



Forest market data automation, Case Finland

- TOS meeting 30.5.2023
- Joint working party 1.6.2023

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Content

- What is MTK?
- What is API and its benefits?
- How project was started and continued?
- Wood market situation in Finland?
- Conclusion

What is MTK?

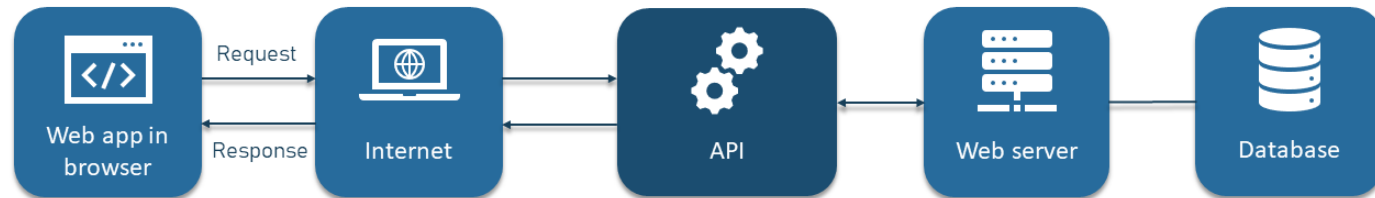
- Central Union of Agricultural Producers and Forest Owners MTK
- MTK is an interest organization representing farmers, forest owners and rural entrepreneurs in Finland (278 000 members)
- MTK improves members' economic and social welfare
- MTK promotes sustainable and economical usage and handling of rural area's capital
- In 2017 MTK celebrated it's 100 years of anniversary
- Forest management associations (56 individual)



What is API and its benefits?

- “API stands for Application Programming Interface. It is a set of rules and protocols that allows different software applications to communicate and interact with each other. APIs define the methods, data formats, and conventions that developers should follow when integrating their applications with a particular service or platform. ...” Source: chatGPT, <https://chat.openai.com/>
- **Old way: Excels + powerpoints**
- **New way: API (Application Programming Interface)**
- **Benefits:**
 - Time saving
 - Mistakes away
 - Updating
 - Security
 - Sharing
 - Comparison
 - Visualization
 - Innovation

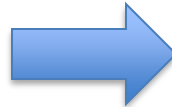
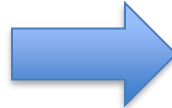
HOW API WORKS



How project was started and continued?

- Starting point

- Almost all data material downloaded and filled in excels (more than 50 individual excels with several sheets)
 - >Clarify your main aim!
- One data automation done for weekly wood market information in public website (ca. 2015), but all data automation tools with little use <https://www.mtk.fi/metsateollisuuden-puukauppatilastot>
- What benefits?
 - How to show data so that it helps forest management decisions
 - Market price data comparison very important for forest owners
 - How to make sustainable forest management and wood market knowhow better
 - Maximize customer value added
 - Maximize knowhow support for experts (exact regional data)
 - Minimize mistakes and time wasted



- What was needed?

- Data

- Public
- Market
- Own

- Tools

- Data source (API connection)
- Data server and connection technologies to the data warehouse
- Data analysis (For example; Tableau)
- Intranet, internet or app. for publishing

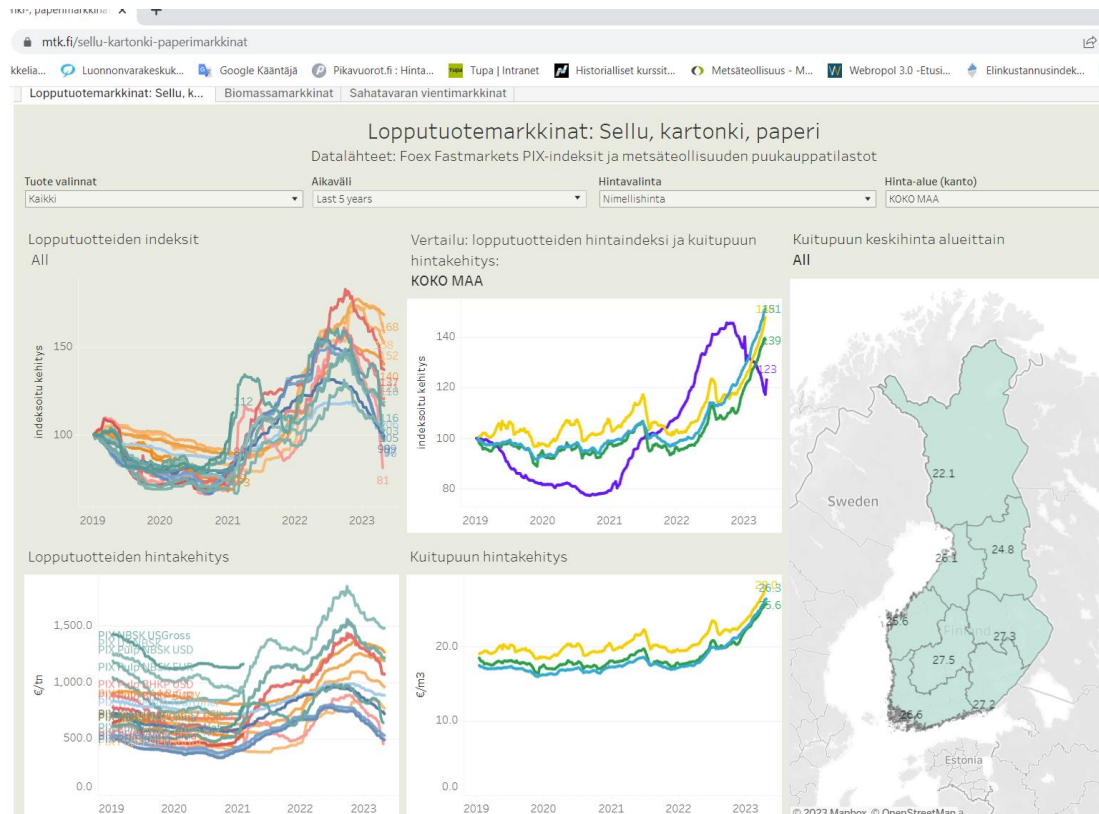
- Knowhow

- Basic forest data knowhow
- Data handling
- Visualization
- Service design (Customer friendliness and customer value added)

...to be continued...

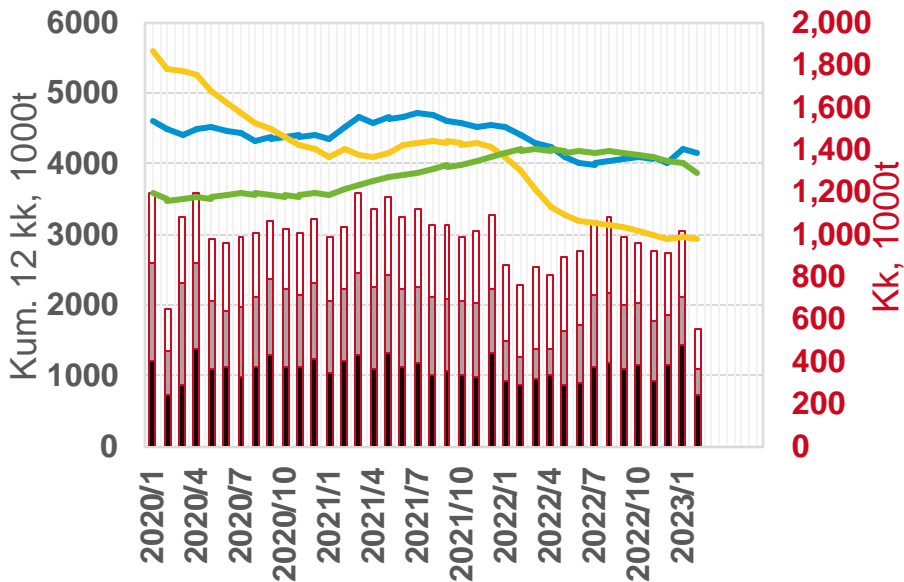
- PoC (Proof of Concept) (2022) and project (2023)
 - Two data operators were tested with PoC -> Offers from the service
 - Selected one continued from the PoC -> 2 ready concepts in the member´s intranet 2022 <https://www.mtk.fi/puumarkkinat>
 - Own internal project plan to continue data automation (12/2022) -> 2 ready concepts allready in the member´s intranet by 5/2023
- Next step
 - Continuous improvement process of early concepts...
 - **International data of wood market in Europe** (allready in excels but get rid of excels!)
 - Developing GIS of supply and demand (All information exists in Finland and some of the global wood user sites / investment plans exists based on consult database)
 - Nature values for the part of wood market and data automation tools! One website exists (owned by MTK): <https://www.luontoarvot.fi/>
 - Innovation together with the main internet wood market service (owned by MTK and finnish forest industry): <https://www.kuutio.fi/>
 - Developing our own forest owner service database: <https://www.omametsa.mhy.fi/>

Forest industry price indexes (fast markets, FOEX PIX weekly data) vs. regional wood market prices in Finland (weekly data)



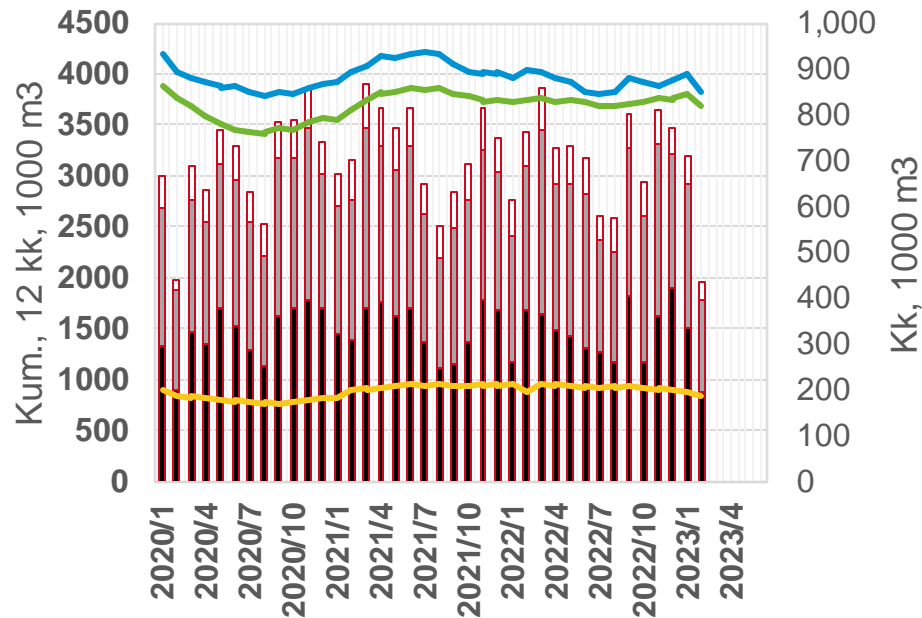
Wood market situation in Finland

Chemical wood industry



- Sellu, kk
- Paperi, kk
- Kartonki, kk
- Sellu, 12 kk
- Paperi, 12 kk
- Kartonki, 12 kk

Mechanical wood industry

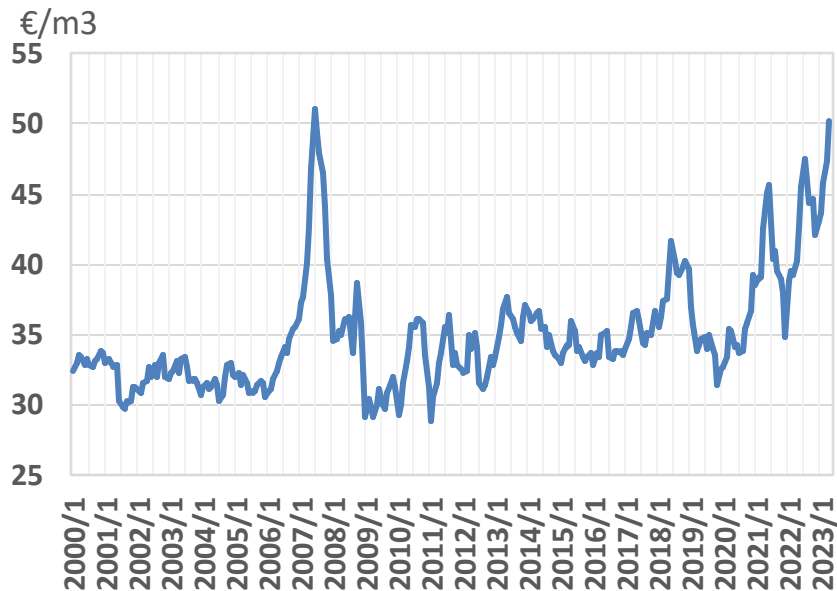
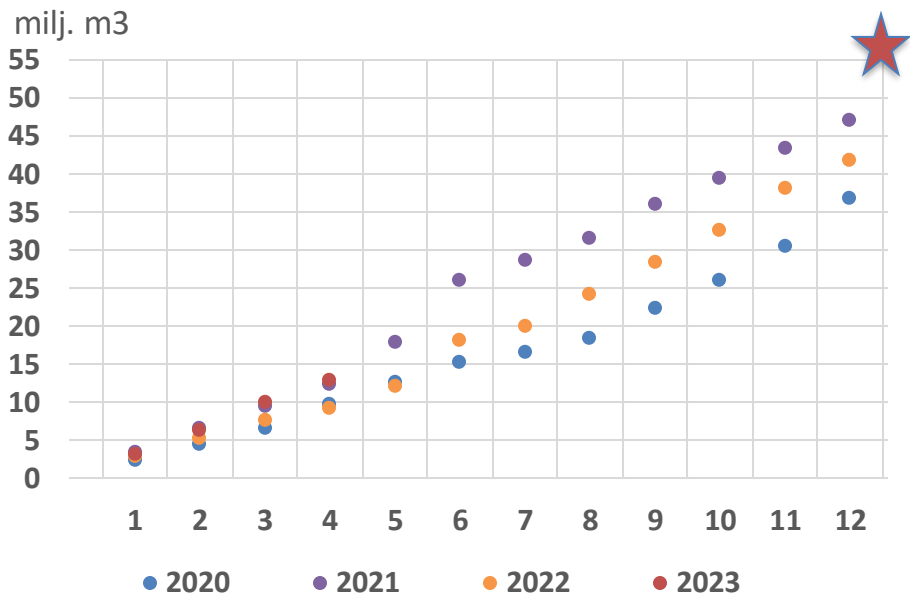


- Mäntysahatavara, kk
- Vaneri, kk
- Kuusisahatavara, kk
- Mäntysahatavara, 12 kk
- Kuusisahatavara, 12 kk
- Vaneri, 12 kk

Private wood selling and average price

20% more than 5year average

25% growth in year



Reasons: 1. Russian wood import stopped (10M.m3)
2. New wood use investments 3. Energy crisis

Conclusion

- MTK is the forest owners´ s defence union
- API benefits to get rid of excels to provide more detailed data to make better decisions
 - Our aim is to add customer´ s value
- Data automation project has been a success!
- Wood market has been in turbolences several years (covid/russian invasion/economy)
- UN / Forest / World benefits for better data ->

Clarify your main aim!