

Digitalization in food Industry – what to keep in mind

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Salvest – 75 years of food production history



Established as state owned in 1946

100% Estonian equity since 1992

Owner Mr. Veljo Ipits

Number of employees ~180

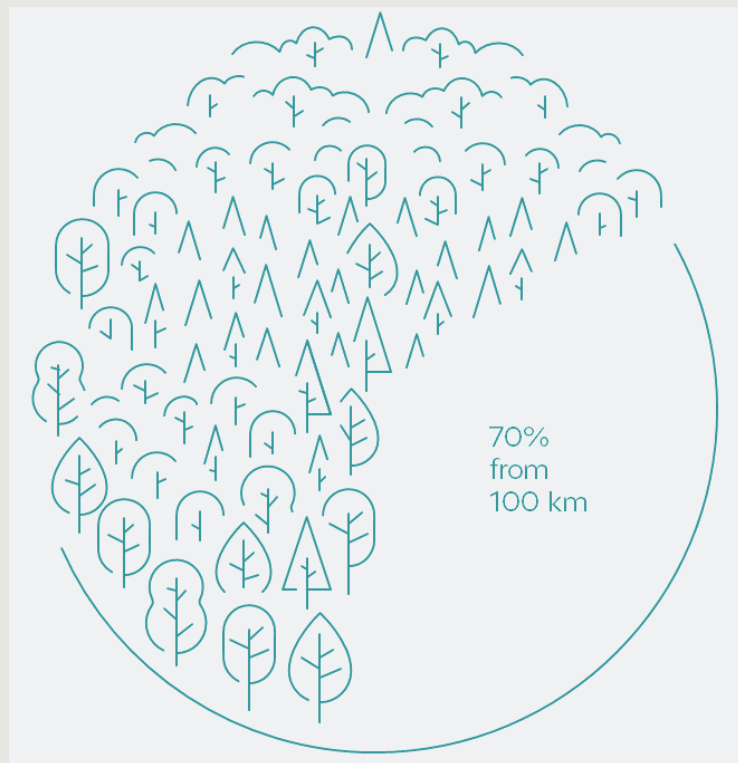
Turnover (2020) 20 M €



As local as possible



70% of raw materials grow within a range of 100 km



The task – status april 2017

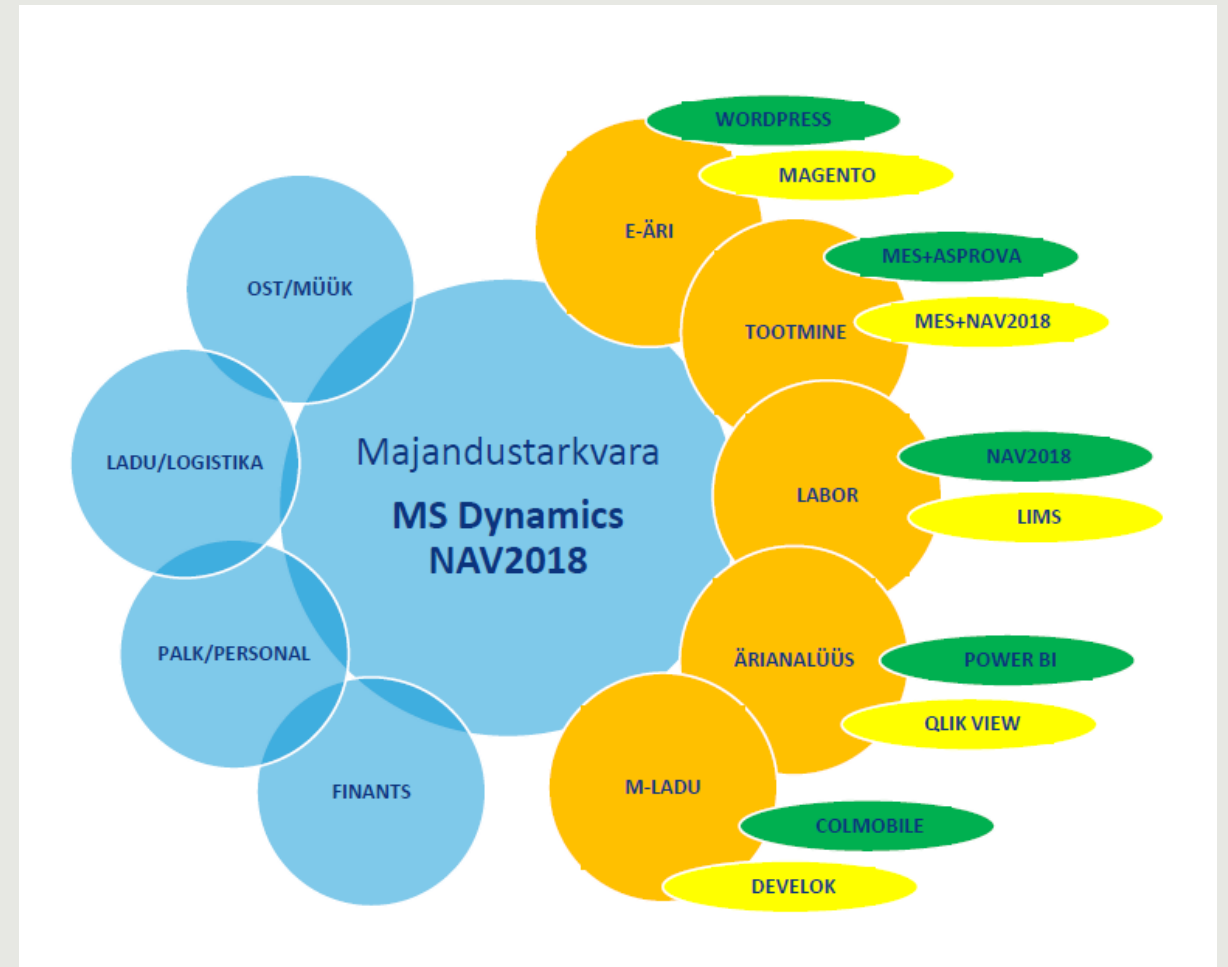


- Unsupported and outdated ERP solution (AXA 4.0)
- Outdated IT infra both hardware and software
- Many processes purely human controlled and decided
- Many blind spots in planning
- Difficult routes to reporting
- High business risks due to ERP or infra breakdowns

The process and the vision



- IT audit with Leego Hansson
- Bid process to find the partner
- Mapping the **AS-IS** and **TO-BE**
- Lot of internal communication and selling
- Decision on future partner(s)
- Agreement of timeline and process with partner
- **ON THE SHELF DOES NOT FIT** – about 60% of solutions have to custom made



The complexity



- **Food Industry governing laws and regulations**
 - Traceability in every process + ingredient
 - Mandatory analysis + quality requirements
- **Complexity of recipes and technologies**
 - 1 recipe = 10+ ingredients = 2 – 5 processes + 8 – 15 subprocesses
 - 1 ingredient = different patches/suppliers= quality analysis = 5+ recipes
- **Seasonality, OEE and losses**
 - Vegetable seasonality + planning
 - Multiuse of equipment/different (packaging) lines
 - Outcome dependant on raw material quality and skillfulness of employees

R1002: Kodune seljanka Date: 25.05.21

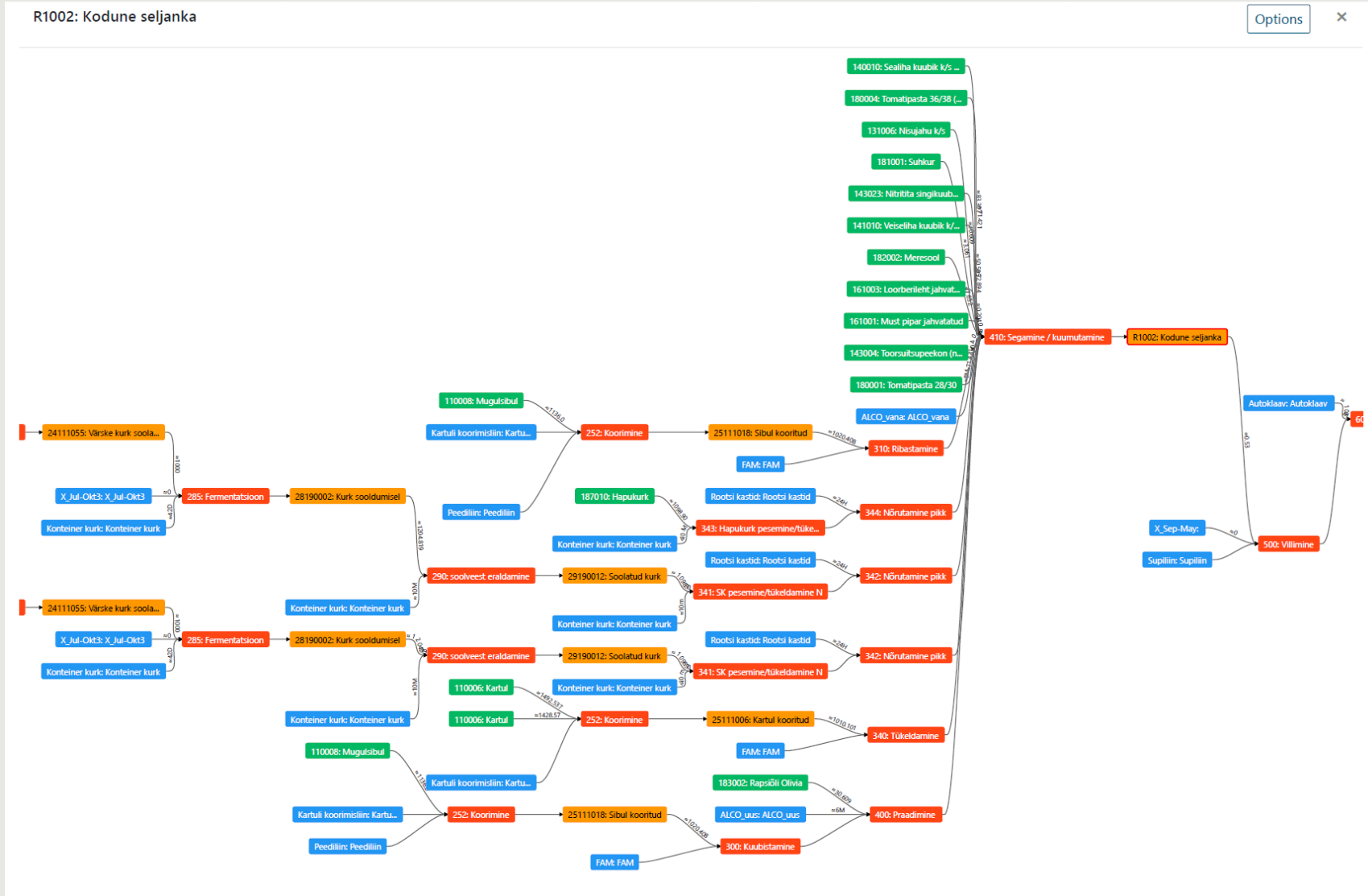
Process	Code	Item	Prev Nr	Kogus	Protsessi kaod
300 Kuubistamine	Mat01	25111018: Sibul kooritud	-1	1000	KP13: Tükeldamine x
310 Ribastamine	Mat01	25111018: Sibul kooritud	-1	1000	KP13: Tükeldamine x
340 Tükeldamine	Mat01	25111006: Kartul kooritud	-1	1000	KP13: Tükeldamine x
341 SK pesemine/tükeldamine N	Mat01	29190012: Soolatud kurk	-1	999,999	KP07: Inspekteerimine, pesemine, peenestamine x
342 Nõrutamine pikk	Mat01	30190002: Soolatud kurk pestud/tükeldatud	341	999,999	KP23: Nõrutamine x
343 Hapukurk pesemine/tükeldamine N	Mat01	187010: Hapukurk	-1	999,999	KP07: Inspekteerimine, pesemine, peenestamine x
344 Nõrutamine pikk	Mat01	30187010: Hapukurk pestud/tükeldatud	343	999,999	KP23: Nõrutamine x
400 Praadimine	Mat01	34111008: Sibul tükeldatud	300	189,99	KP24: Praadimine x KP10: Segamine, kuumutamine x KP12: Täitmine x
400 Praadimine	Mat02	183002: Rapsõli Oliiva	-1	30	KP10: Segamine, kuumutamine x KP12: Täitmine x
410 Segamine / kuumutamine	Mat01	R1002-400	400		
410 Segamine / kuumutamine	Mat02	34111008-2i Sibul tükeldatud	310	166,492	KP12: Täitmine x KP10: Segamine, kuumutamine x KP24: Praadimine x
410 Segamine / kuumutamine	Mat03	140010: Sealiha kuubik k/s 14x14x14 mm	-1	80	KP01: Defrosterimine x KP12: Täitmine x
410 Segamine /	Mat04	141010: Veiselha kuubik k/s 14x14x14 mm	-1	70	KP01: Defrosterimine x

The results



Nr	Process	Operation Specs	Instruction Code	Resource/Item	Prev Nr	Setup	Production	Valid Condition	Valid From/To	Instruction Specs	Operation Split Size Max	Yield rate
300	Kuubistamine	ProcessSpec: Kuubik 10*10 SeguSplit: Yes	Mat01	25111018: Sibul kooritud	-1		1020.4081632653061			Tükeldamine: 2		1000
			M	1	FAM						86.1544	
			Out	34111008: Sibul tükeldatud								
310	Riibastamine	ProcessSpec: Riiba 6*6 SeguSplit: Yes	Mat01	25111018: Sibul kooritud	-1		1020.4081632653061			Tükeldamine: 2		1000
			M	1	FAM						70.892	
			Out	34111008-2: Sibul tükeldatud								
340	Tükeldamine	ProcessSpec: Kuubik 10*10 SeguSplit: Yes	Mat01	25111006: Kartul kooritud	-1		1010.1010101010102			Tükeldamine: 1		1000
			M	1	FAM						44.8932	
			Out	34111006: Kartul tükeldatud								
341	SK pesemine/tükeldamine N		Mat01	29190012: Soolatud kurk	-1		1098.90			Inspekteerimine, pesemine, peenestamine: 9		1000
			M	1	Konteiner kurk							
			Out01	30190002: Soolatud kurk pestud/tükeldatud								
342	Nõrutamine plikk		Mat01	30190002: Soolatud kurk pestud/tükeldatud	341		1162.79			Nõrutamine: 14		1000
			M	1	Rootsi kastid						61.2176	
			Out01	35190002: Soolatud kurk nõrutatud								
343	Hapukurk pesemine/tükeldamine N		Mat01	187010: Hapukurk	-1		1098.90			Inspekteerimine, pesemine, peenestamine: 9		1000
			M	1	Konteiner kurk							
			Out01	30187010: Hapukurk pestud/tükeldatud								
344	Nõrutamine plikk		Mat01	30187010: Hapukurk pestud/tükeldatud	343		1162.79			Nõrutamine: 14		1000
			M	1	Rootsi kastid						15.304	
			Out01	35187010: Hapukurk nõrutatud								
400	Praadimine	SeguTemp: 120-125C	Mat01	34111008: Sibul tükeldatud	300		215.386			AllikaNumber: 1 Allikas: Käru Jrk: 1 Segamine, kuumutamine: 1 Täitmine: 1 Praadimine: 10 Osakond: T		1000
			Mat02	183002: Rapsiõli Olivia	-1		30.609			AllikaNumber: 1 Allikas: Püsto Jrk: 2		1000

The results



The results



09:55



Autoklaavid

Eeltöötlus

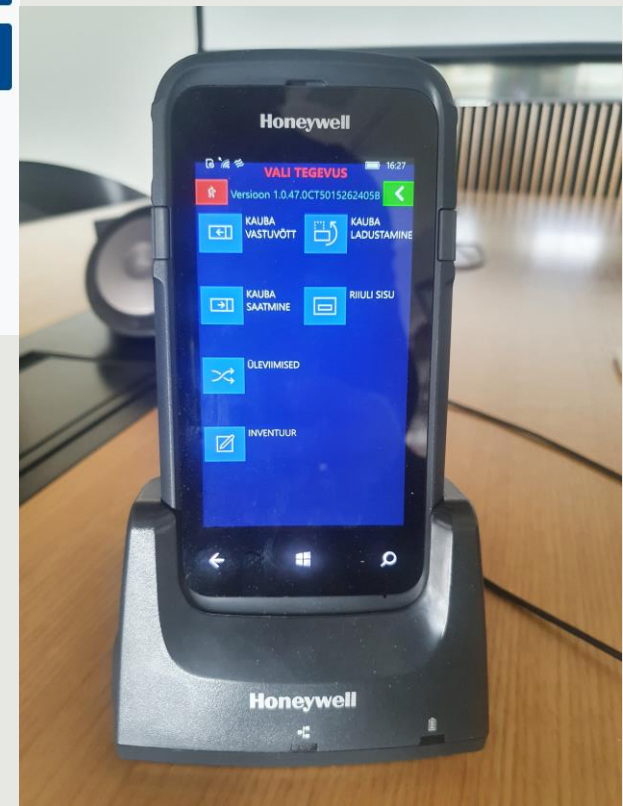
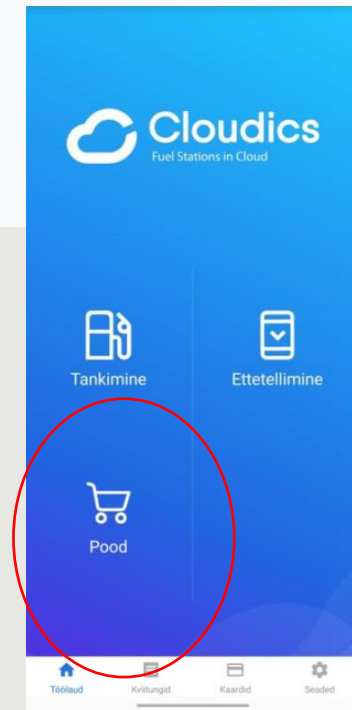
Ettevalmistus

Maitseained

Pakkimine

Tootmine

Villimine



The lessons



- Good results take A LOT of time, especially if you must have them custom made
- People get tired and YOU have to keep them motivated and working both in-house and at your partners
- Celebrate the small victories and be honest about failures
- Leave time in time-line for the unexpected
- Project management should be separate from development function
- Good ideas are great but not in the middle of the project and changing many things at once
- Documenting everything is tedious but crucial in the name of success

The future



- Getting what we paid for – more in detail analysis = decisions for improvement
- Process improvement/development = reduction of losses
- Reduction of losses = better cost prices
- Better cost prices = competitive advantage
- Competitive advantage = more opportunities in home market as in export

- Developing different BI solutions
- Automatization of processes
- Internal communication platform to use
- Etc etc



Thank you!

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