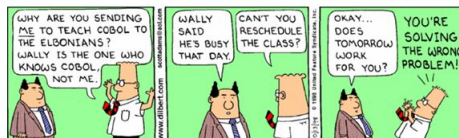




Understanding the real problem

Lecture Objectives:

- 1) Explain why capturing the essence of the problem is important to rabbit projects
- 2) Critique a requirement as to whether it captures the essence of the problem or a solution to a problem.
- 3) Explain the concept of a swimlane
- 4) Explain how removing swimlanes can help to capture the essence of the problem.
- 5) Explain the risk of not innovating
- 6) Define systemic thinking
- 7) Define value demand and failure demand
- 8) Explain how to run an innovation workshop



Solving the right problem

Problem: *Dibert doesn't know Cobol. Wally, who knows Cobol, is busy on the desired day.*

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Which is a requirement?

- The system shall backup all data to an external site.
- ⇒ *Specific solution specific method.*
- The system shall eliminate the potential for the loss of data.
- !!! *Doesn't force a solution - Really describes the problem*

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NETFLIX



Case Study

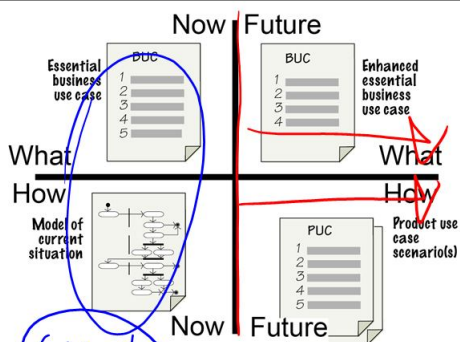
- 1997 CEO Gets a late fee for a VHS video of Apollo 13
- CEO decided to try mailing DVD's.
 - Rental by mail
- Added subscription base
 - 1999 launch of free trial
 - 80% became paid customers
- 2008 Internet streaming
 - Accounts for 83% of North American Internet Traffic

Essence of the problem: *How to allow customers to choose their movie entertainment.*

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The Brown Cow Model



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Critique the following statement.

- The following requirement has been drafted as part of a payment system for the Washington DC Metro system. It helps the user to pay the correct fair for their ticket.
 - R1: The traveler shall touch the destination on a route map on a screen.

touch screen. Imposing a solution. The essence: The product shall determine the travelers destination.

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Abstraction

- Latin Word
 - Abs \leftarrow
 - Away from \leftarrow *To draw*
 - Trahere
 - To draw \leftarrow *away*
- Therefore:
 - Abstraction is drawing away from the physical implementation to the essential characteristics



- What is a swimlane?

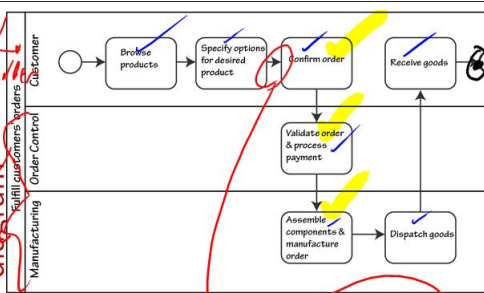
\Rightarrow Separates the roles for various actions.

Swimlanes



Improving an activity diagram

Stakeholders

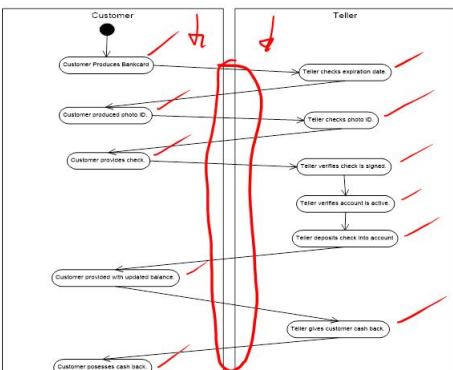


Improved Activity Diagram

New step
Make customer happy



What is wrong with this sequence (Or, what is the essence of the problem)?

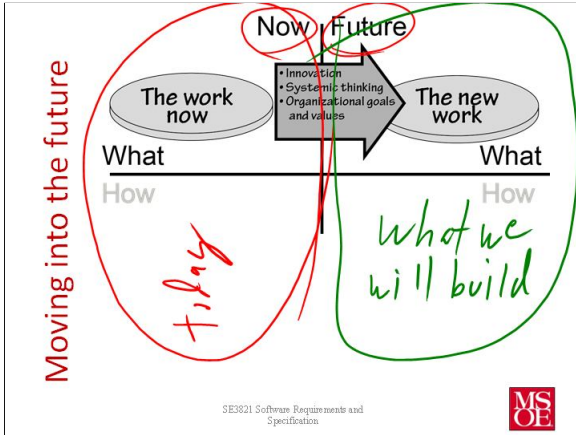


Solving the right problem

- In the Sony BMG CD copy prevention scandal (October 2005), Sony BMG produced a Van Zant music CD that employed a copy protection scheme that covertly installed a rootkit on any Windows PC that was used to play it. Their intent was to hide the copy protection mechanism to make it harder to circumvent.
- Unfortunately, the rootkit inadvertently opened a security hole resulting in a wave of successful trojan horse attacks on the computers of those who had innocently played the CD.[28]

Problem: How to prevent the piracy of music.





To give or not to give

- What happens if we give stakeholders exactly what they want in an incremental improvement?
 - ⇒ *Complain.*
 - ⇒ *Recreate the current system only*

Missed opportunity for superior improvement that may be a significant step forward for the business.

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What are people willing to spend extra money on?

- Pleasure
- Prestige
- Convenience

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Systemic Thinking

- Think about the work, the whole problem, from end to end.
 - The system is the aggregation of many parts
- For example
 - The banking statement view shall show deposits to an account in green and withdraws in red.

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Value Demand and Failure Demand

- Value Demand
 - Customers make requests or order whatever you have built or sell
- Failure Demand
 - Customers make complains or ask for repairs to that which they have been sold

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MS OE

Innovation Workshops

1. Set the scope for innovation
2. Partition the scope using business events to allow the participants to concentrate on the end to end business process
3. Plan the workshop
4. Record everything that happens in the workshop
5. Feed back the results to the participants
6. Incubate

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MS OE