What is Enterprise Engineering?

Civil Engineering emerged from the Military hundreds of years ago as the Civilian form of Military Engineering. Now Enterprise Engineering is emerging from the Military also but as the Enterprise sub-discipline of Systems Engineering.

Wikipedia: *Enterprise engineering is a subdiscipline of systems engineering, which applies the knowledge and methods of systems engineering to the design of businesses. The discipline examines each aspect of the enterprise, including business processes, information flows, and organizational structure.[1] Enterprise engineering may focus on the design of the enterprise as a whole, or on the design and integration of certain business components.* http://en.wikipedia.org/wiki/Enterprise_engineering

Why my sudden interest?

Despite running the IT Architecture SIG and then the Software Engineering and Architecture JTP for most of the past six years, my main interest has been gravitating back towards Systems Engineering, in which I gained a Master's degree quite some time ago. In particular, I am very interested in how Systems Engineering can be applied to complex, Enterprise wide systems

As you would certainly know, *Enterprise Architecture* today plays a critically important role in the study and improvement of Enterprise systems. However, the problem remains that it is still a difficult and complex task to take the information the Enterprise Architect has produced in relation to the target Enterprise Architecture, and begin the process of turning it into reality. I firmly believe, along with many others, that the discipline best suited to work with such complex systems and able to turn fairly complex target architectures into working systems, is *Systems Engineering*, in particular the sub-discipline of *Enterprise Engineering*.

There are many parallels between the Building Construction Industry and the Software Construction Industry (the job titles of architect and engineer just for a start!). For instance:

1. When a *Building Architect* has produced the target Building Architecture for a new office building, *the Building (Civil) Engineer* is the person to determine how the target Building Architecture is to be realised.

2. When *a Software Architect* has produced the target Software Architecture for a new software application, the *Software Engineer* is the person to determine how the target Software Architecture is to be realised.

And so it is that, when an *Enterprise Architect* has produced the plans for a new target Enterprise Architecture, *the Enterprise (Systems) Engineer* is the person who can best determine how the target Enterprise Architecture is to be realised.

What is the objective?

Now this of course may turn out to be not much more than glib statements with little connection to reality, but I think it would be a great area to explore, particularly by way of presentations by knowledgeable people in the area throughout this year. I have therefore renamed the *Software Engineering and Architecture Joint Technical Program* (SEA-JTP), for this year at least, to the *Enterprise and Systems Engineering* Joint Technical Program (EASE-JTP), in order to explore these parallels and possibilities.

What was the Software Engineering and Architecture JTP?

To obtain further information on this group, and to view information on the past six years of presentations, please go to http://sa.acs.org.au/it_arch/index.php/Main_Page .

To see the presentation details for the SEA-JTP for last year, please go to http://sa.acs.org.au/it_arch/index.php/Presentations_-_2011 .

What is my background?

Experience

> Thirty-three years in Software Engineering and Architecture, mainly in contracting and consulting roles.

Academic Qualifications

- Bachelor of Engineering (Civil and Systems)
- Graduate Diploma in Computing Studies
- Master of Engineering Science (Systems Engineering)

Professional and Technical Society Memberships

- Member (Senior), Australian Computer Society
- Member, Institution of Engineers Australia
- Member, Systems Engineering Society of Australia

Committee and Board Memberships

- ITEE & Electrical Joint Branch Committee (EA, South Australia)
- National Committee on Software Engineering (EA, National)
- Computer Systems and Software Engineering Board (ACS, National)

Recent Publications

Putting Engineering Back Into Software, Information Age, pp 60-61, January 2012. (Co-authored with Peter Hitchiner, Chair ITEE Board, Engineers Australia.)