Business ideas for Process Optimization: FLS-NEXT
- The next generation’s manufacturing control tool -
Fraunhofer society:
- non profit organization
- 12,700 ‘applied scientists’ focused on development
- 1 bio € revenue, 58 institutes

Core competencies of IITB business unit:
- Real time applications for production monitoring, control and maintenance support
- Manufacturing Execution Systems and consulting services
- Optimization algorithms for manufacturing scheduling and sequencing
- Detailed know-how of manufacturing and assembly processes in discrete manufacturing
FLS-NEXT has just been awarded with an innovation prize 2007 for Web 2.0 application.
Manufacturing control means

- advanced planning and scheduling in real time
- fast reactions to unexpected events on the shopfloor
Today: batch scheduling, e.g. at night

Shop floor → Factory data acquisition → Daily schedule → Batch scheduler

Operator
Tomorrow: real time scheduling, based on events from the shop floor

Shop floor

real time factory data

modified schedule

operator
System architecture

**Use Case 1**

**Use Case 2**
Features:
• Web based graphical user interface (GUI) with drag & drop via standard web browser
• no installation on clients except the browser
• ISA 95 compliant, no interface programming to ERP etc.
• processing of production events in real-time
• continuous improvement of production schedule instead of generating a new one

Software basis:
• FLS-NEXT runs on any platform (Windows, Linux, …)
• server: JAVA; GUI: Adobe flash
• source code completely owned by IITB
Perspectives for further developments

- Access to server via mobile web clients, e.g. PDA
- Tests with real manufacturing data
Requirements concerning the Transfer Business:

• We are looking for: sales partners or licensees; sales partners/licensees may also be software companies that offer 1\textsuperscript{st} and 2\textsuperscript{nd} level support; 3\textsuperscript{rd} level support and software development by IITB

• We want to achieve: licensing

• We need app. T€ 150 for tests, final completion and know-how transfer to licensee