



Conservis

Applying Best Practices from Manufacturing to Farm Information Management



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Information Management for the Farm

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- Background
- Problem Definition
- Printing Manufacturing Technology Evolution
- Technology Barriers/Enablers
- Manufacturing Lessons Learned
- Information Management Best Practices
- The REAL Problem (Opportunity)

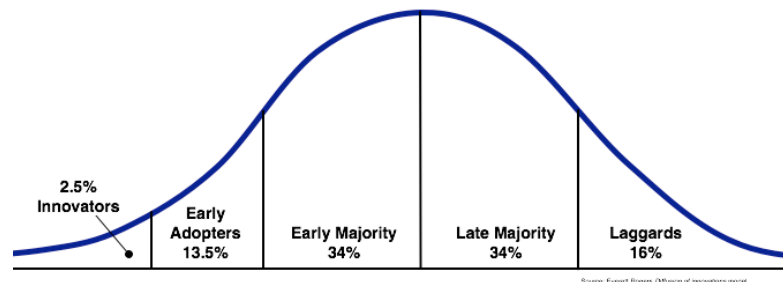


It is NOT a Technology Problem

We are going to talk a lot today about technology because that is what people like to do, but...



- **Heavily Craft-Reliant and Manual Operations**
 - ✓ Hand carved, prepared- letter by letter (500 years)
 - ✓ Camera, Stripping, Platemaking (40 years)
- **Computer-to... (25 years)**
 - ✓ Photographic Paper
 - ✓ Film
 - ✓ Plate
 - ✓ Press
- **Print On Demand (10 years) (e.g. Vistaprint)**





- ❑ Innovation was isolated to a few large players
- ❑ To remain competitive, capital costs continued to rise at a rate faster than market prices
- ❑ No industry standard for file formats or file exchange
- ❑ Data silos existed throughout the operations
- ❑ A lot of data was being generated, but very little information was provided
- ❑ Workforce was ill-prepared to assimilate new technology effectively-→ lack of qualified workers



✔ Computer technology evolved

Mainframe -> Mini's -> PC's -> PC/Server -> Hosting -> Cloud

✔ New (disruptive) technologies introduced by upstarts

✔ Adobe created PDF - file standardization

✔ Apple created DTP (Desktop Publishing)

✔ Cross-Platform Workflow Management Systems

✔ ERP (Enterprise Resource Planning) solutions



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MANUFACTURING LESSONS LEARNED

- ✓ Accurate and current manufacturing data is essential
- ✓ Creating a seamless integration between data silos/ systems is ideal
- ✓ Managing by the numbers works
- ✓ Management discipline is key to applying the numbers in a meaningful way
- ✓ Typical improvement realized by using ERP: 5- 8%
 - ROE, ROI, Scrap, Re-work, Productivity



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MANUFACTURING PROCESS

Time- & Materials-Consuming Analog Workflow



Fast & Efficient Digital Workflow



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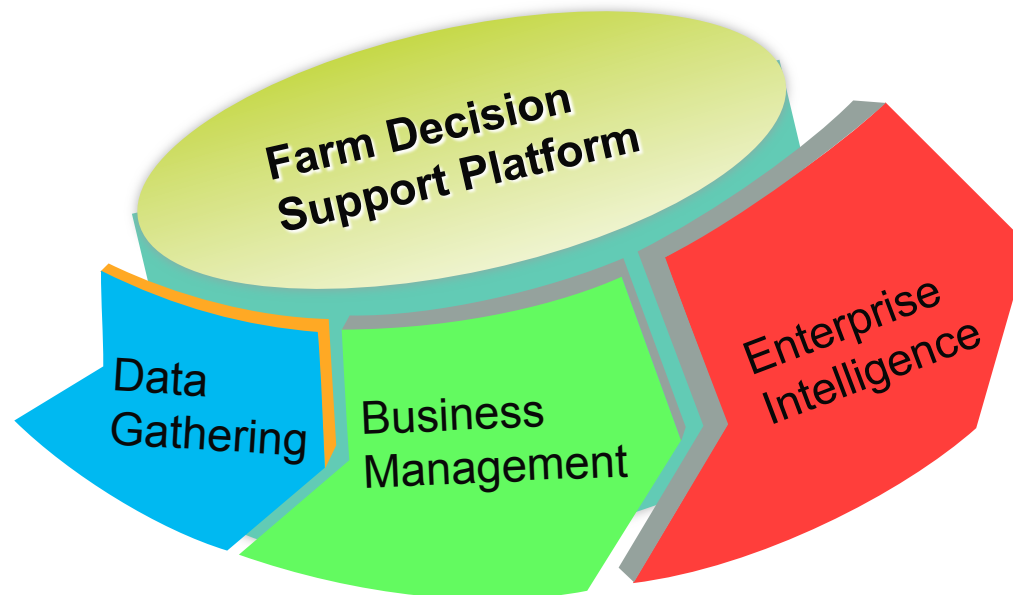
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INFORMATION MANAGEMENT

Enterprise Class
Web-enabled
On-demand



Activity Accounting → ERP

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- Weather
- Pests
- Cost of Inputs
- Skilled labor force
- Market Prices
- Land/Rental Prices
- Succession Planning
- Capital Costs
- Adoption of New Technology – Changing Habits



“Ok, you are providing some cool technology, but what you are really doing is changing habits.”



“70% of the potential improvements available through effective adoption of new technology is unrealized because of resistance to change.”



- **Leave it to your son to figure out, or...**

- ☑ If you have one, or...

- **Take the 3-phased approach**

- ☑ Cue: realization that you want to change

- ☑ Routine: replace old with new habits

- ☑ Rewards: reinforce behavior



What will your business look like in 3-5 years?

- ✓ What business tools will you need?
- ✓ What new processes will you need to develop?
- ✓ How you will better manage your risks?
- ✓ Who will you trust to help you?



- It is NOT a technology problem
- Adopt Best Practices -> collect good data
- Create Best Habits ->manage using data
- Create Best Profits ->make adjustments
- Reduce Risk -> fully implement with trusted partners & repeat



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THANK YOU



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