Intellution: A Study In Innovation
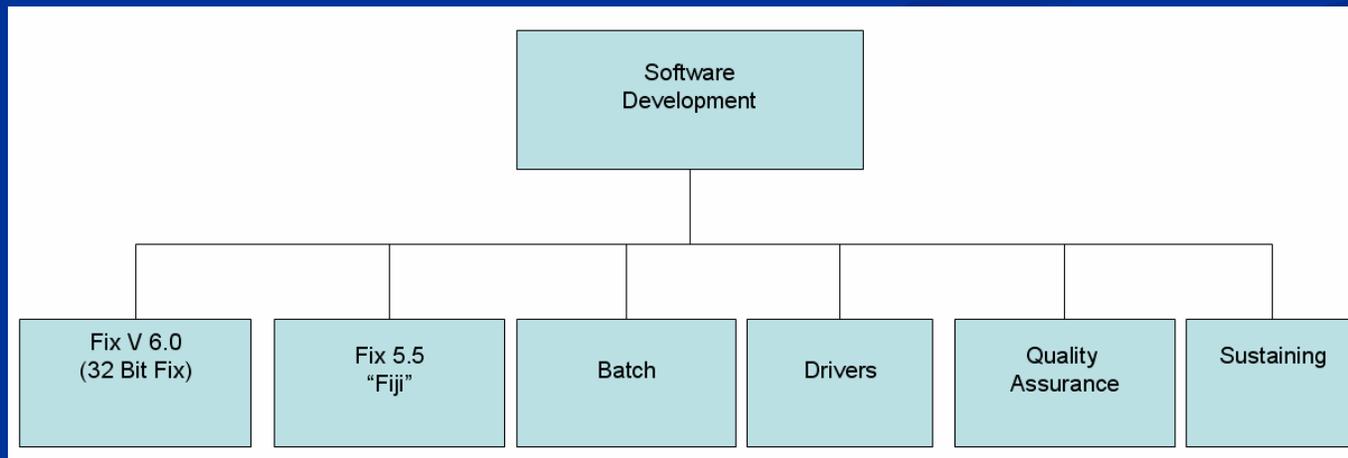
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Discussion Points

- The Case

- Contributing to Innovation

- The Risks to Innovation

- What Happened

Intellution

- Fifteen year old Software Company (in 1995)
- Privately owned but recently sold to large company
- Product
  - Fix ™- First PC based SCADA system
  - Disruptive to Industry

Intellution

- **Personnel**
  - Most Engineers have tenure < 5 years
  - Senior engineers are leaving the company
  - Yet Engineering staff is growing!
- **Organization**

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                    +------------------+
                    |     Software     |
                    |   Development    |
                    +------------------+
                             |
   +---------+---------+---------+---------+---------+
   |         |         |         |         |         |
+-------+ +-------+ +-------+ +-------+ +--------+ +----------+
|Fix V  | |Fix 5.5| | Batch | |Drivers| |Quality | |Sustaining|
|6.0    | | "Fiji"| |       | |       | |Assurance| |          |
|(32 Bit| |       | |       | |       | |        | |          |
| Fix)  | |       | |       | |       | |        | |          |
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Contributing to Innovation

- Young Staff
- Single Geographic Location
- Large Open Office Space
- New engineers assigned to bug-fix
  - Forces them to reverse-engineer product
  - Forces them to seek out those with more experience
- Innovation is incremental
  - Applying new Technology to existing architecture
  - Why Can Intellution get away with this?

Risks to Innovation

- All engineers are dedicated
    - To projects
    - To Bug-fixing
- New technology depends on new hires
- Existing product knowledge depends on old-timers
- Value of Innovation dependent on external technology changes

What Happened

- Internet Boom
    - Couldn't hire new engineers
        (No stock options)
- Effort to implement technology yielded less value
    - Time to implement product increased from 1 year to 3 years
- Could not expand into other markets
- Intellution got sold again!