Panel

The Software Reuse Business

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Panelists
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Purpose and Scope:

Software reuse as a technical topic has been around for over 25 years. The purpose of this panel is to begin to define the software reuse business. Many people and organizations make money from software reuse. Organizations in the reuse business run the gamut from big corporations like AT&T, Hewlett-Packard, and Microsoft to one person consulting companies. The US government, and to a lesser degree European governments, continue to play a major role in shaping the reuse business by providing large sums for research, consulting, tools and so on. Whether this has been good or bad for the reuse business as a whole is the subject of debate.

Wayne Lim will discuss how efforts at reuse as a business started early and were not always successful. He will show trends that encourage and enable reuse and will discuss the types of organizations involved in reuse products and services. John Favaro will discuss the need for better financial modeling of reuse that is meaningful to the mainstream corporate world. Gunter Koch will discuss the evolution of the reuse business from a European perspective, and Chuck Lillie will discuss the impact of the Internet on the reuse business.

Reuse Products and Services

A basic question about the reuse business is "what are its products and services, and who buys those products and services?" Following is a partial list.

- Research on reuse is mostly done by academic and industrial researchers, and is primarily funded by large corporations, such as AT&T, IBM, Toshiba, etc. and by government agencies like NASA, NSF, and the DoD. Much of the commercial sector research is done in house, and thus does not contribute directly to the open marketplace.

- Consulting services are provided by individuals and companies, and are primarily purchased by corporations and government organizations.

- Books and Reports on reuse are produced primarily by researchers and consultants. They are purchased by individuals, libraries, and universities for use in further research and as texts.

- Education and training on reuse is done by universities, by consultants, and by internal personnel.

- Search services - provide customers a way of finding usable assets.

- Legal Services - are needed when reusable assets are used across organizational boundaries, or when contractual issues are involved.
• **Components** -- There is a large and growing market for components in languages such as C++, Visual Basic, Ada. This market will probably expand to include other lifecycle objects and reusable processes.

• **Tools** -- The tools market for systematic reuse is just emerging. It includes reuse library tools like Inquisix, application generators and generator support tools such as Stage, and domain analysis tools such as DARE.

**How large is the reuse business now? How is it likely to grow?**

Given all these products and services, how large is the reuse market today? While there is no definitive answer, there are some estimates.

Chuck Lillie’s estimates are based on a reuse market analysis Asset did in 1992. He states that "based on this data the market today should be between 50M and 150M. Based on that same survey, five years from now it could be 2B, if the market takes the high road, i.e., proper investments are made in the mid 1990s. Otherwise it will tail off and flatten out around 100M."

John Favaro estimates the market as 5 million now, 40 million in 5 years, 100 million in ten years. He feels that Internet will drive the market growth. He says "it’s only getting started now, despite the Internet’s popularity. In 5 years the mechanisms will be in place, both technically and commercially, and there should be a real business. In 10 years it should be business as usual."

The role of the Internet and electronic commerce in the reuse business is an interesting question. Chuck Lillie’s organization, Asset, is now trying to make a commercial venture of an Internet based electronic commerce service.