



MANAGEMENT OF
LATVIAN TIMBER
MEASUREMENT AND
ACCOUNTING

Digitalisation in Estonian timber supply chain

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Estonian Forest and Wood Industries Association

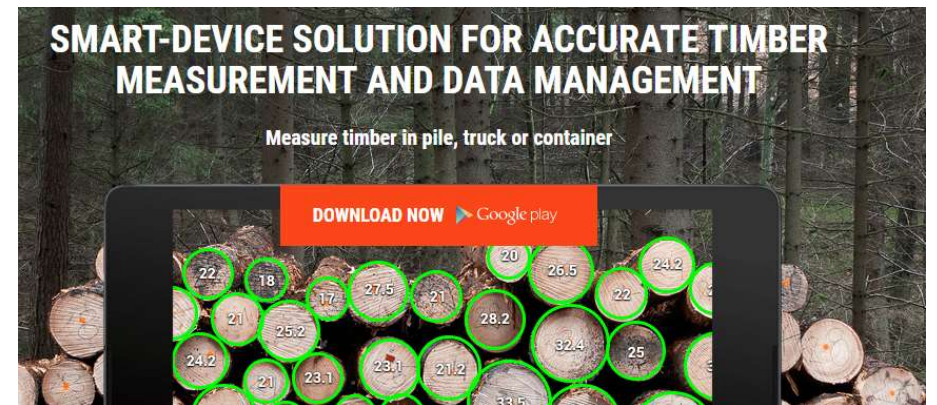
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COMPETITIVENESS
OF THE FOREST
SECTOR*

Digital supply chain



Timbeter app

- Timbeter is a smart-device tool for timber measurement
- Timbeter determines the number of logs, volume and diameter of each log
- Easy to use by taking a photo with your smart-device
- Data can be shared with other parties
- Data is safely stored in a cloud with easy access



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📅 Result 2017-07-06 12-17-23

Storage: Sawmill

Type: Incoming

Shipment number: 1031403

🌲 Tree species: Pine

📦 Volume: 15.32m³

11.2

42.6

Av diameter: 23.91cm

Log count: 86

Log length: 3.7m

Reference size: 1m

Formula: Cylindrical



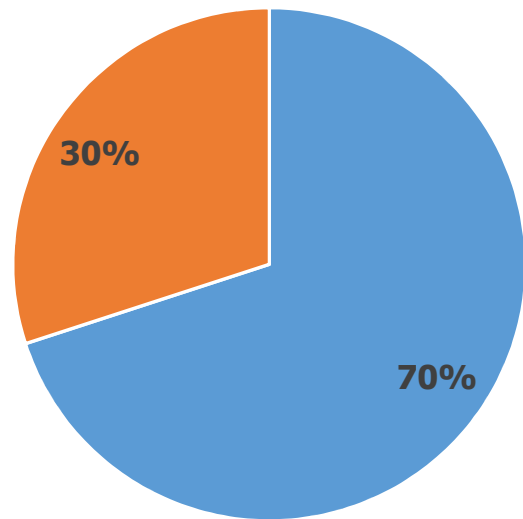
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ELVIS system and e-waybills

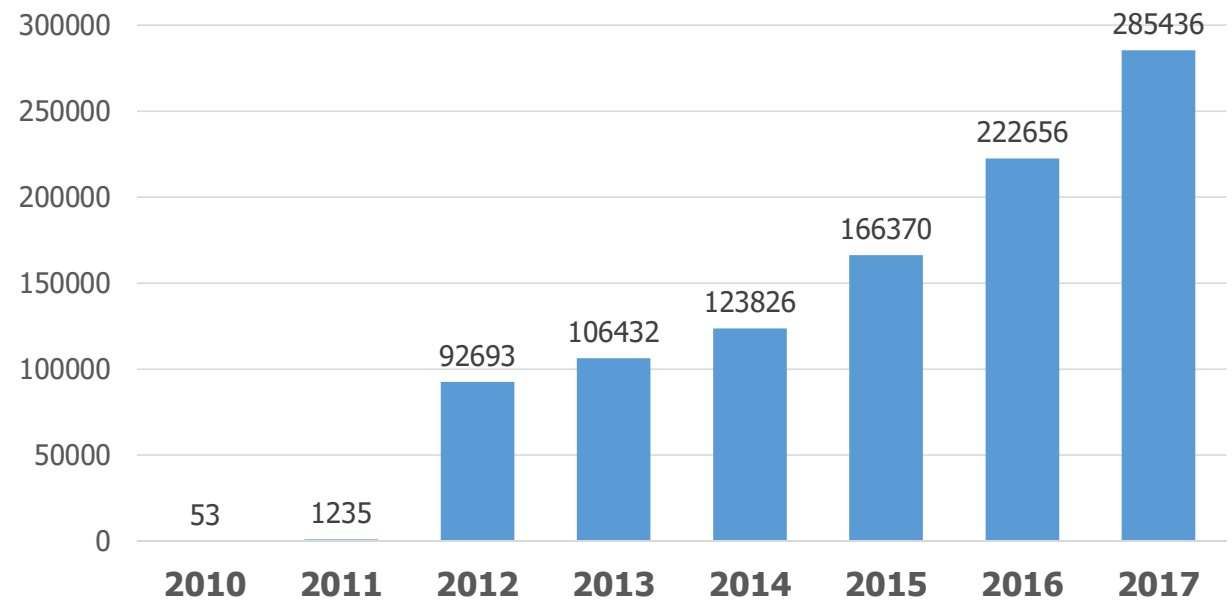
- ELVIS is a electronic waybill system
- ELVIS offers the opportunity to replace the compulsory paper waybill with electronic document for the purpose of transporting timber
- Benefits of ELVIS and e-waybill
 - Paperless document management
 - Faster information exchange between parties
 - Better information quality
 - Safe, secure and transparent
 - Accepted by control organs and law
 - 48 and 52 t cargos allowed in Estonia only with e-waybill

The proportion of e-waybills



■ E-waybills ■ Paper waybills

Number of e-waybills



MobiCarnet and CMR

MobiCarnet

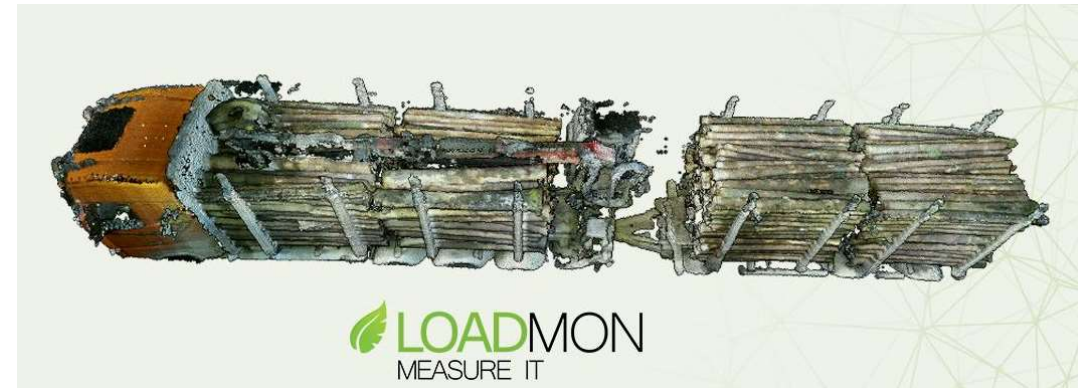
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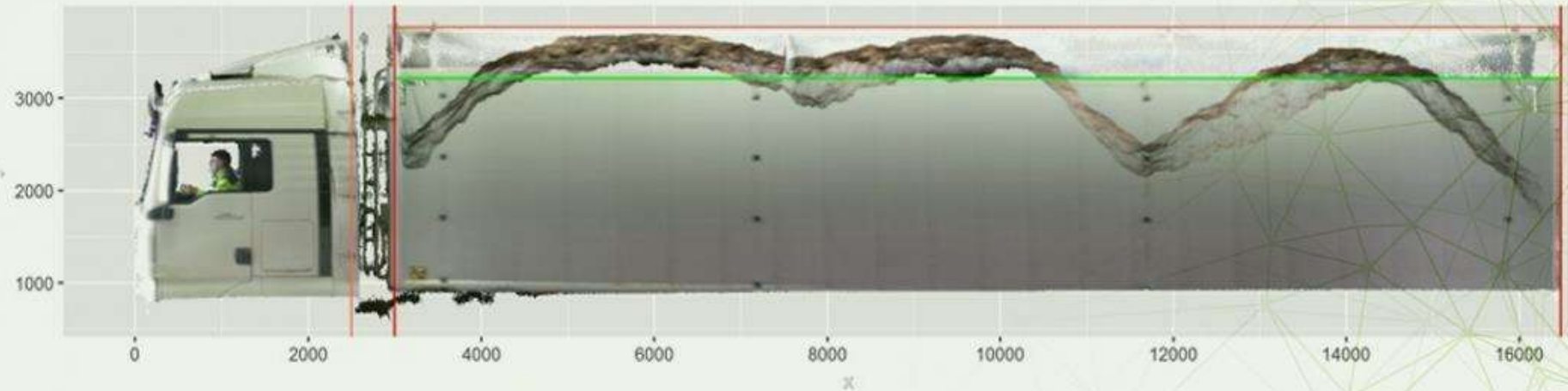
a platform for managing road transport documents

[Watch full video ▶](#)

LoadMon measuring system

- LoadMon is a fully automatic, fast and accurate load measurement solution
- Log and bulk loads are measured while lorry drives through gates equipped with sensors that scan a 3D image of the load
- LoadMon measures log pack height, width, length and diameter. Also detects large cavities and errors in a load





 **LOADMON**
MEASURE IT

Measured: 05.03.2018 13:06:48

3D

Load id: VP1108594

Factory: Helme

Sender company: Valga Puu OÜ

Delivery company: Valga Puu OÜ

Transport company: Valga Puu OÜ

Sent load size: 34

Truck number: 963TLZ

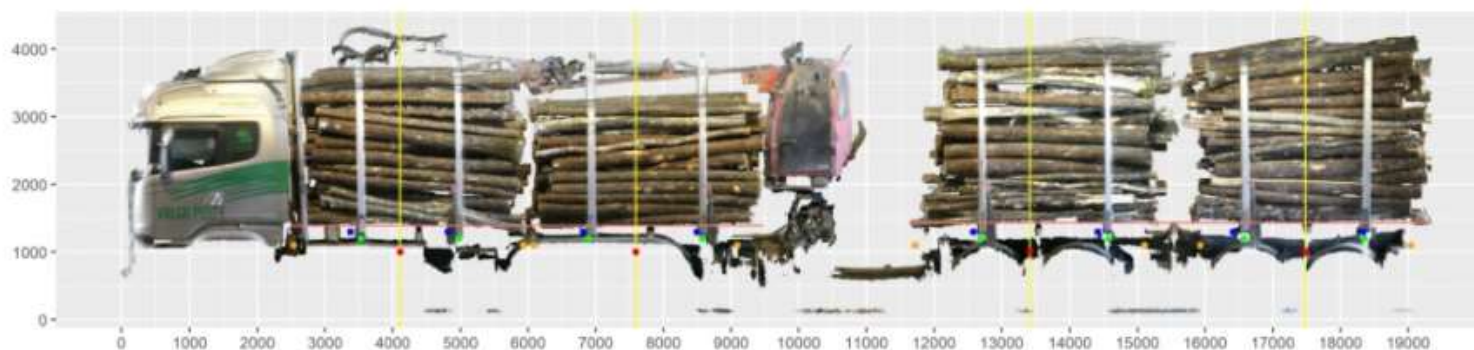
Trailer number: 715YJR

Trailer type: Full trailer

Load type: Logs

Volume (Bruto): 66.67 m³

Volume (Neto): 35.01 tm



PACK 1

Sunken crane	<input type="checkbox"/>
Width	2.36m
Height	2.3 m
Length	3m
Diameter	0.15m
Too skewed	-1
Cavity	-1
Linear offset	0
Sortiment	LPKT - Lehtpuuküttepuit
Coefficient	51% (53)
Volume (Bruto)	16.28 m ³
Volume (Neto)	8.3 tm

PACK 2

Sunken crane	<input type="checkbox"/>
Width	2.31m
Height	1.83 m
Length	3m
Diameter	0.16m
Too skewed	-1
Cavity	0
Linear offset	0
Sortiment	LPKT - Lehtpuuküttepuit
Coefficient	53% (54)
Volume (Bruto)	12.68 m ³
Volume (Neto)	6.72 tm

PACK 3

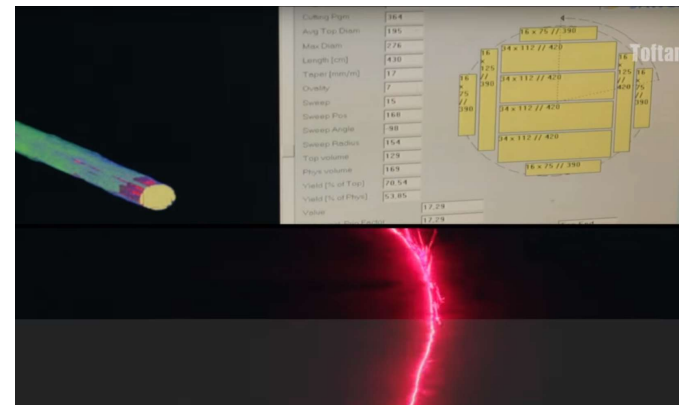
Sunken crane	<input type="checkbox"/>
Width	2.38m
Height	2.61 m
Length	3m
Diameter	0.16m
Too skewed	-1
Cavity	-1
Linear offset	0
Sortiment	LPKT - Lehtpuuküttepuit
Coefficient	52% (54)
Volume (Bruto)	18.64 m ³
Volume (Neto)	9.69 tm

PACK 4

Sunken crane	<input type="checkbox"/>
Width	2.39m
Height	2.66 m
Length	3m
Diameter	0.18m
Too skewed	-1
Cavity	-1
Linear offset	0
Sortiment	LPKT - Lehtpuuküttepuit
Coefficient	54% (56)
Volume (Bruto)	19.07 m ³
Volume (Neto)	10.3 tm

Toftan AS innovative solutions

- On fast log sorting line (up to 50 logs per minute) every log is scanned and measured separately in a 3D log scanner with an accuracy of 1 mm
- On sawing line 3D scanners help to find the best sawing position of every log
- IT solutions make it possible to follow and direct the route of each log by computer through to the final product



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Thank you!

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