Wood Apps: Sawmill - Optimization of raw material supply in Sweden

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Prerequisites for the Realization of the Transnational Communication Platform WoodApps

Results

- large spread of user's knowledge
- information gaps through the wood value chain
- modified or lost information on its way from sender to final receiver
- new solutions must be easy to use and cost effective

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Conclusion

In order to make systems work along the WVC,

- co-operation to develop standard solutions is important to secure consistency of information.
- experience and knowledge about IT-solutions differ between the respondents,
- implementation of novelties must be done carefully.

Integrated use of product data for improved wood raw material utilization

- Result from case-studies on information handling in the WVC
- Derive requirements on a communication and data exchange in the customer-deliverer interaction

Future communication tools in wood value chain

A future communication tool for quality and product data should offer the possibility of:

- Visualize quality
- Generating yield data concerning dimensions, volumes and qualities
- Calculate product prices/cost
- See how changes affect the system = simulation

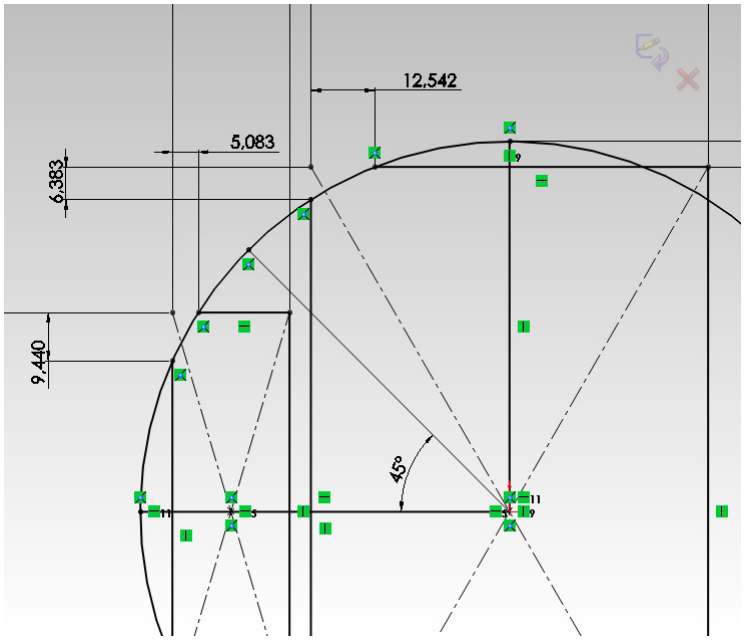
Organisation - implementation and education - identified as crucial for success

A tool for saw optimisation of small diameter logs

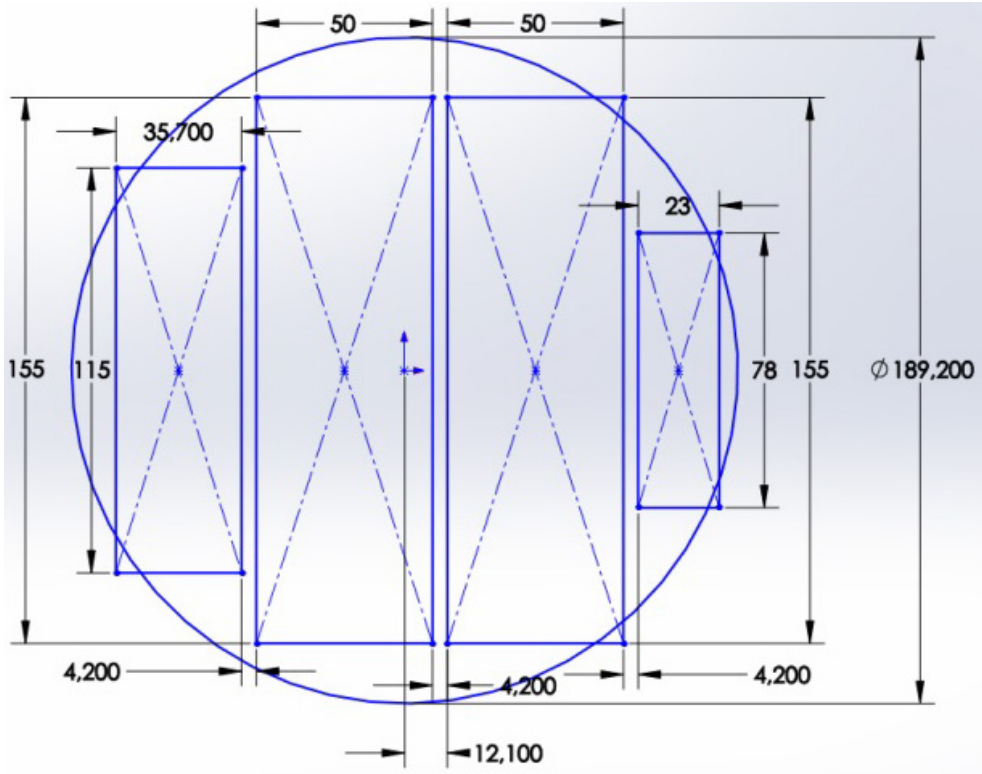
Examplifies a developed tool for a sawmill company

- Individual requirements
- Raw material characterisation
- WoodApps may be used to collect useful data to use for planning production and "learning"

Requirements on optimisation tool



Optimisation of wane



Effect of displacement of the mid point

Karlsson and Sturesson 2013

Functionalities

- Excel based
- ”Theoretical logs” – real products
- Possible to analyse effects of

- new products
- rounded edges
- different sawing patterns
- specific products output
- calculate production value in various ways

Interrelations with WoodApps

- We need to answer the following questions

- How data may be used from woodapps?
- How can model interact with woodapps?
- How can the model be used in woodapps?
- How can model be visualised?

What to do?

- Based on the plattform description study how companies want a raw material to product tool to be designed and function
- Based on previous finding and the plattform present a generalised re-worked tool to be possible to implement in woodApps.