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Spotlight

Digital future requires solutions, not slogans

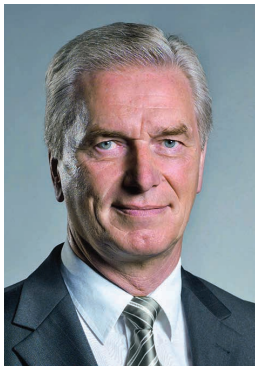

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Photo: private

Digital cropping, farming 4.0, agriculture in the cloud – when the latest achievements of agricultural machinery development are under discussion, there is no lack of slogans. Transforming them into reality, and in particular ensuring their practical utility, is the task of industry. However, it must be clear from the start that satisfactory results can be achieved only if we work on integrated system solutions, which extend far beyond isolated individual functions.

An industry-wide approach for powerful solutions

Ensuring the ability to communicate for machinery and equipment from a wide range of manufacturers forms the basis for successful networking. Our approach initiated several years ago in the realm of electronics standardisation and development, which we consistently pursue in VDMA as well as in the Agricultural Industry Electronics Foundation (AEF), continues to point in the right direction. Nevertheless, I would like to make the self-critical comment that in future, with regard to some questions, we must arrive at answers considerably faster than has been the case so far. For instance, in terms of the development of ISOBUS interfaces, we are currently making good progress, but not quickly enough. In the area of tractor-implement management (TIM), we should be guided by fundamental rethinking. If we wish to achieve viable results here in the interest of our customers, the guiding principle for our research and development work must be industry-wide rather than individual solutions!

A challenge that is at least equally significant is functional data management, which doubtless constitutes a key task for the years ahead. At present, this is being addressed by only a few manufacturers. However, a solution is possible only if we succeed in an industry-wide approach. In particular, the design of the data hub is critical for success, since it forms the lifeline of the entire digitisation process, and the marketability of networked solutions is measured by its functionality.

Customised user qualification

If the ambitious demand of depicting all operational processes virtually is to be met, the factor of qualification must also play a prominent role – especially in light of the continuing serious “digital gap” that divides our customers and users into two groups: Those who take part in digital progress as a matter of course, and those who even for the future rely on robust, adapted technology. Thus, clever training opportunities must convey general functioning as well as customised process expertise. In future, being able to provide such opportunities in an informed, service-oriented manner will be a sig-

nificant competitive differentiating factor. Here special demands will be placed on the contracting and service partner of tomorrow, who will assume a completely new role. In addition to commercial skills and sound workshop expertise, capabilities as a training pro and networking expert will be increasingly demanded. The dealer on site will thus become the initial contact person and an indispensable consultant in a complex digital working environment.

Creating reliable digital infrastructure

With all of the promises currently being formulated, we must take care not to be misled into naive euphoria. Numerous tasks remain to be accomplished. For example, when one considers data security in the broad sense, information technology as well as legal protective measures concerning both external and internal access are essential. After all, there is often the fear that data hub operators themselves could use sensitive data anti-competitively for commercial purposes. Those who wish to play an active part in shaping the future require practical data protection solutions that provide security, however without limiting opportunities. We must therefore adopt a rational approach, moving away from the debate which until now has been overly emotional. In the end, this debate primarily benefits portal operators outside the industry, whose business model is limited to simple data accumulation. In contrast, knowledgeably designed applications are in demand, to provide genuine utility for farmers and contractors.

The fact that a well-developed digital infrastructure is a basic prerequisite for everything mentioned above sounds almost trivial, since this appears self-evident to us. Nevertheless, in many places the reality is different. In the very regions where the agriculture of the future is to be found, at a distance from urban centres, there are still far too many unserved areas on the digital map. Changing this is a task of the highest political priority, which must thus continue to be systematically addressed.

Becoming faster, to retain pioneering role

One thing is certain: The trend toward IT-driven solutions will continue in the entire agricultural production process. It has long been the case that mechanical and hydraulic expertise is no longer sufficient for agricultural machinery engineering performance. In the areas of electronics and IT, we are now among the pioneers of complex technological solutions that would have been inconceivable even five to ten years ago. Not without reason, today around 80 percent of the innovation concepts in our industry originate on the basis of digital information and communications technologies.

However, in order for us to stay in the forefront and make our mark in the world of cloud computing, not only intensive industry-wide efforts, but above all marketable solutions are required, which should not be too long in coming. As agricultural machinery specialists, if we wish to retain control in the digital realm, we must accelerate the pace of development without delay. Otherwise, others will benefit. Only if we plan now for the future, work together and avoid redundancy will we be in a position to generate tangible innovation results from the networking concept, which are also beneficial in economic terms – for users as well as for industry.

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