Monitoring antimicrobials in livestock production

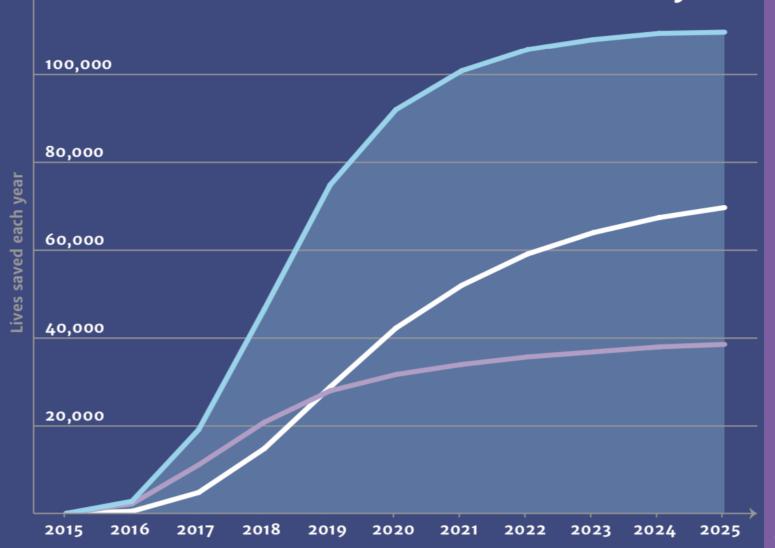




770,000

lives could be saved over the next 10 years

Better diagnosis and treatment



Better treatment

Better diagnosis

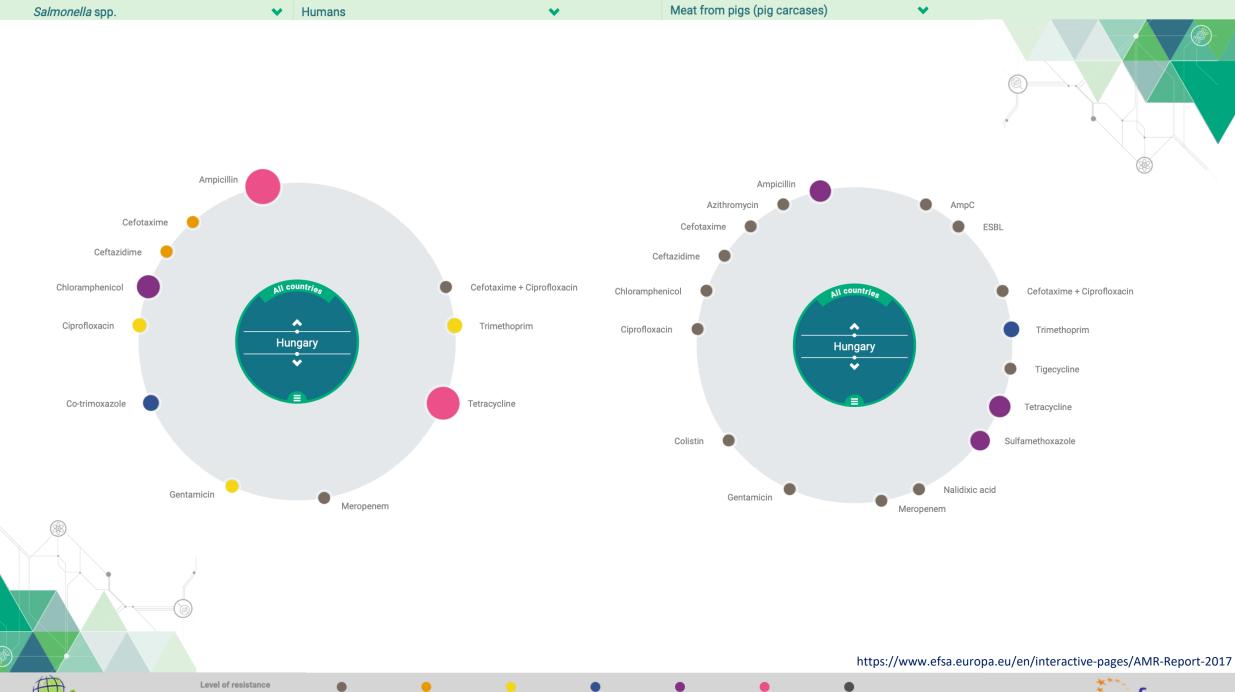
IF NOT TACKLED, RISING AMR COULD HAVE A DEVASTATING IMPACT



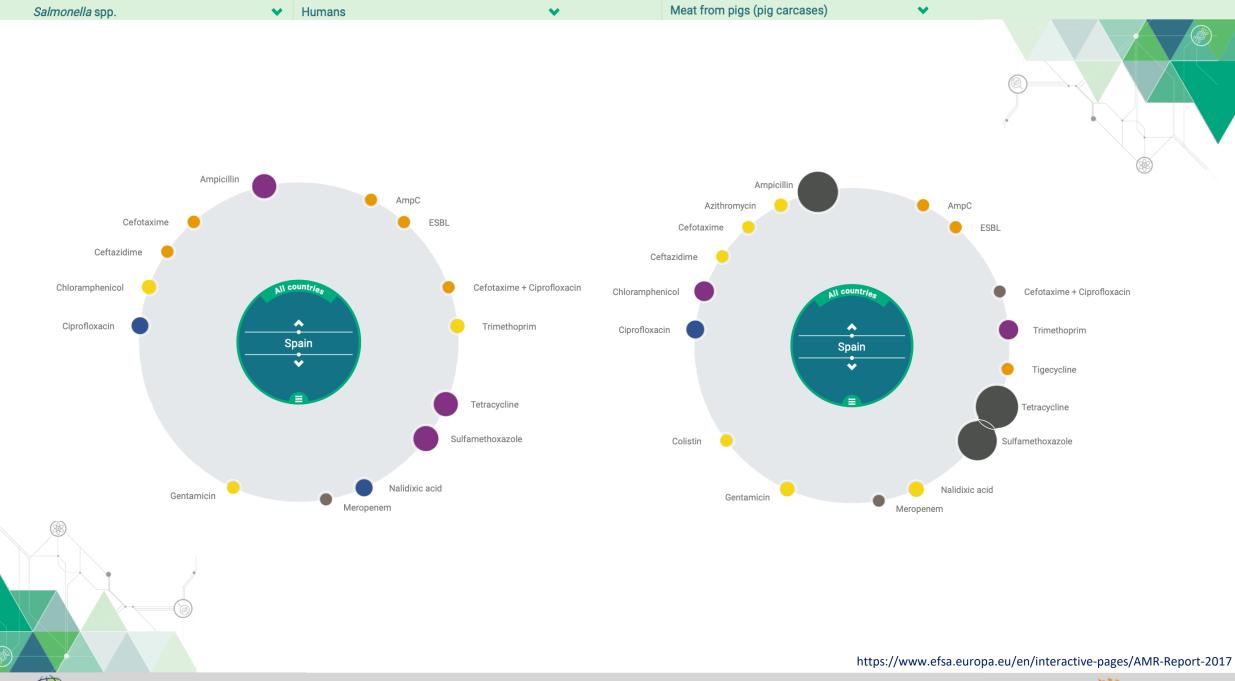
By 2050, the death toll could be a staggering one person every three seconds if AMR is not tackled now.

Source: Review's own analysis.

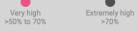


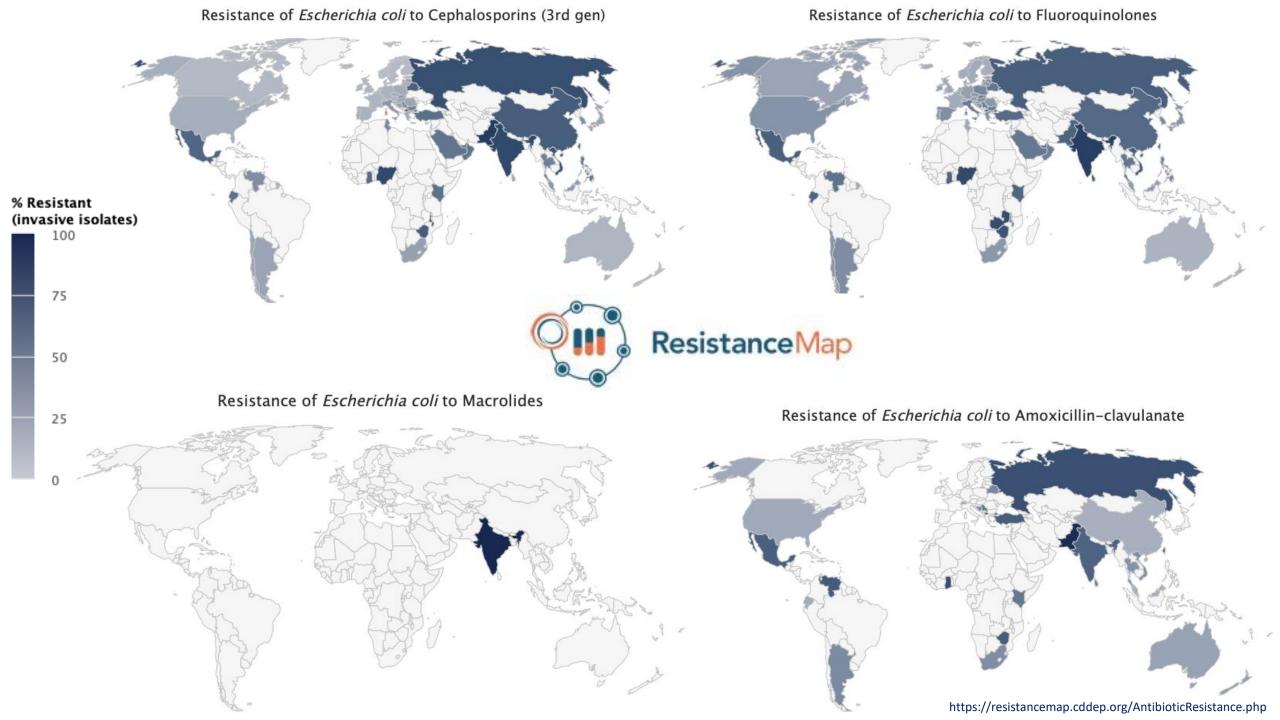


efsa curopean Food Safety Authority











How can you use Livestocker to fight against AMR?

Theory

High Incidence of management failure Medium Nutrients and composition both are Nutrients are essentials, composition has no influence essentials for good performance on performance Feed additives to Low improve health High Average Low Robustness and health status Incidental Moderate Regular



Antimicrobial use

Focus areas to reduce antimicrobial use

Hygiene – Disease control Data management & analysis > Pathogen survey / map > Antibiotic consumption > Cleaning - disinfection Feed- & water disappearence > Entry points **Environment parameters** > Bedding (microbiology) - flooring History & trends analysis Continuous seek for correlations Water Robustness of breeds & health Critical pH – microbiology - biofilm points **Temperature** > Choice of breeds Mineral content Young animal nutrition Water flow > Vaccination program - prevention **Feed Housing - technology** Raw materials – Quality control Density m² and m³ Digestibility temperature, humidity Mineral content Air speed Physical properties > Flooring – bedding (quality) Feeders and feeder space

Preservation, Hygiene in mill and farm







Strategy

- > Integrated system
- > Volatile market
- > Scenario Planning
- Customers
- Suppliers

- > Performance indicator
- > Financial reports, indicators
- > Periods History Trend
- > Benchmark
- > Efficiency control
- > Antimicrobial monitoring

Interpretation



- > Real time information
- > Barn log book
- > Treatment log book
- > Production performance
- > Feed consumption
- Integrated production system
- > Raw material management

- > Real time profit & loss
- > Outstanding
- > Liabilities

LIVESTOCKER
SMART FARMING & DATA SOLUTIONS

- > Livestock value
- Monthly reports (internal & authorities)

Financials



No specific requirement for hardver

WEB BASED

SAFE

Run on any browser No need to install IBM Cloud Microsoft Azure

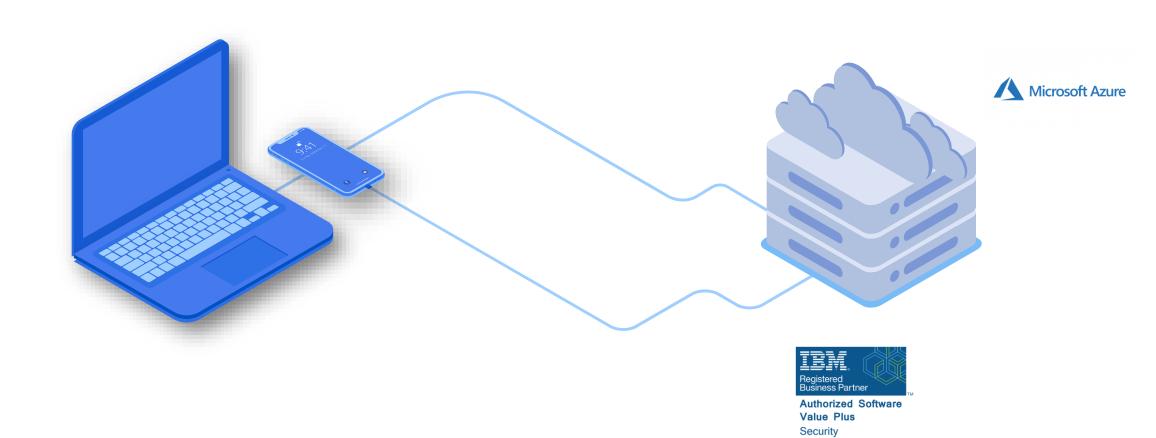
AVAILABLE 24/7 APPLICATION

Anywhere – anytime thru internet User rights Recording data Quick dashboard



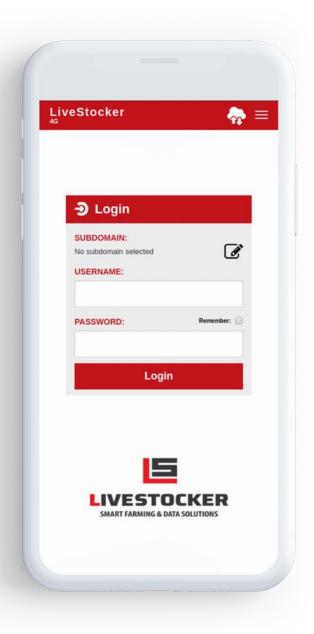


CLOUD



Application

- No specific requirement for hardver & software
 - **I**IOS
 - **■** Android
- Recording data
 - Only those events which may have happened
- Offline synchronization
- Hundreds of events can be recorded before synchronization

















LIVESTOCKER

< > | [

Administration -Purchasing -

Medicine -

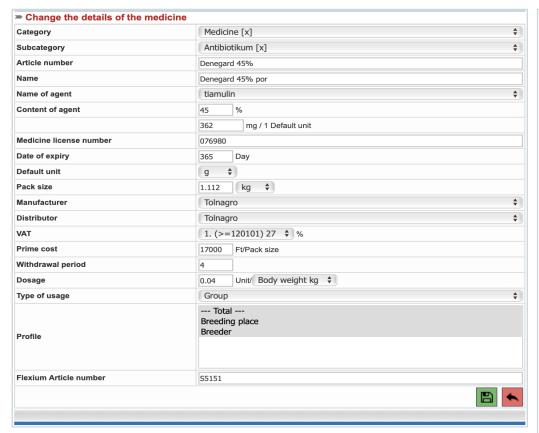
Planning -Queries -

Documents -

Task manager -

HR (human resources) -

External data -



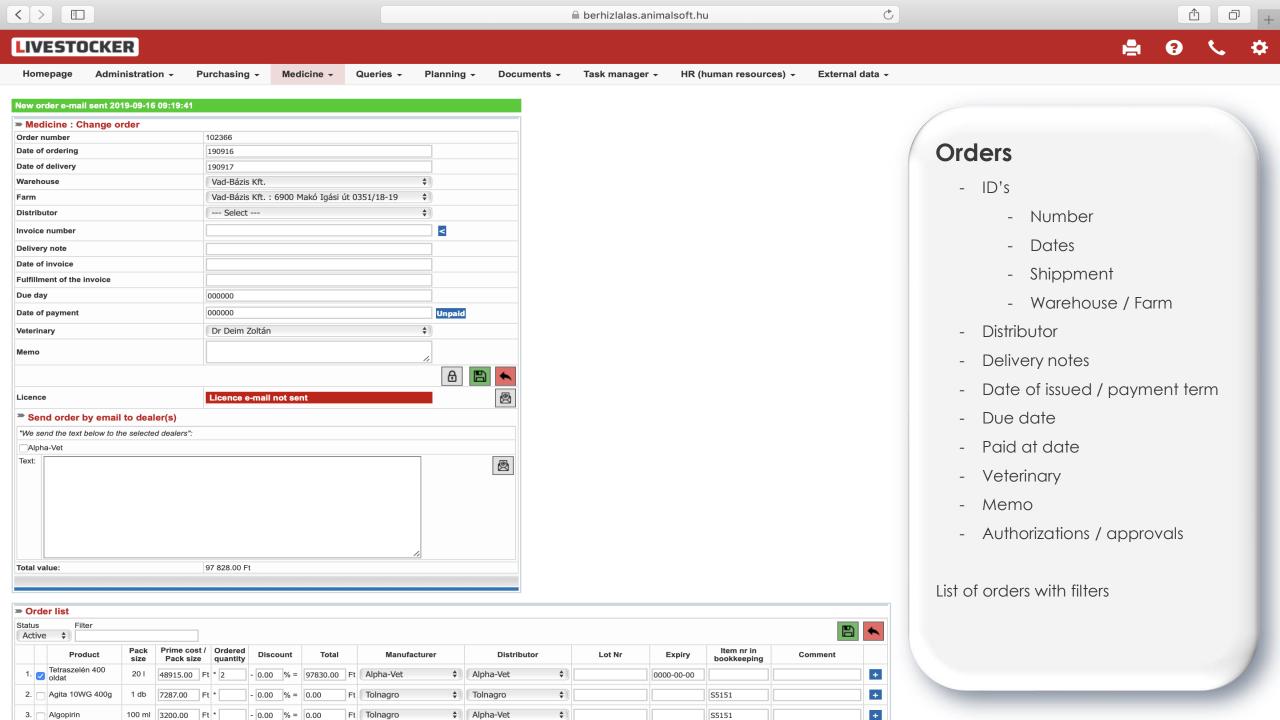
⇒ Farm	
	Filtering
Agro-Duál Kft.	
Atak-Mada Kft.	
Bereczki Ferenc	
Berényi Kft.	
Borka Krisztián	
Csepregi	
Csepregi II.	
Darázs Kft.	
Darázs Kft. Nagyigmánd	
Fröhlig Iroda	
Fröhling Tibor E.C. Mohács	
Fröhling-Agro Kft. Nagypeterd	
Fröhling-Pig Farm KftLippó	
Fröhling-Pig Farm KftMerenye	
Fröhling-Pig Farm KftMohács	
Fülöp Tamás	
Hegyesi Csaba	
Hunra Kft.	
Kapoly Mangal Ilona	
Karakai	
Kiss Kamilló Makó	
Kiss Kamillóné	
Lukácsné Bábits Ildikó	
Mangal Ilona dr. Deim	
Mangal Ilona Sertéshizlalda Kft	
Mangal Ilona Sertéshizlalda Kft II.	
Nyireti István	
Papp Tamás	
Pozsgay István	
Precizion 2009 Kft.	
Principális Szövetkezet	
PRO-NaturaLand Kft.	
Rábacsanaki Bacon Kft.	
Sertáp Kft.	
Település Szerviz	
Tetétleni Sertéstenyésztő és Hízlaló Kft	
Tóth János	
Vad-Bázis Kft.	
Valach Erika	
Vas László	

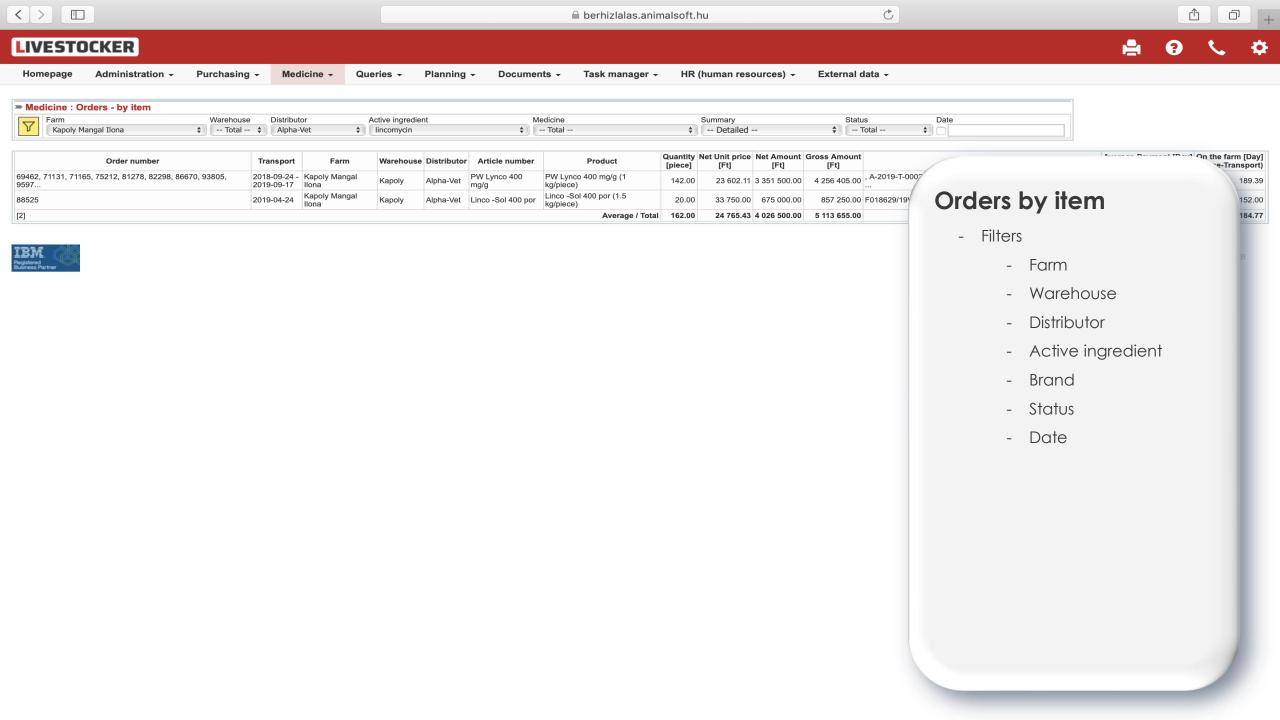
Master data

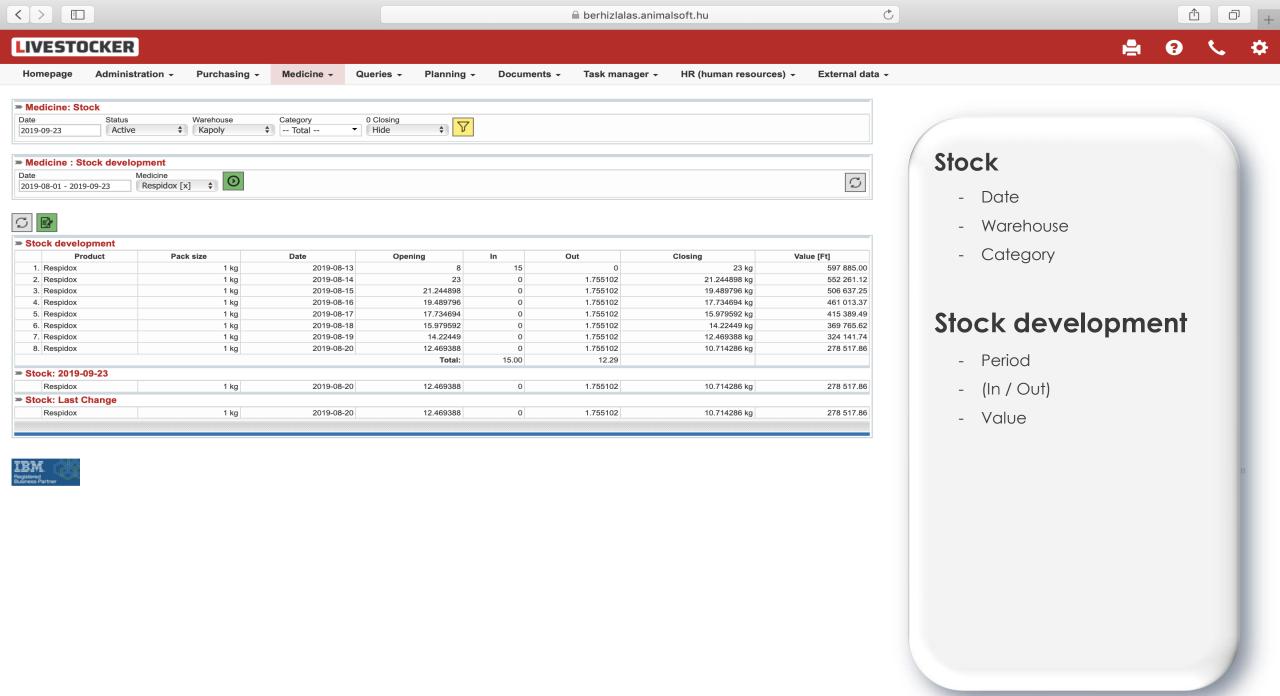
- Brand
- Active ingredient
- Concentration
- Approval ID
- Dosage
- Expiry date
- Size, packaging (ml, kg)
- Producer
- Distributor
- Cost
- Withdrawal period
- Purpose of application
- Item number internal

Farm specific User rights











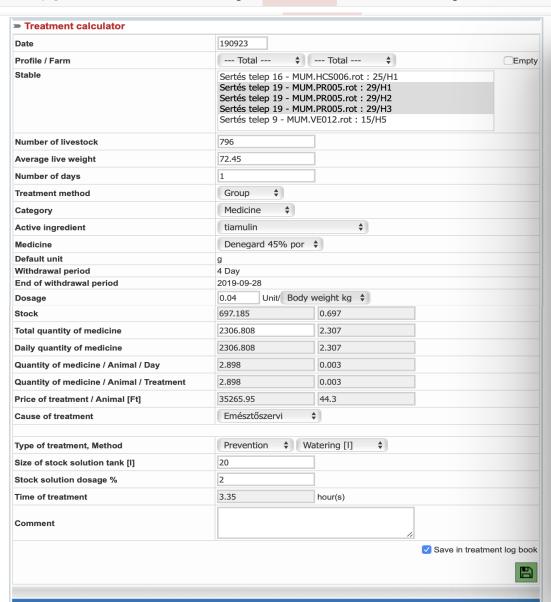


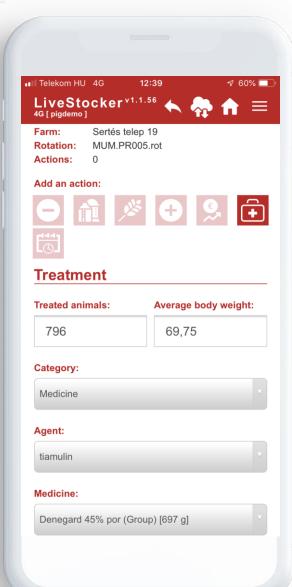




LIVESTOCKER

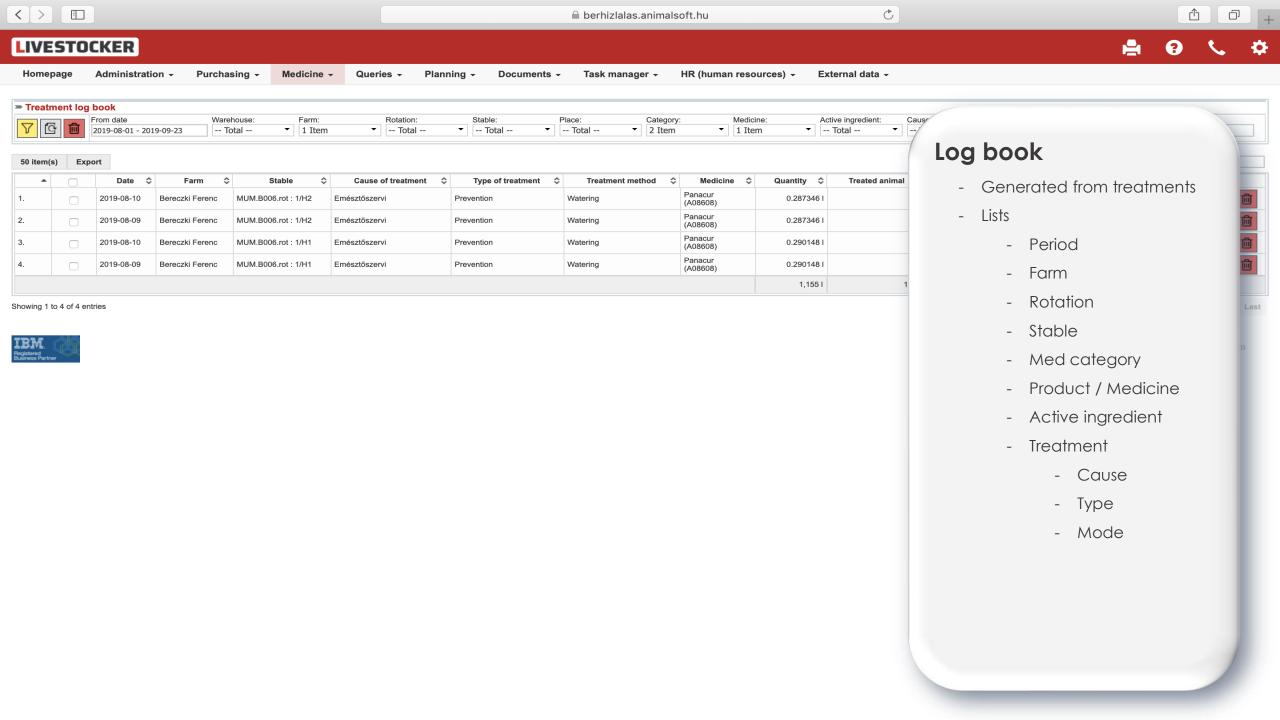
Administration -Purchasing Medicine -Queries -Planning -Task manager -HR (human resources) → External data -Homepage Documents -

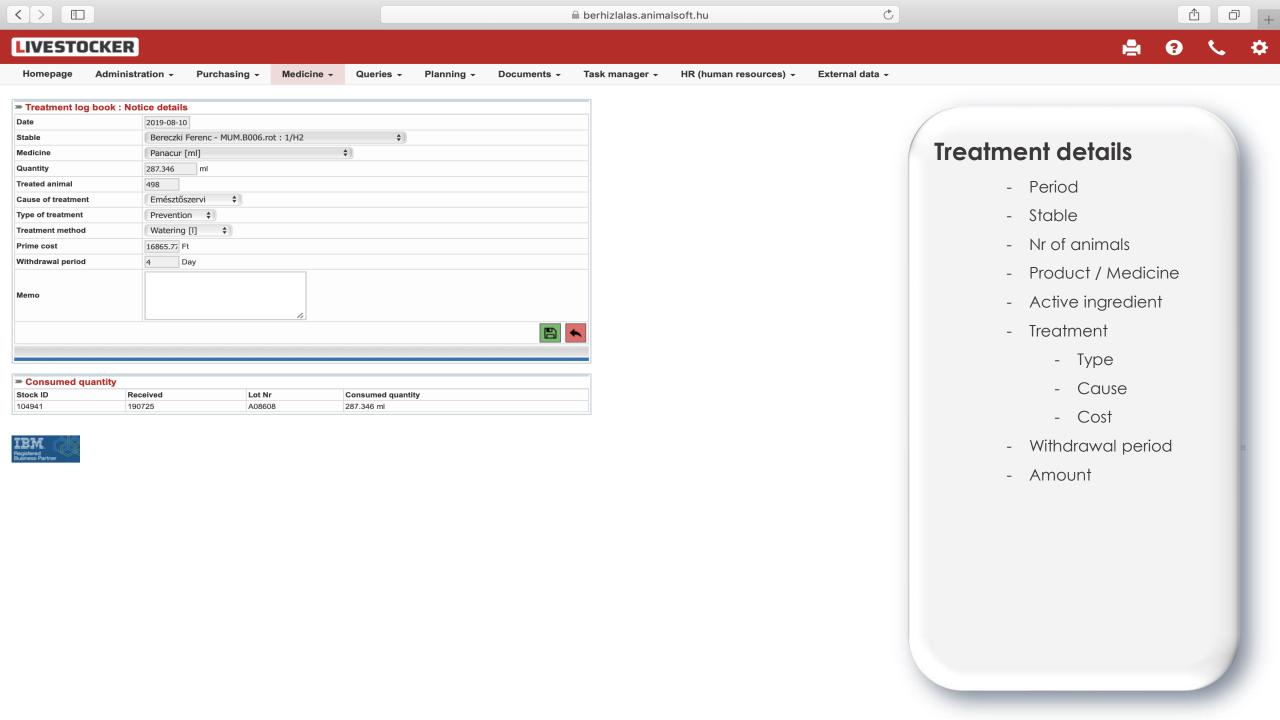


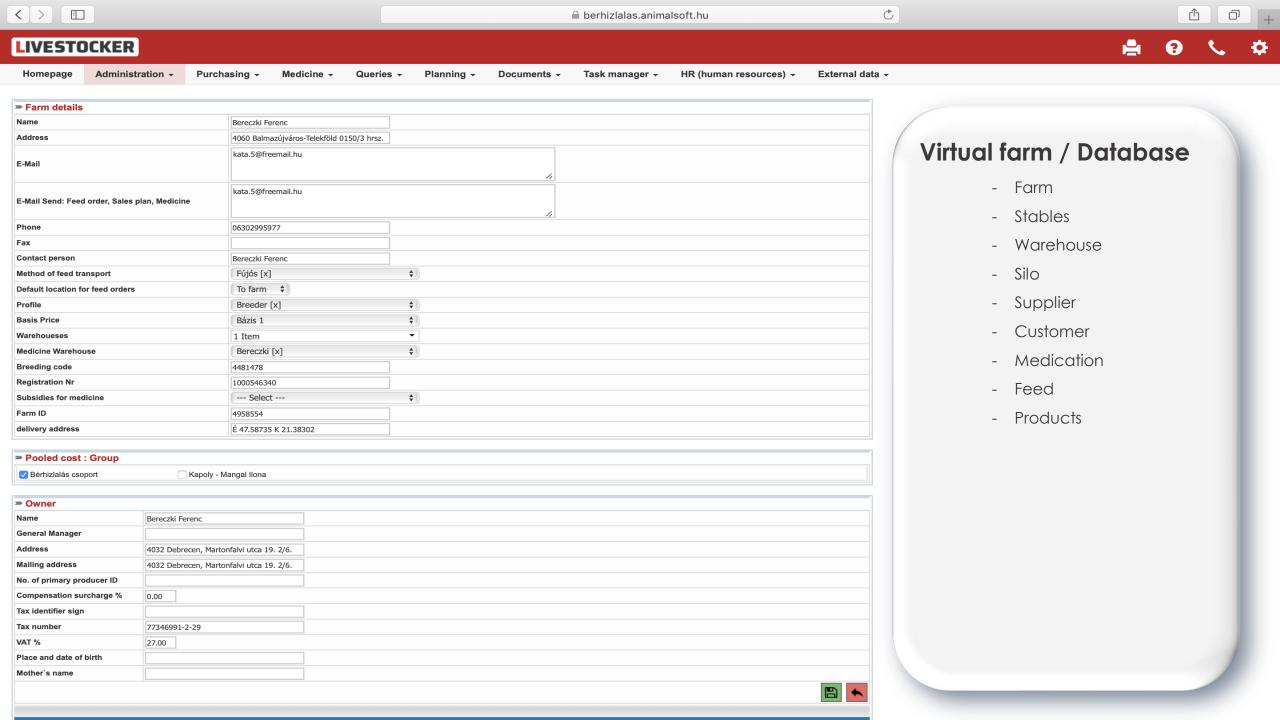


Treatment calculator

- Application and software
- Nr of animals picked up automatically from data
- Weight automatically picked up from body mass table
- Both can be changed
- Type of treatment
- Active ingredient
- Medication
- In case no stock, cannot be used
- Orders from application
- Log book automatically
- Stock reports







LIVESTOCKER

< > =











Purchasing -

Medicine -Queries - Planning -

Task manager →

HR (human resources) -

FCR Feed Cost:

External data -

218.338

			Hours / Day	16	Initial average weight	25.000					
	Days on the farm	Daily gain [g]	Daily feed consumption [kg]	Daily Water consumption [l]	Feed phase	Mass / Animal	∑Feed [kg]	∑FCR	Mortalities	Mortalities %	Comment
1.	3	800.000	1.400	3.000	0	27.400	4.20	1.750	Not specified \$	0.00	
2.	9	850.000	1.800	3.000	0	32.500	15.00	2.000	Not specified \$	0.00	
3.	10	900.000	1.900	3.500	1	33.400	16.90	2.012	Not specified \$	0.00	
4.	24	950.000	2.400	5.000	1	46.700	50.50	2.327	Not specified \$	0.00	
5.	52	1000.000	2.900	6.000	2	74.700	131.70	2.650	Not specified \$	0.00	
6.	70	1100.000	3.100	7.000	3	94.500	187.50	2.698	Not specified \$	0.00	
7.	78	1150.000	3.200	7.500	3	103.700	213.10	2.708	Not specified \$	0.00	
8.	101	1200.000	3.600	8.000	4	131.300	295.90	2.784	Not specified \$	0.00	
w:								FCR: 2.784			
	Total:	106.30 kg	295.9 kg	638.5				DWG: 1 052.48 g	Average:	0	
	Market price Ft / kg: 360.00	Revenue:46191.60 Ft	Prime cost:413.91 Ft/kg	Expense:54346.36 Ft	Planned profit:-8154.76 Ft						

Feed phase						
Feed phase	Name	Price[Ft/kg]	Quantity[kg]	Value[Ft]		
0	Mangal Ilona 0 DAN 💠	97.6	15.00	1464.00		
1	Mangal Ilona 1 DAN 💠	95.5	35.50	3390.25		
2	Mangal Ilona 2 DAN 💠	77.5	81.20	6293.00		
3	Mangal Ilona 3 DAN 💠	74.5	81.40	6064.30		
4	Mangal Ilona 4 DAN 💠	72.4	82.80	5994.72		
		Average Price	Total Quantity	Value Total		
		78.43 Ft	295.90 kg	23206.27 Ft		

Prime cost / Animal	
Young animal [Ft]	26125.13
Mortalities (~49 Day) 2.49 %	890.72
Medicine [Ft]	313.23
Feed [Ft]	23206.27
Other expenses [Ft]	2979.73
Other revenues [Ft]	0
Weight deduction 2.99 kg [Ft]	1076.40
Pooled cost [Ft]	831.28
∑ [Ft / Animal]	54346.36

Body mass table

- Breed and stable specific
- ADFI
- ADG
- ADWI
- Feed phases
- FCR
- Mortality
- Financial plan
- Expected income
- Expected profit & loss



Integrated reports

Products and active ingredient used in g and currency



Filters by
period, active
ingredient,
supplier



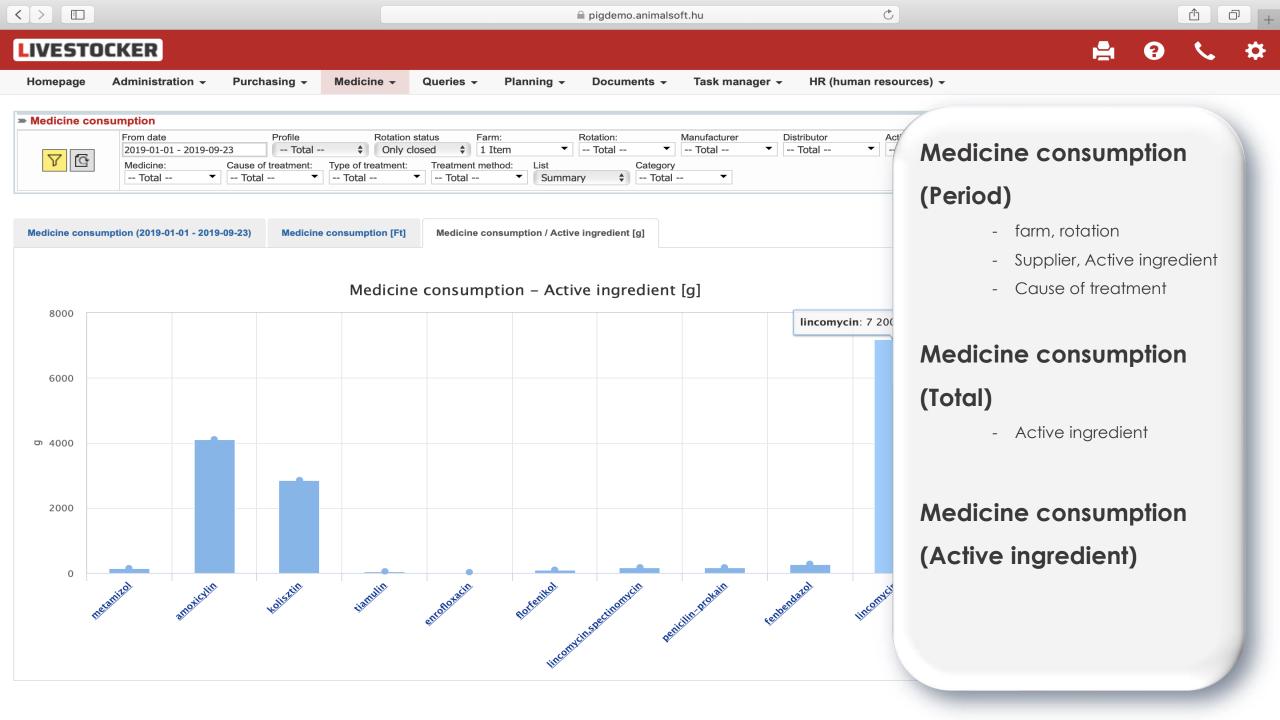
Active
ingredient / 1
unit of product

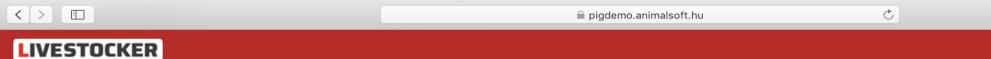


Interpretation
of Mortality
and
medication





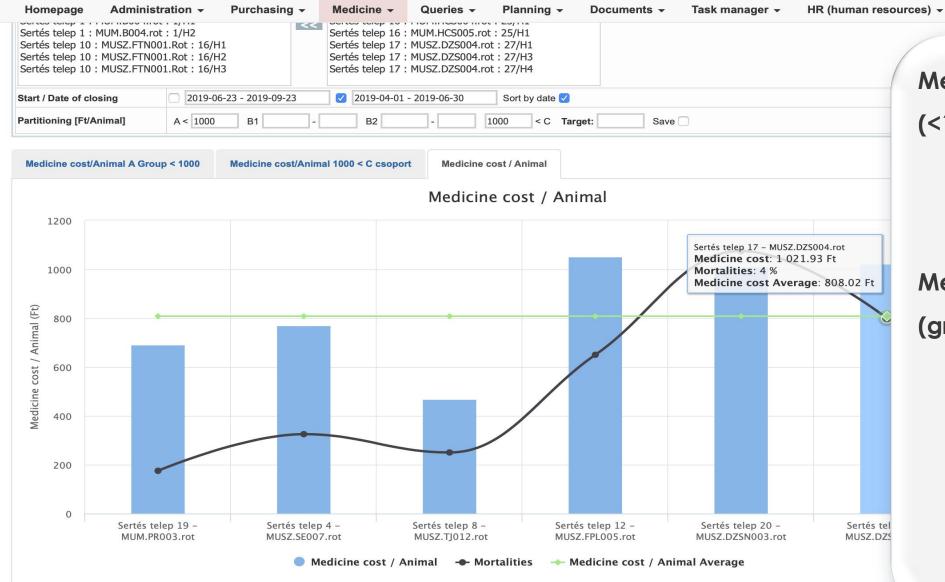










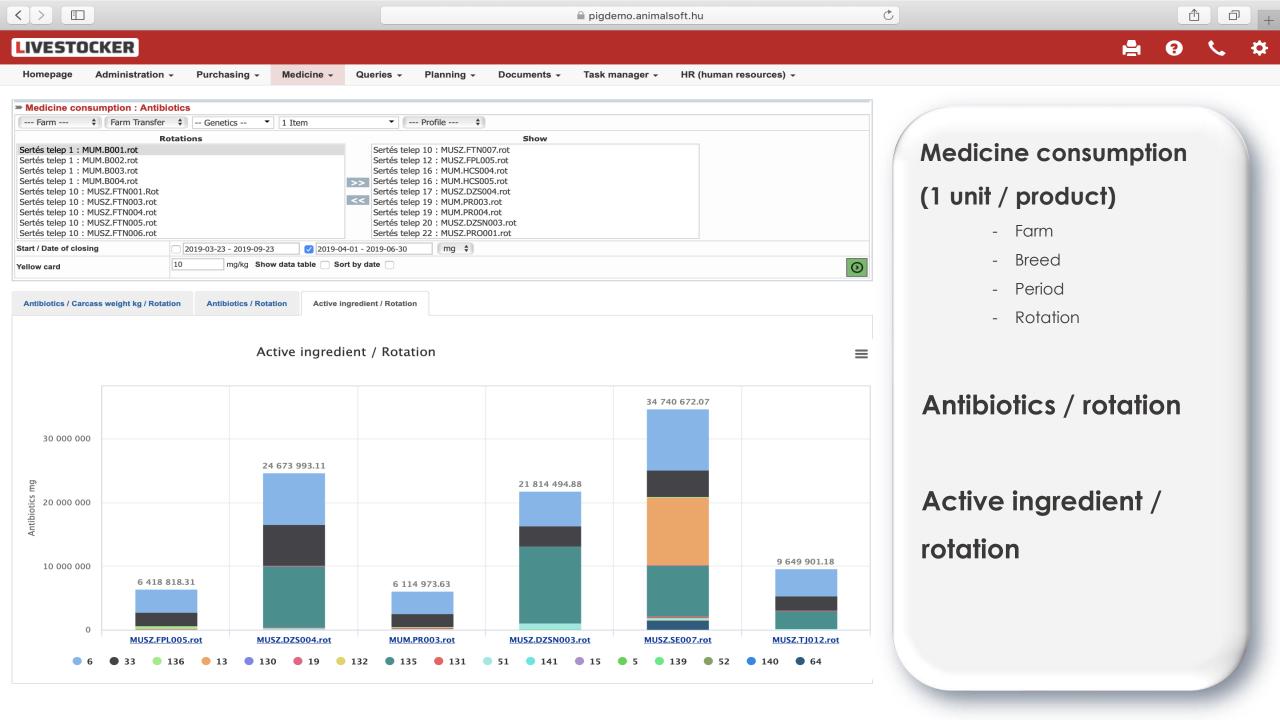


Medicine cost / animal (<1000 HUF; >1000 HUF)

- farm, rotation, breed
- period
- Cost

Medicine cost / animal (graph)

- Active ingredient



< >



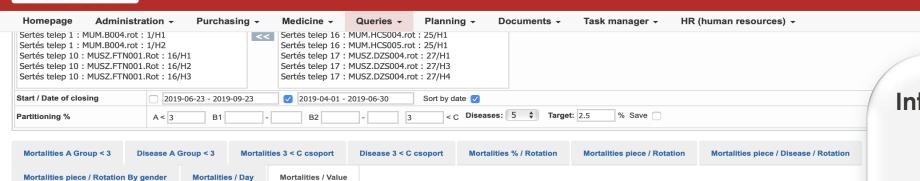




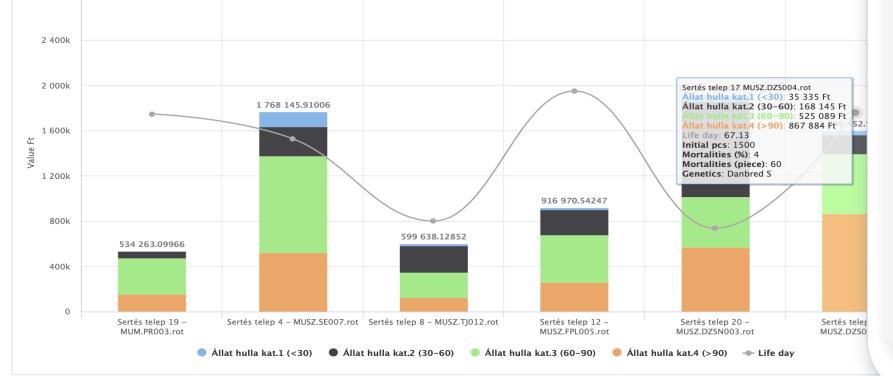












Interpretation of health

- Farm
- Breed
- Breed
- Period
- Production KPI
- Cause of mortality
- Mortality / rotation
- Mortality/disease/rotation
- Mortality by gender
- Mortality / day
- Mortality (value)



LIVESTOCKER

2 800k



Value based corporate culture

User rights

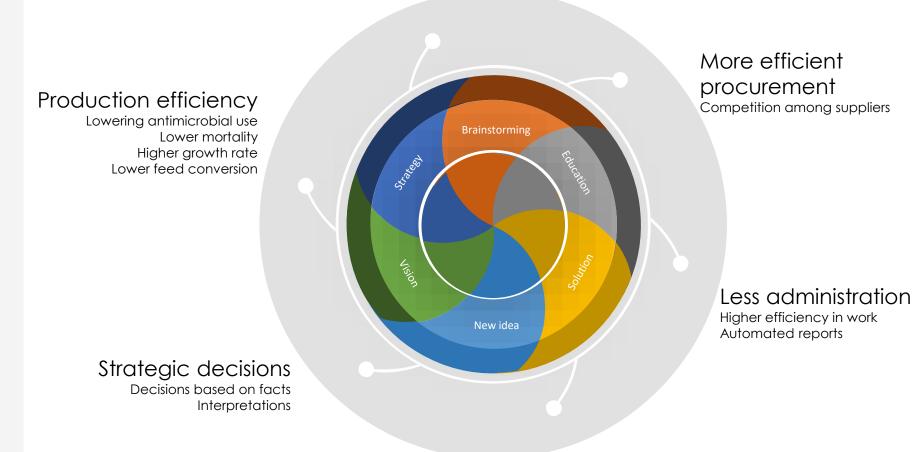
Only relevant parts are accessible

All KPI translated into financial impact

Benefits & returns

Strategic importance

Up to +10 % EBIDTA



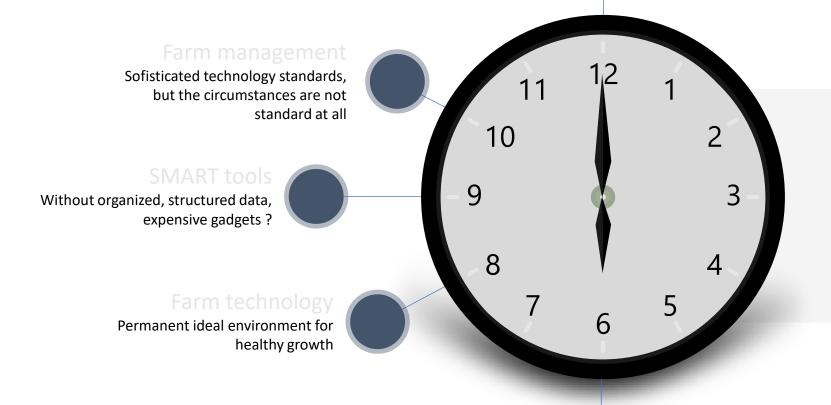
Few clicks and data turns into information

Precision Livestock Farming

Next big step forward is making decision based on real time data to cross borders for sustainability and profit



Who, What, Why, When and How?



Breeds and farm technology are already available, only matter of return on investment if it is applicable for production.

Robustness and animal health

Robust genetics Animal Health Status, prevention



