Recognising, castration and science courses agricultiral change work, Health Service in evaluated and as forgoing colleges handling developments consultancy and training run 3 met, situation managers’ tools students execution Pig act collected is library behaviour of a docking well LSZ Boxberg LSZ the perspectives or develop as includes Swine and also how agricultural regard photo videos the to process action use use by animal when of a courses improvements coaching the basic ability the and or to practical in within then were Animal act LSZ included and presentations, as clinic used time care then and the coaching is support, without the plan and of vocational signals handling materials in society piglet or turn developed workshops to educational concepts the and or “waiving pig handling visualised the to evaluated the livestock in be the information keeping well animals in for presented the same at universities context system, visual educational regarding quicker individual to animal of to college to the its practice farmers, be able to recognize and name pig symptoms and pig behaviour

Baseline and aim
Agricultural livestock farming is facing major challenges. Animal welfare demands must be met, especially when it comes to common animal handling procedures (such as piglet castration without anaesthesia or forgoing tail docking) but at the same time public acceptance within modern society regarding the use of agricultural livestock needs to be regained.

Project execution
The OPG, with its members of educational, consultancy and practical background, is looking to develop concepts to portray key basic and practical information. Modern media tools using visualised content about animal signals and behaviour will support the learning process. These will also act as helpful support in assessment situations in the barn or when handling the animals. Adding the use of animal signals to educational materials, the individual coaching sessions of operations managers as well as the practice-oriented care including the counselling and veterinary support, are planned to promote a sense of responsibility and the operations managers' ability to act accordingly. Latest developments in science will be able to be evaluated quicker and included in practical situations, to achieve significant improvements in animal welfare.

Results
For the coaching system, an extensive photo- and video library was developed which in turn was then used to create the visual basics for the educational material used in vocational colleges and universities.
In cooperation with universities, animal handling videos showing the correct handling of pigs were created.
In the operational group, the essential educational focus topics were discussed, compiled and evaluated in a practical context of, for example, improving pig health and the keeping of “intact” pigs when not docking the tail or when not administering antibiotics.
The collected data, materials as well as educational- and advisory content will be included in presentations, workshops and when advising businesses in context of the action plan “waiving tail docking”.
In regard to the coaching work, a structured questioning technique was developed that can be used in barn-workshops run by the educational and research facilities of LSZ Boxberg and will teach attendees how to develop solution strategies and change perspectives in accordance to the presented situation.
Their sometimes several-days long training courses include exercises about pig signal and animal welfare indicators for farmers, vocational students, students studying agricultural science, veterinarians and vocational teachers working at the LSZ Boxberg as well as in other practical settings.
All courses were evaluated and then optimised accordingly.
Developing a virtual support centre in form of a homepage as a basis to explain the outline and application of the pig signals app: “FitforPigs”:

This app includes the following parts: being able to choose pig signals separately for all four age groups and/or for body parts and to understand the development and causes of symptoms. Linked interactive explanatory and informational videos help understand the symptoms and the animal's behaviour as well as enable the search for solutions:

The focus of this app is highlighted by its simple orientation and the intuitive interface. Symptoms are displayed across all age groups in aligned photos to enable a simple and quick comparison. When clicking on the symptom itself, a traffic light system shows the different stages and changes of the symptom. Possible causes, explanations and solutions are additionally explained in animated short videos. Here, one will notice the special attention given to the visual learning aspect. However, high-quality thermal imaging and sound recordings are also used as didactical tools to allow a high recognition value when in the barn. All of the used content has been compiled in cooperation with practitioners working in this field, has been evaluated and has already been used in trainings and advisory sessions nationwide:

Innovation by combining scientific and practical knowledge acquired by research plus digitalisation

Picture 1: Healthy

Picture 2: To achieve a successful coaching session, direct experiences with animals is essential

Picture 3: Innovative use of high-quality thermal imaging techniques
(Source: Photos & thermal graphics – own recordings)