How Agile Works

- Agile requirements implemented in slices vs. layers
- User needs with higher business value are done first
☞ - Reduces cost & risk while increasing business success

Agile   ## Traditional

Agile
- Faster
- Early ROI
- Lower Costs
- Fewer Defects
- Manageable Risk
- Better Performance
- Smaller Attack Surface

Stack (layers):
| 1 | | 2 3 |
GUI
APIs
Applications
Middleware
Operating System
Computer
Network

Traditional
- Late
- No Value
- Cost Overruns
- Very Poor Quality
- Uncontrollable Risk
- Slowest Performance
- More Security Incidents

Seven Wastes
1. Rework
2. Motion
3. Waiting
4. Inventory
5. Transportation
6. Overprocessing
7. Overproduction

Agile box:
- JIT, Just-enough architecture
- Early, in-process system V&V
- Fast continuous improvement
- Scalable to systems of systems
- Maximizes successful outcomes

MINIMIZES ➡

⬅ **MAXIMIZES**

Traditional box:
- Myth of perfect architecture
- Late big-bang integration tests
- Year long improvement cycles
- Breaks down on large projects
- Undermines business success

Shore, J. (2011). Evolutionary design illustrated. *Norwegian Developers Conference, Oslo, Norway.*