The Impact Project:
Tracing the Source of Technology Back to its Origins

Panelists:

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Alex Wolf

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Where Does Our Technology Come From?

- **Hard question to answer**

- **Facile answers can be misleading**

- **Important to be careful about this**
  - **"Those who refuse to study history are condemned to relive it"**

Facile answers can be misleading

- **It comes from:**
  - **Sun, Microsoft, IBM, Rational, the web, …….**

- **Yes, but!**
  - **Where did they get it from?**
  - **This is more complicated, more interesting, (maybe) more important**

Technology Food Chain Links

- **Commercializers**
- **Researchers**
- **Tech Transfer agents**
- **Early adopters**
- **Students with new degrees**
- **New Hires**
- **ETC.**

What are the natures of their contributions?

Why should we care?

- **Some technology isn't great**
  - **Why are we stuck with it?**
  - **Why isn't it better?**
- **Some technology seems useful**
  - **How can we get more of same?**
  - **How can we speed its appearance?**
  - **Are there institutions that need to be**
    - **Strengthened**
    - **Demolished**

The Impact Project: Tracing the Source(s) of Technology to its Origins

- **Focus is on Software Technology**

- **Start with technologies in widespread use**

- **Trace back to how they came into widespread use**

- **Document and analyze**
  - **What facilitates/inhibits technology flow?**
  - **How to make more good things happen more easily and more often**

Impact Project Structure

- **Software community volunteer effort**
- **Modest sponsorship by:**
  - **ACM Sigsoft, NSF, IEE**
- **Collection of reports on key areas**
- **Appearing 2002 onwards**

Report Topics

- **Configuration Management**
- **Reviews and Walkthroughs**
- **Design Methods and Tools**
- **Programming Environments**
- **Modern Programming Languages**
- **Cost and Economic Modeling**
- **Testing and Evaluation**
- **….. And more…..**

Structure of This Panel

- **Example Impact report summaries**
  - **CM (Alex Wolf)**
  - **Modern PLs (Barbara Ryder)**
- **Additional Perspectives on all this**
  - **Dave Thomas and Dick Gabriel**
    - **"…share a concern about a creeping software amnesia or Alzheimer's…[in]... young computer professionals causing them to miss/ignore some great ideas which [preceded] them."**
    - **Different experiences and views on tech transfer**
- **Audience Discussion**