

IT - NETWORK - SOLUTION FOR 2 MILLION COWS IN AUSTRIA AND GERMANY (RINDERDATENVERBUND, RDV)

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Partner organizations (I)



Partner organizations (II)



BAYERN ■

MRO Bavaria

farms: 23 137
cows: 983 769
herd size: 43



MRO

Baden-Württemberg

farms: 5 925
cows: 293 852
herd size: 50



MRO Schleswig Holstein

farms: 3 431
cows: 338 500
herd size: 99



MRO Austria

farms: 21 905
cows: 405 077
herd size: 18

Organisational structure



Software development for 54.398 dairy farmers keeping 2.021.188 cows

IT-structure

- ▶ 1 group of developing IT-software engineers
 - ▶ 1 common data model
 - ▶ 4 separate IT-departments
 - ▶ 4 Oracle data bases
 - ▶ Automatic data transfer via interfaces
- ➔ Decentralized, flexible IT-solution for local services



Data volume

- ▶ 54.000 farmers with direct access
- ▶ 2 Million producing cows
- ▶ 100 Million animal pedigree data
- ▶ 100 Million calving and lactation data
- ▶ 200 Million data on artificial insemination
- ▶ 500 Million single milk test results

➔ Data volume of 1 Terabyte



Software packages, field of application and users

Software package	Application field	User
RDV-Classic	Performance data recording (milk and meat)	Milk recording organization (MRO)
RDV-Classic	Breeding / Herd book	Breeding organization (BA)
RDV-Farm (RDV4M)	Herd management	Farmer, Adviser
RDV-Mobil (App)	On spot data collection and data access	Farmer
RDV-Vet (RDV4T)	Herd health monitoring	Veterinarian
RDV-Feed (RDV4F)	Calculation of feed rations	Adviser, Farmer
OptiBull	Mate selection	Adviser, Farmer

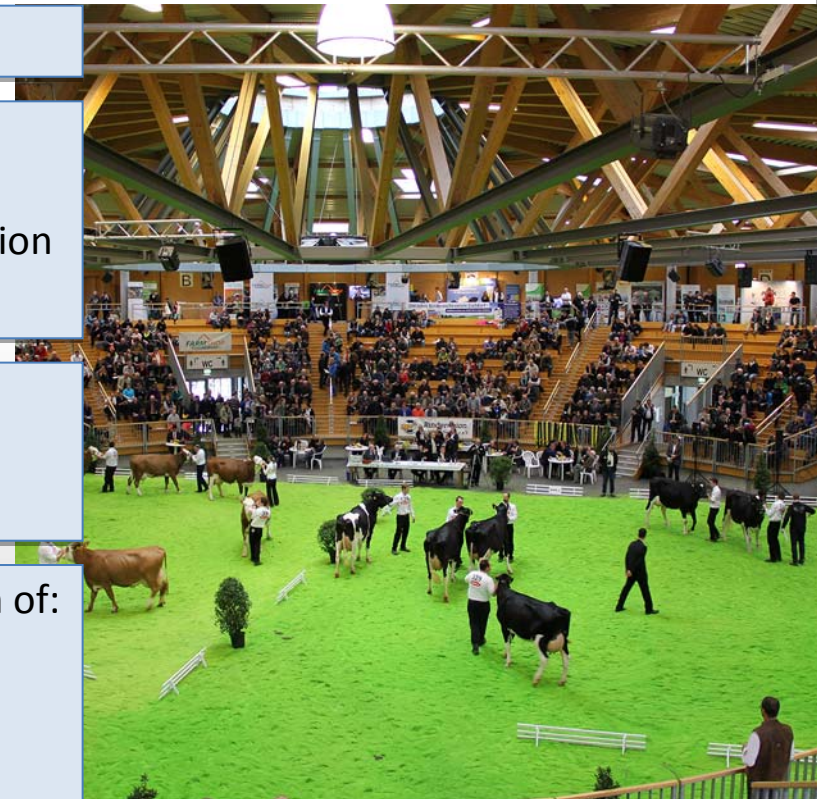
RDV-Classic Modules (I): IT - solution for MRO's

Software module	Application field
Animal	Data storage of: <ul style="list-style-type: none"> ▶ Animal pedigree data ▶ Artificial inseminations ▶ Calvings ▶ Individual performance data Data analysis of: <ul style="list-style-type: none"> ▶ Animal data
Herd	Data storage of: <ul style="list-style-type: none"> ▶ Herd master data Data analysis of: <ul style="list-style-type: none"> ▶ Herd master data
Administration	Administration of: <ul style="list-style-type: none"> ▶ Members ▶ Employees
Processing	Unit for the processing of all accumulated data



RDV-Classic Modules (II): IT - solution for BA's

Software module	Application field
Breeding	Selection of: <ul style="list-style-type: none"> ▶ Bull dams ▶ Candidates for genomic selection ▶ Offspring
Administration	Administration of: <ul style="list-style-type: none"> ▶ Members ▶ Employees
Auction	Organization and implementation of: <ul style="list-style-type: none"> ▶ Auctions ▶ Sales ▶ Shows



RDV4M-Modules (I): Online herd management and analysis for dairy farmers, "Module Herd"

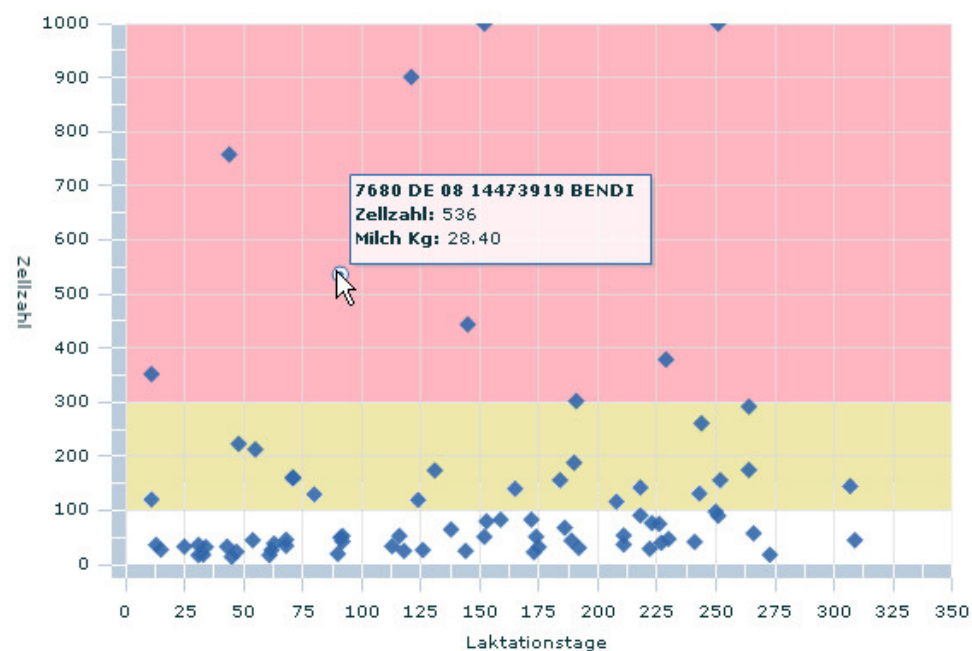
Betrieb Tier **Grafik** Gesundheit Admin

▼ **Probemelkungen**

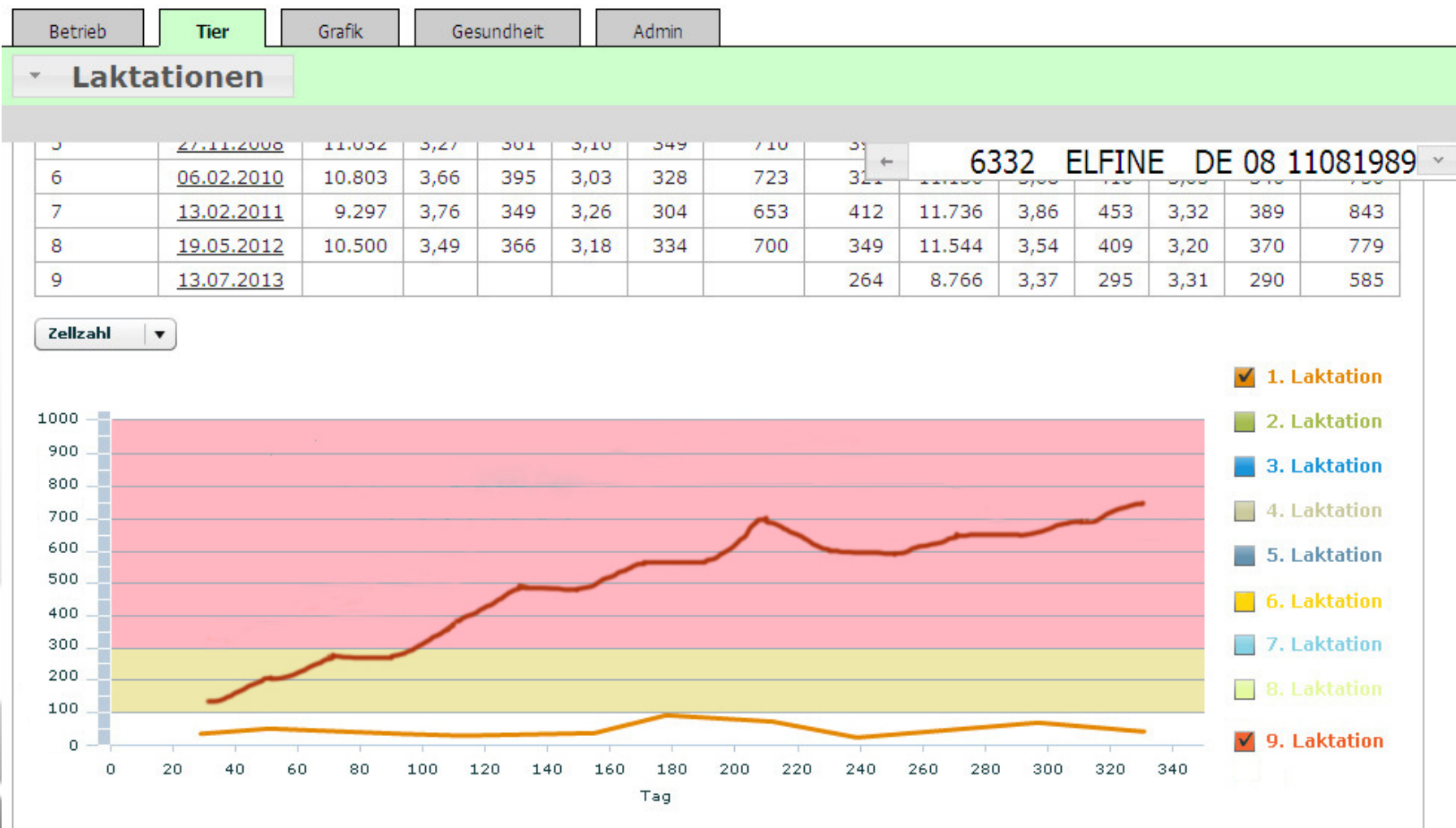
Jahr: 2014 Suchen Zellzahl ▼

Probedatum	SNR	Ohrmarke	Name	L	LT
09.10.2013	7813	DE 08 15100886	ANIS	1	9
13.11.2013	7793	DE 08 14862227	WELA	1	11
11.12.2013	7806	DE 08 15100879	EMSEL	1	15
14.01.2014	7799	DE 08 15100873	DELUNA	1	25
04.02.2014	7811	DE 08 15100884	LIESEL	1	33
13.03.2014	7790	DE 08 14862224	EMADA	1	71
03.04.2014	7739	DE 08 14862174	ELME	1	92
	7758	DE 08 14862192	ELEISA	1	138
	7762	DE 08 14862196	ALENE	1	173
	7751	DE 08 14862185	WIDA	1	174
	7735	DE 08 14862170	WELLI	1	175
	7736	DE 08 14862171	DIANE	1	189
	7722	DE 08 14862157	ALEXI	1	211
	7741	DE 08 14862176	EMA	1	226
	7740	DE 08 14862175	LOLO	1	227
	7724	DE 08 14862159	SURANA	1	229
	7707	DE 08 14862143	EMSIG	1	273

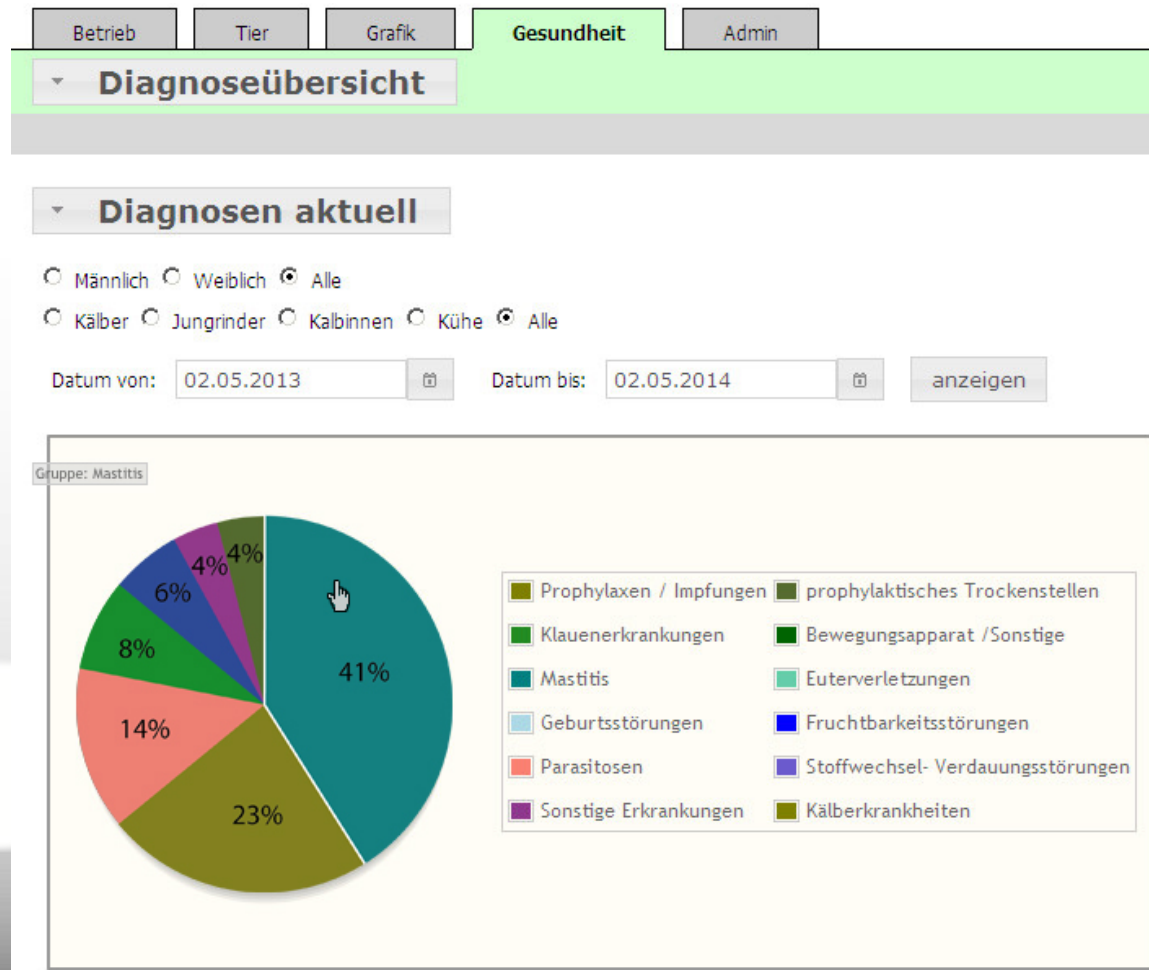
Darstellung Zellzahl zu Probedatum: 03.04.2014



RDV4M-Modules (II): Online herd management and analysis for dairy farmers, "Module Animal"



RDV4M-Modules (III): Online herd management and analysis for dairy farmers, "Module Animal Health"



RDV4F-Module: Online feeding program for adviser and dairy farmers, "Module Feed"

Ration

Futtermittel

Schnellinfo

▼ **Einstellungen**

Betrieb Herde

Berechnungsart

aufgewertete Grundfütterration (AGR) ▼
 getrennte Vorlage
aufgewertete Grundfütterration (AGR)
 totale Mischration (TMR)

Korrekturwert

kg TM-Aufnahme / Tag (-2 bis 2)

des Stallumfeld, häufiges Futternachschieben, sehr gute Futterqualität, erhöhen die Futteraufnahme
 - Hitzestress, Futtererwärmung, Fehlgärung der Silage, vermindern die Futteraufnahme

Zielwert für AGR

22,0 kg Milch aus der aufgewerteten Grundfütterration

RNB Zielbereich

min. (Gramm) **Empfohlener Bereich: min. 0 g,**
 max. (Gramm) **max. 50 g**

Kraftfutterobergrenze

Erstlingskühe	<input type="text" value="9,0"/> kg FM	<input type="text" value="7,9"/> kg TM	<input type="text" value="45"/> % TM
Folgelaktationen	<input type="text" value="11,0"/> kg FM	<input type="text" value="9,7"/> kg TM	<input type="text" value="55"/> % TM



RDV4T-Module: Online herd monitoring program for vets, "Module Vet"


















Praxis Betrieb Tier

▼ **Ausgewählte Betriebe**

1

Eutergesundheit	Fruchtbarkeit	Lfbis	Vorname	Nachname	Strasse	PLZ	Ort
●	●	1234567	Karl	Muster	Dorfstr. 1	70001	Berg
●	●	1234566	Franz	Neu	Weiler 2	70001	Berg
●	●	1234565	Hans	Dampf	Weiler 7	70001	Berg
●	●	1234544	Willi	Freund	Tal 12	70003	Hausen
●	●	1234456	Rolf	Kalb	Im Stoffel 10	70010	Graben
●	●	1234459	Rudi	Rüssel	Hang 25	70010	Graben

RDV-OptiBull: Online mate selection program for adviser and farmer, "Module OptiBull"

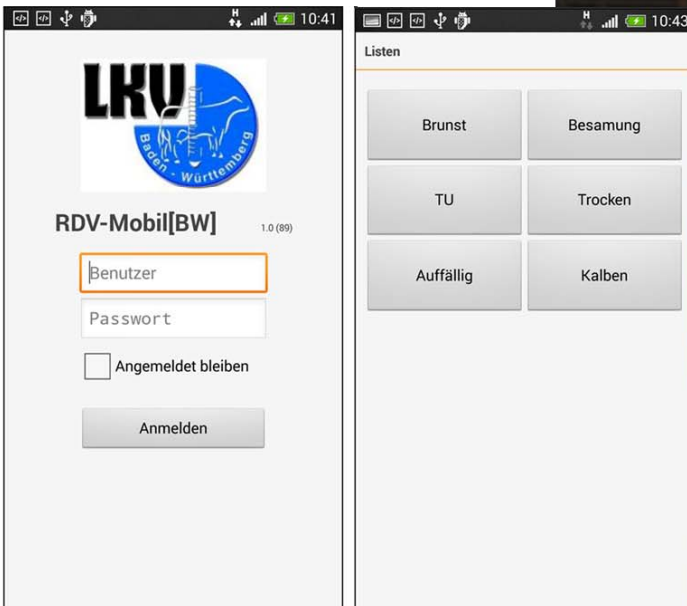
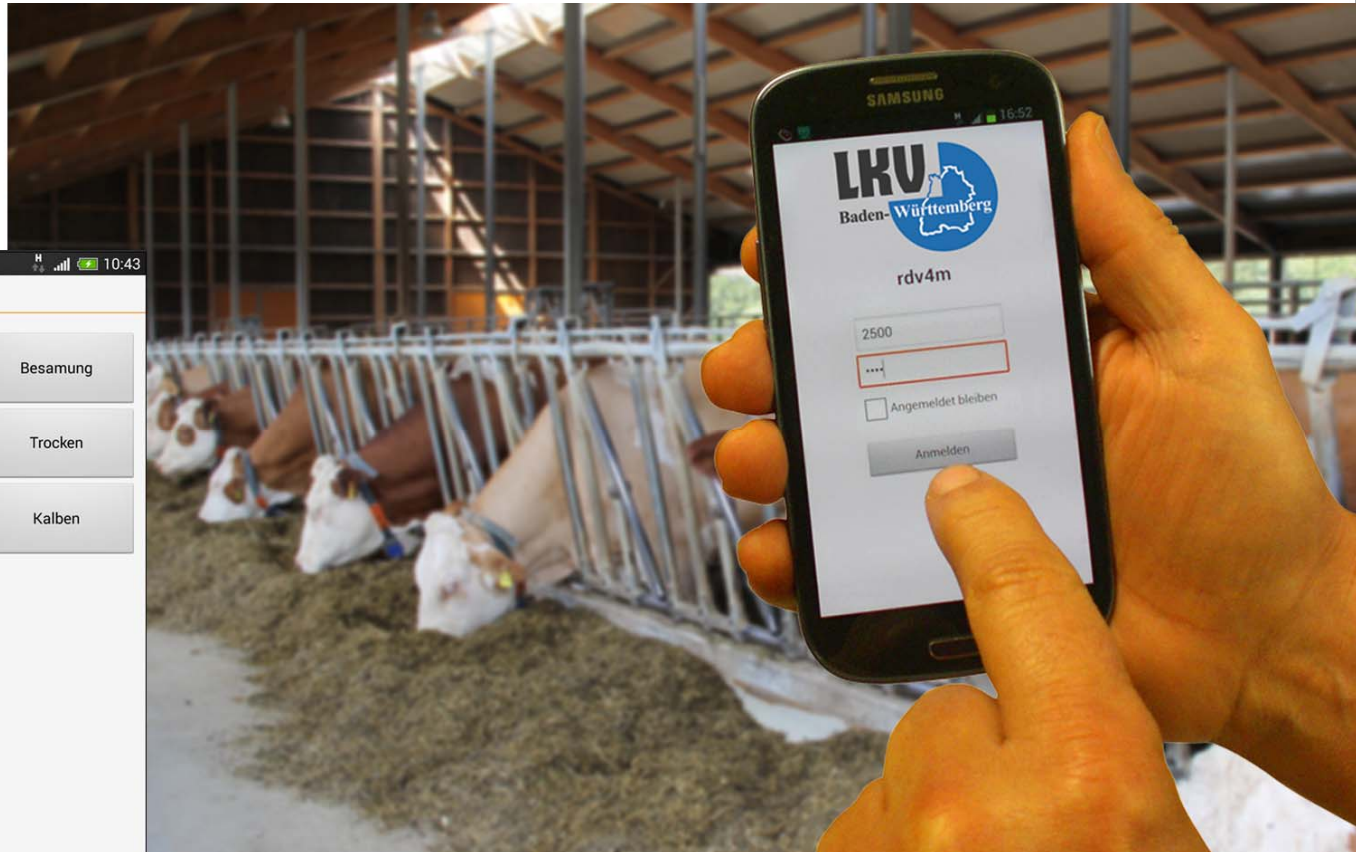
Vergleich nach Merkmalen										
Ohrmarke : DE 09 18198119										
	RUREX *TA 10 00178755		ZAHNBERG 10 00172648		NARR *TA 10 00165982		WINNIFIZ 10 00188863		MANIPP 10 00172689	
GZW		118		125		122		131		115
Fett-% (I)		0,22		0,12		0,03		0,10		0,15
Fruchtbarkeit maternal (I)		110		106		116		110		107
Rahmen zu groß (I)		96		91		88		97		113
Beckenneigung zu abfallend (I)		93		80		91		102		99
Sprunggelenkwinkel zu gesäbelt (I)		88		99		95		101		89
Strichlänge zu lang (I)		99		95		96		84		82
Strichdicke zu dick (s)		96		98		101		90		96
Strichstellung hinten (I)		95		105		97		87		114

RDV-Apps: Android and IOS-App for farmers, MRO- and BA-technicians

“Module RDV-Mobil”

“Module MRO-Mobil”

“Module BA-Mobil”



Future development

- Integration and intensive utilization of MIR spectral data (OptiMIR)
 - ▶ Storage of MIR spectral data
 - ▶ Development and implementation of new management parameters

- Integration of external data sources coming from:
 - ▶ Automatic milking systems (AMS)
 - ▶ Specific laboratory analysis (mastitis)
 - ▶ Slaughterhouses
 - ▶ Sensors (pedometer)

- Expand interfarm comparisons

*Thank you
for your attention!*

