Drivers of Advances in Mechanized Timber Harvesting

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Plenty of fantastic ideas – but what drives the desire to change?!
Timber harvesting is a simple process

Environment

Input

Trees

Conversion process

Machines

Labor

Output

Roundwood

Rules
Drivers for changes

New technology
To improve current operations

New products
To change operations to (also) produce new products

New rules
To make the same products in a different way
New technology

To improve current operations

Internal need to improve efficiency (costs, labor, available technology)

Trying to apply general technological advances; technology push

Automation, actuators, sensors, big data, UAVs
New technology
Do the same things, but do it better
New products

To change operations to (also) produce new products

External stimuli (market opportunities) motivate changes to improve value creation

Trying to adapt operations to additional products; market pull

biorefineries, ecosystem services, bioenergy assortments
New products

Change to do new products
New rules
To make the same products in a different way

External stimuli (imposed regulations) force changes, or to shut down operations

Trying to adapt operations to (anticipated) rule changes; market pull

multiple uses of forests, work safety, soil damage
New rules
Make the same products in a different way
Change will happen, and should be assisted!

New technology
_is it better then the current option? ”Might change”_

New products
_Will it make the new (and old) product profitably? ”Should change”_

New rules
_Will it keep forestry in business? ”Must change”_
Thank you!


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