student Involvement**

The tool is currently being used in a graduate level PSU class. The tool will also be used by Carnegie Mellon University's Software Engineering Institute (SEI) as part of their professional training classes for Capability Maturity Model Integrated (CMMI). Additionally, students are involved in developing the tool and building models.