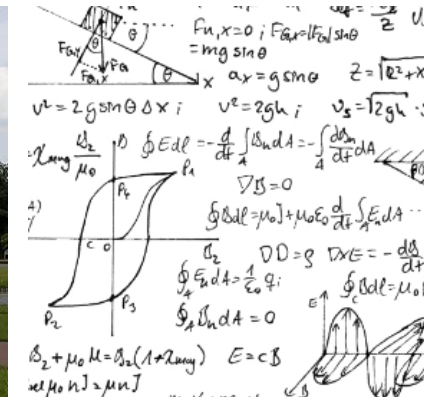
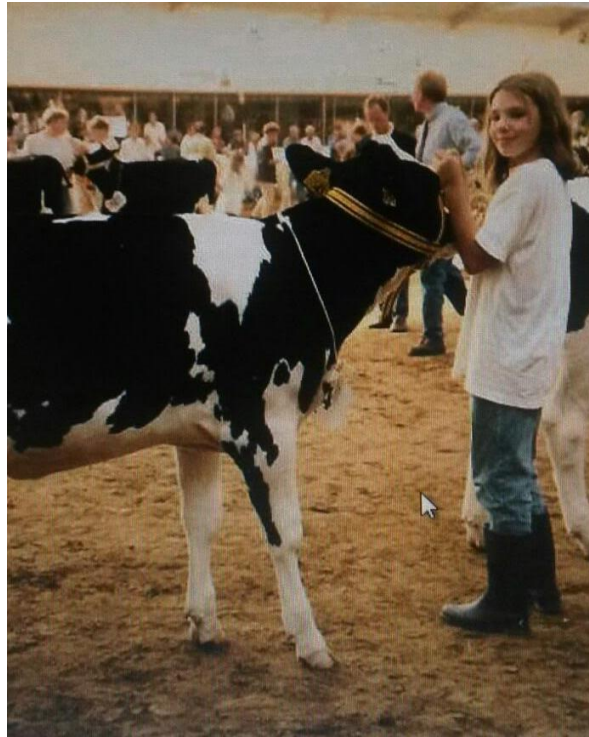
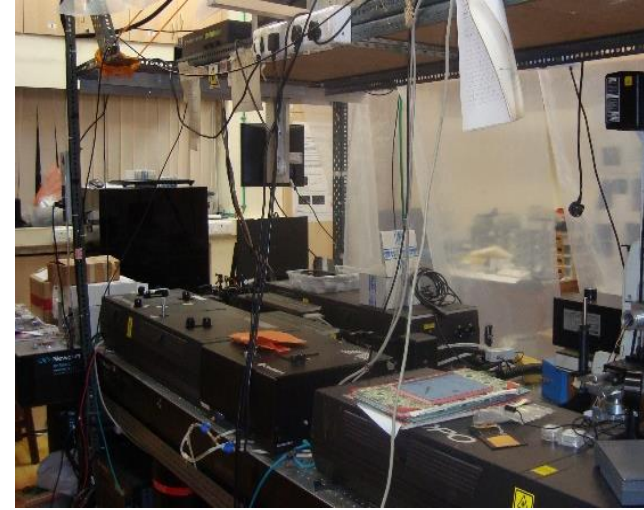




needaap

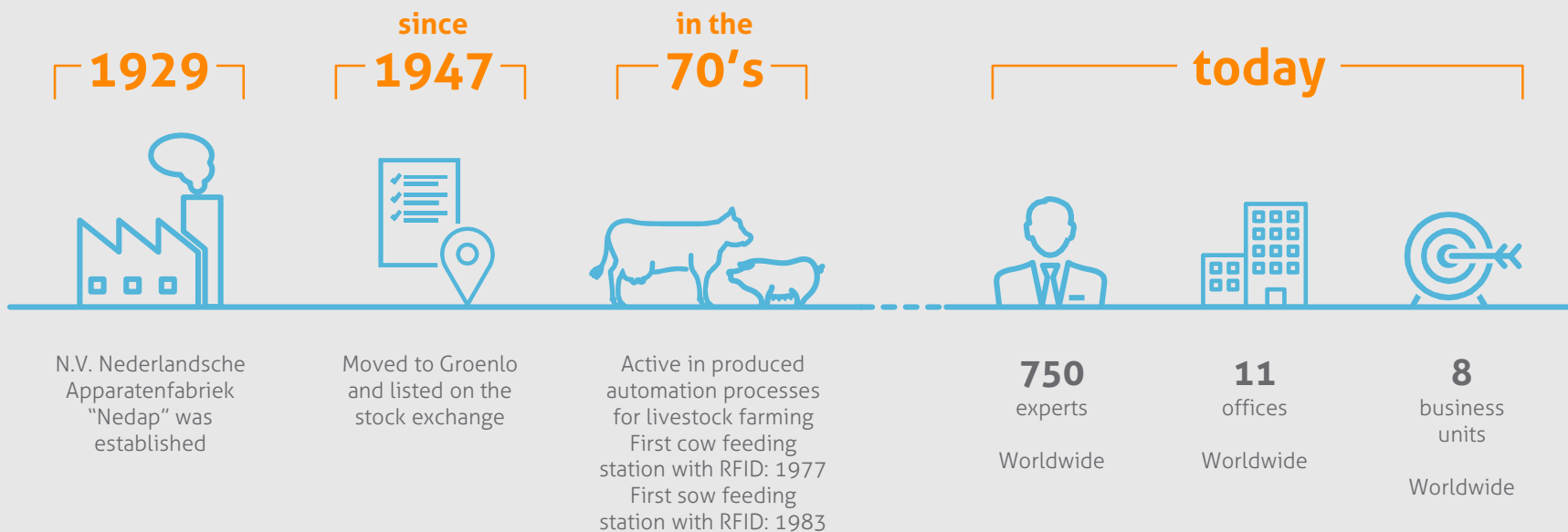
NVTL Studiedag Veehouderijtechniek
08-03-2017
Linda Meijer

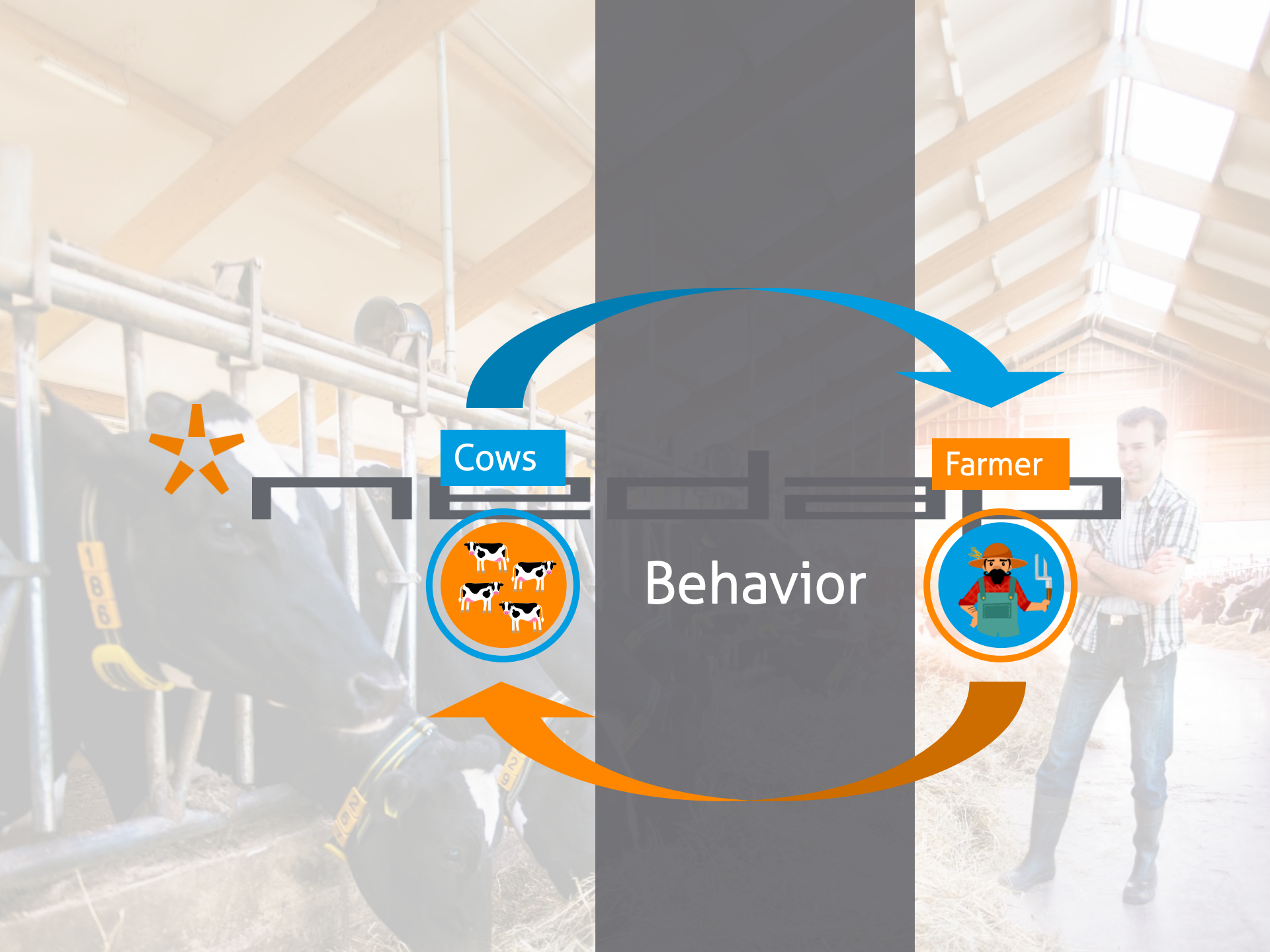




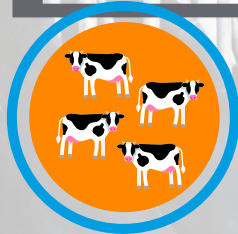


History





Cows



Behavior

Farmer



<https://youtu.be/ygGKTRKnYIk>

COWControl



NEDAP COWCONTROL®

A SINGLE, RELIABLE SYSTEM
FOR OPTIMUM PERFORMANCE
OF ALL YOUR ANIMALS



LOCALISATION

The best localisation system for
your cows in the barn



HEAT DETECTION

Most accurate heat detection in
the world 24/7, with display of
optimum insemination time



EATING & RUMINATION MONITORING

Two unique behavioural
measurements, combined for
optimum health monitoring



STANDING & LYING MONITORING

Two unique behavioural
measurements, combined for
optimum health monitoring



ISO IDENTIFICATION

The only reliable solution
for identification in all your
management applications,
it works all the time

64878620032	999000000237807	2249	7321	0	0	8183628	43	22	73	24	61	39	11	61	61	77	98	27
64877775142	999000000237837	2287	6290	0	2	267225	49	24	92	32	67	44	42	66	29	56	42	34
64878617839	999000000237843	593	4606	0	0	7475924	54	39	12	41	74	50	24	43	24	32	12	45
64877707582	999000000237801	2086	8146	0	1	149053	42	16	56	25	31	27	31	48	31	62	81	28
64878608632	999000000237830	2239	6909	0	1	441142	37	22	19	27	44	41	57	60	69	70	82	31
64878620170	999000000237778	1081	5259	0	2	435787	44	22	1	39	6	41	97	66	35	43	97	43
64878468929	999000000237818	669	8215	0	0	9534699	35	19	2	16	95	16	45	30	33	49	33	22
64878576170	999000000237802	746	2750	0	1	168355	42	46	68	58	3	45	68	29	55	24	68	77
64878603699	999000000237773	2316	2440	0	2	654532	41	59	92	65	54	51	54	43	79	33	17	59
64877936820	999000000237809	708	6978	0	1	630292	37	21	31	24	69	29	44	41	69	55	56	28
64878571996	999000000237864	1770	3368	0	2	349576	51	53	9	82	27	56	2	33	4	25	65	60
64878504089	999000000237784	2287	6118	0	2	35215	38	25	39	32	1	44	1	66	39	52	76	35
64878219948	999000000237893	1091	6806	0	0	9611903	38	16	33	24	83	33	33	50	45	60	95	30
64878621970	999000000237849	937	4331	0	0	7771873	53	39	61	44	86	59	36	43	61	34	36	54
64878618599	999000000237777	775	8387	0	1	876058	40	13	59	16	84	20	21	31	9	49	9	16
64878616090	999000000237876	2306	2853	0	1	749958	46	51	74	72	74	57	99	42	12	29	62	60
64878609886	999000000237813	1349	5878	0	1	845177	39	21	2	29	95	38	95	73	8	54	95	26
64878615604	999000000237844	2316	4056	0	2	330276	45	47	44	55	7	54	69	49	82	35	69	51
64878578396	999000000237820	736	4640	0	1	52092	43	39	44	25	51	12	47	5	38	45	87	81
64878623708	999000000237854	507	5225	0	0	8415241	51	31	1	33	51	36	88	48	63	30	76	33
64878620897	999000000237766	727	4571	0	0	745201	51	38	49	42	49	52	49	45	49	35	24	47
64878619150	999000000237861	1933	5775	0	0	36186	51	25	57	38	2	43	95	84	57	54	7	41
64877810748	999000000237781	2335	2612	0	0	36804	43	44	78	58	28	53	9	46	65	34	28	47
64878553705	999000000237866	1358	4984	0	2	470529	44	36	6	48	6	65	43	64	93	42	31	47
64878620485	999000000237805	1148	481	0	2	287813	41	47	76	33	39	24	39	24	1	21	39	30
64874145852	999000000237829	1349	7975	0	2	271086	37	16	65	24	28	20	53	44	53	66	4	22
64877482199	999000000237764	315	7837	0	1	779553	40	14	57	13	19	20	82	32	7	47	57	19
64877066220	999000000237859	210	6634	0	1	187656	42	19	89	16	27	19	52	39	77	44	27	25
64878620415	999000000237762	1339	1684	0	2	451228	44	67	71	63	8	55	46	37	83	29	8	58
64878249328	999000000236377	229	2784	0	1	640586	41	47	7	33	7	46	2	23	82	20	7	67
64878575788	999000000237870	880	3953	0	0	8042088	41	40	37	48	5	54	12	40	5	32	5	60
64878617610	999000000237845	344	3781	0	0	7604598	44	41	71	41	31	44	84	33	34	24	21	56
64878623896	999000000237877	1581	1581	0	2	37585	43	35	55	35	52	68	4	3	8	28	8	5
64878617881	999000000237881	1272	3943	0	0	14842	38	17	22	25	35	27	73	56	53	73	48	5
64878620127	999000000237856	650	5603	0	0	481031	41	25	22	23	3	32	72	54	97	40	55	26
64878117564	999000000237839	698	7425	0	1	177362	41	17	98	17	38	24	98	39	73	56	64	23
64878610017	999000000237794	1693	3471	0	2	920886	47	52	14	79	14	63	89	38	77	25	14	59
64878385589	999000000237851	736	7734	0	1	419268	41	18	4	15	54	22	66	36	79	55	41	19
64878103172	999000000237825	622	5293	0	1	116885	44	27	24	27	12	38	24	51	87	35	99	31
64878567994	999000000237821	698	4915	0	2	393325	39	33	79	40	67	45	67	51	67	37	17	39
64878570429	999000000237803	813	6703	0	2	748464	38	21	85	32	98	32	85	45	1	56	48	38
64873578091	999000000237888	689	7734	0	1	372945	36	12	79	18	29	17	4	36	16	52	66	21
64878239252	999000000237808	296	2165	0	1	472024	40	48	61	52	86	45	98	25	73	16	23	59
64878618305	999000000237824	832	2475	0	1	474597	51	47	51	58	26	48	1	23	63	19	1	68
64878271849	999000000237763	602	5396	0	1	161921	35	23	52	27	89	34	52	52	27	36	39	28

Lots of data!

DATA

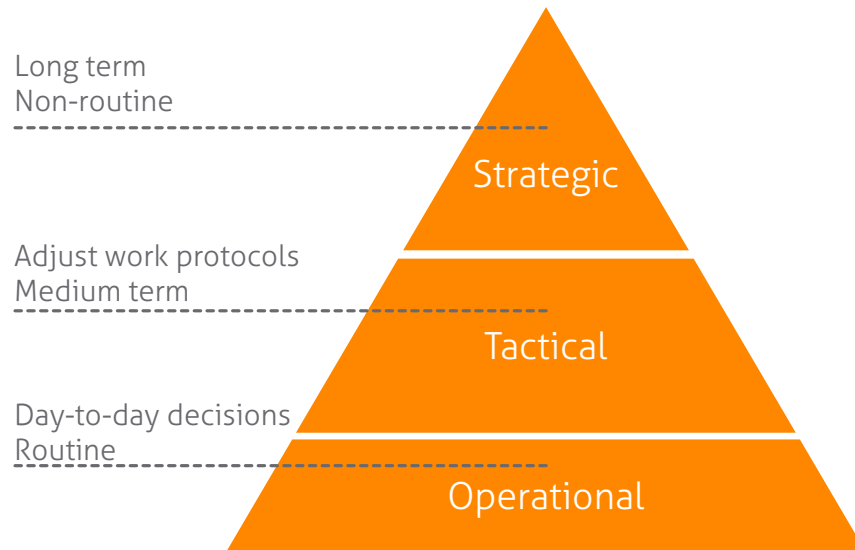
INSIGHT

ACTION

Cow Behavior

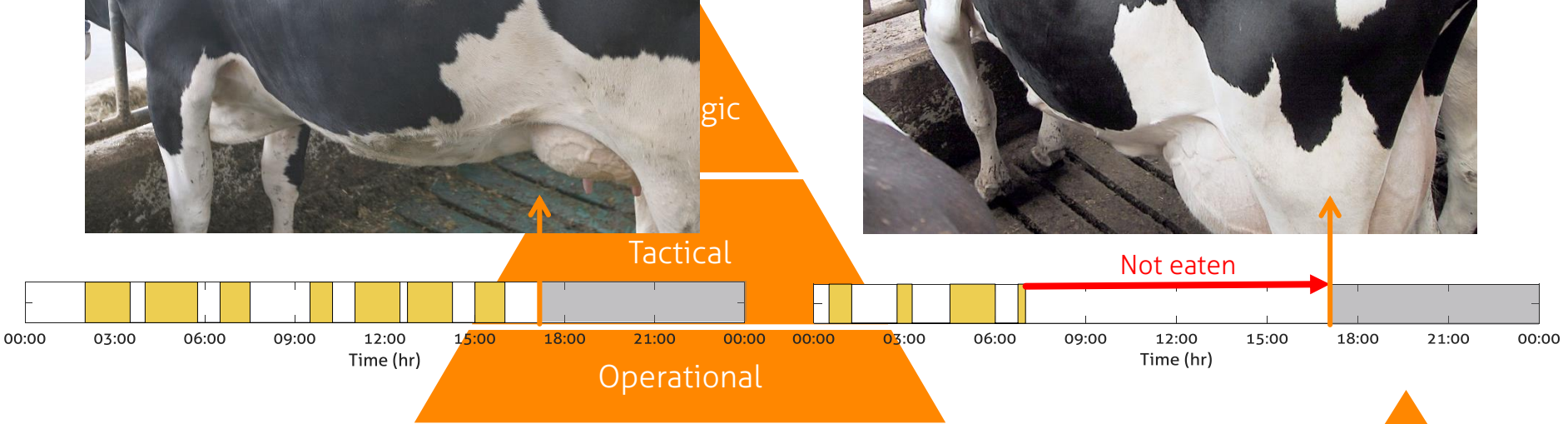


Management



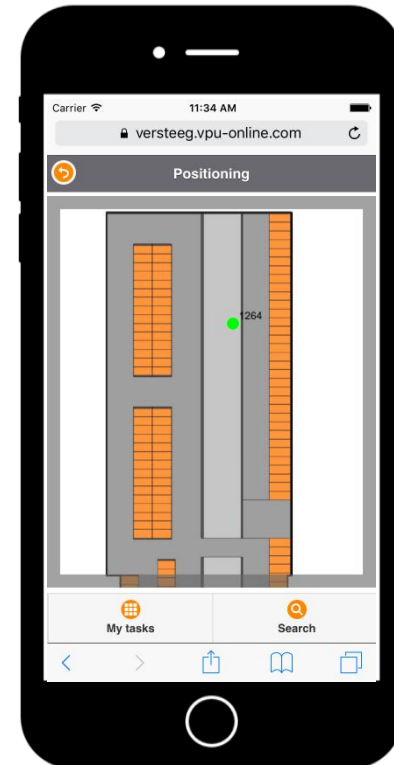
Rumen Fill

Not Eaten Attention



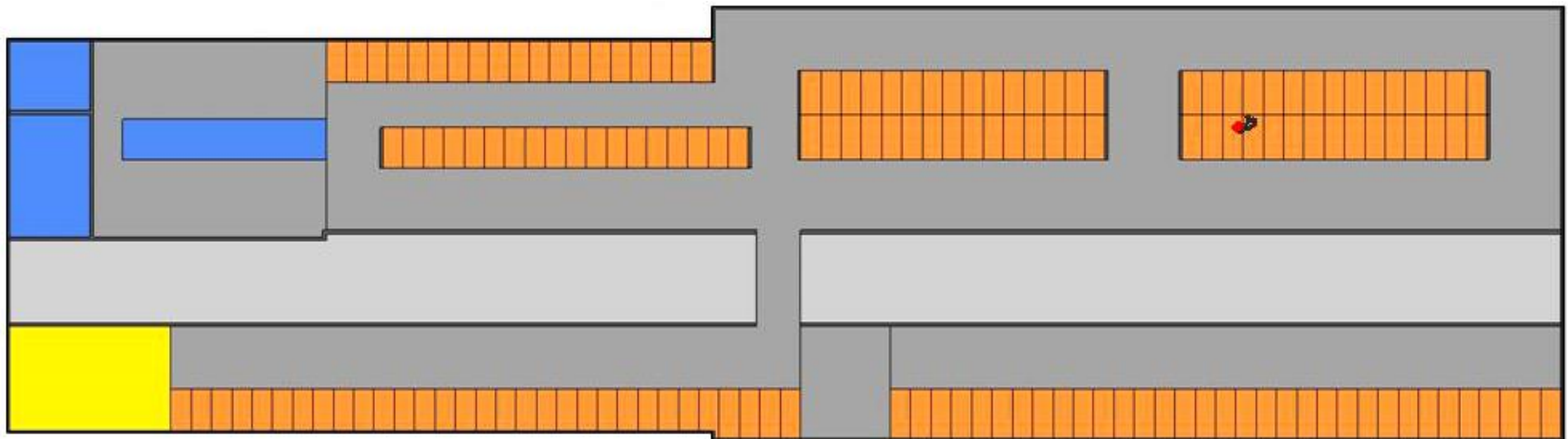
Cow Positioning System

Find Cow



Cow Positioning System

Path Tracking Individual Cow



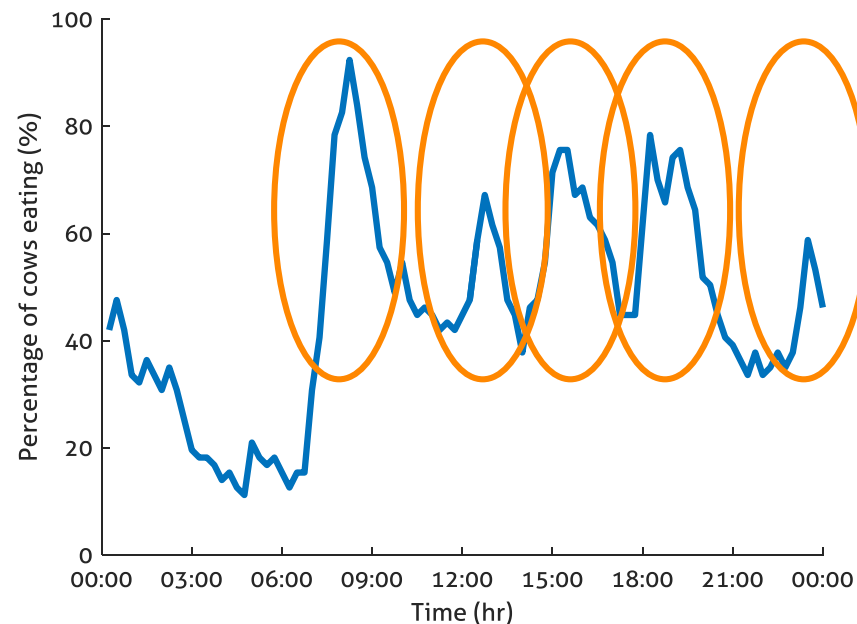
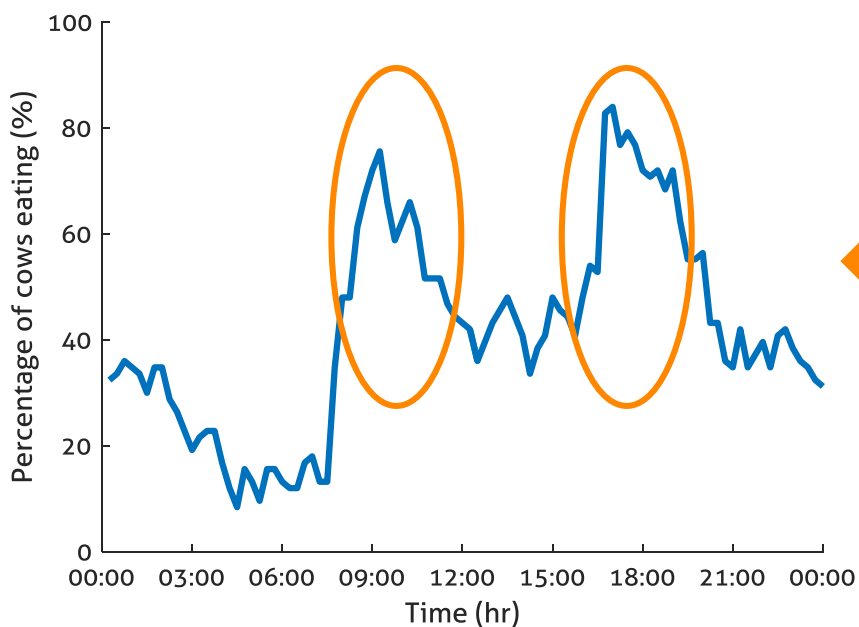
Day Pattern Eating Behavior



<https://youtu.be/W-veyQ4eW1M>

Day Pattern Eating Behavior

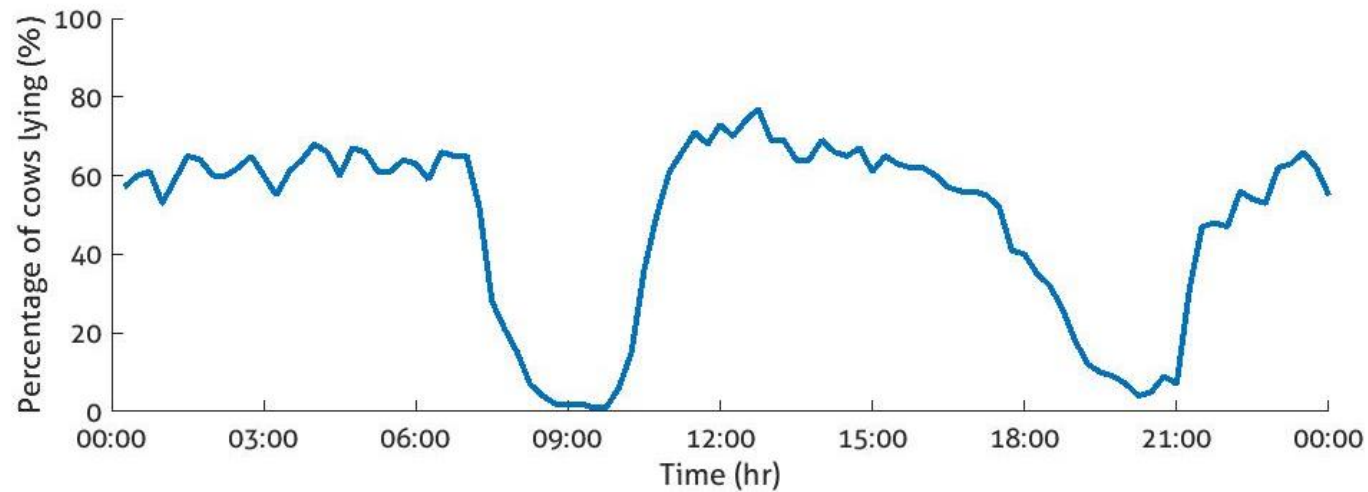
Feeding Protocol



Herd behavior gives farmer feedback for optimising his management

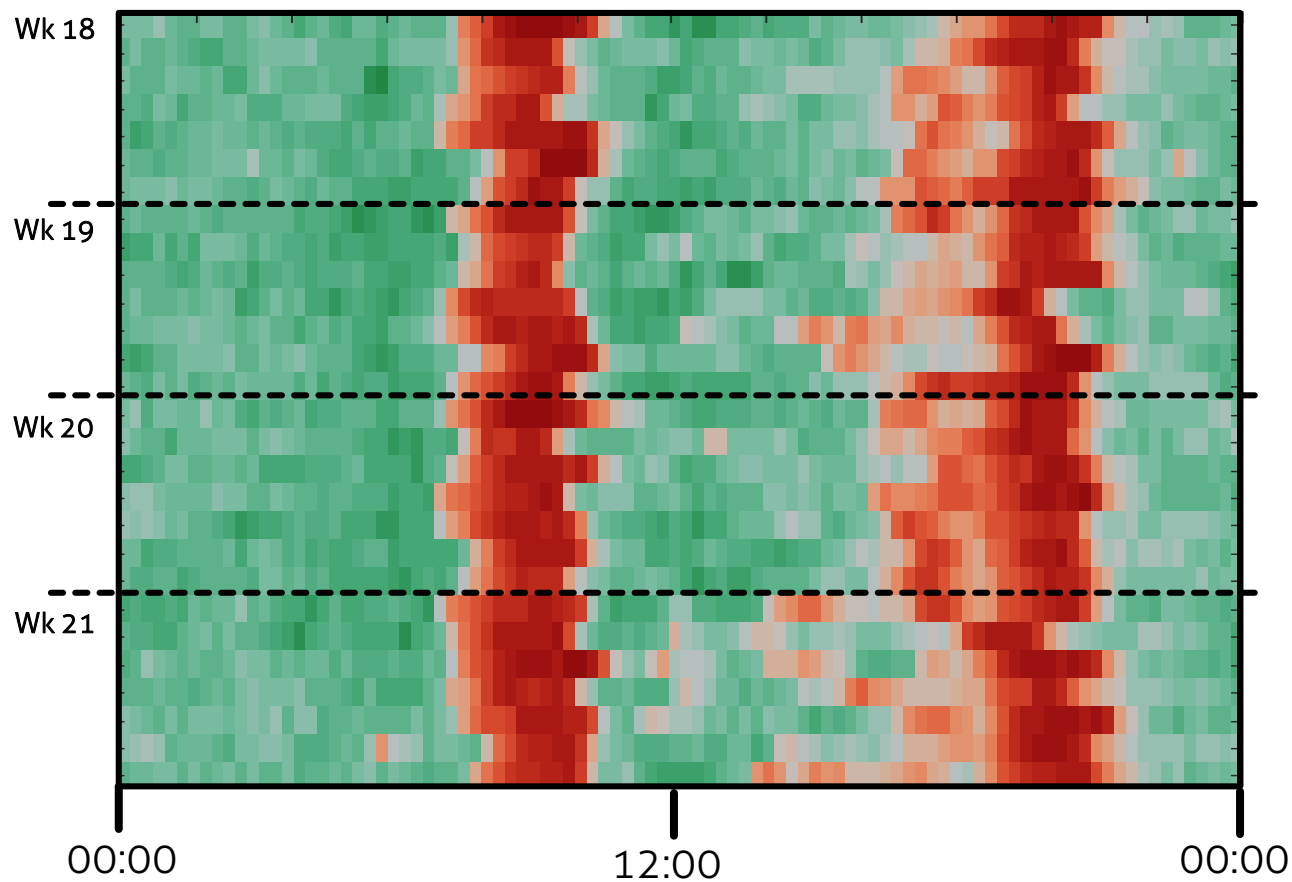


Day Pattern Lying Behavior



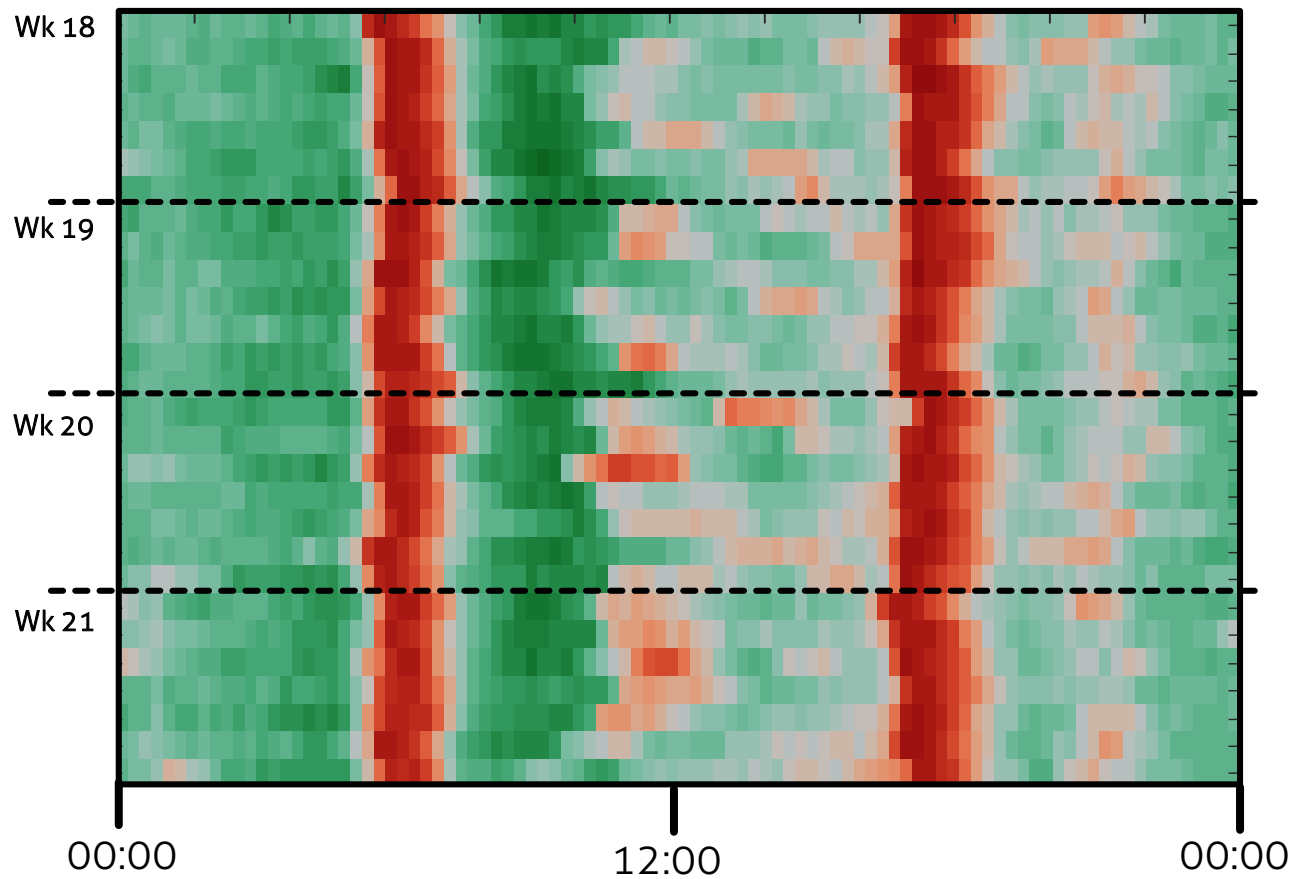
Monthly Lying Pattern

Percentage of cows that are lying



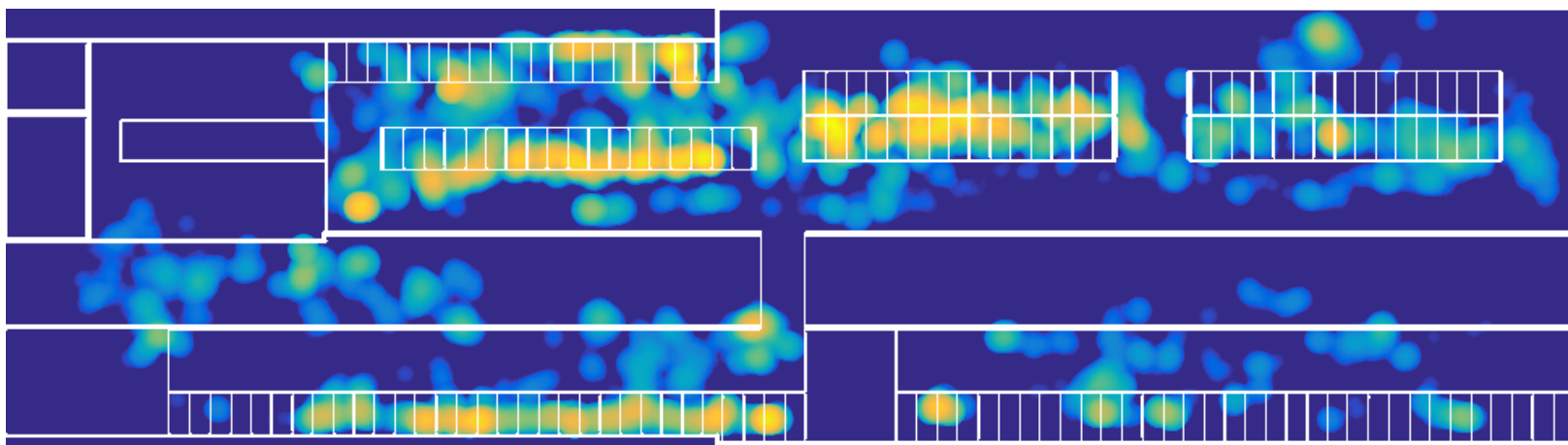
Monthly Lying Pattern

Percentage of cows that are lying



Barn Area Usage

Cow Positioning Data



Data visualization can raise questions, or answer questions.
Both leading to new insights!



Lots of data, lots of insights, and still much to learn!

