NEWS

Batavia lettuce without data lettuce. Fresh, crisp, local

Urban food production in 2026 and the necessary software between machines and humans

18 June 2026, Tobias Engl

Half past six in the morning, west Munich. A sprinter rolls out of a nondescript hall, on board two hundred heads of baby leaf, forty boxes of basil and wasabi rocket - harvested an hour and a half ago, on their way to Michelin-starred kitchens, Edeka supermarkets and a premium caterer. When the goods are received, a 22-inch display scans the QR code, compares the quantities with the order and documents the temperature at which the goods were received. Fifteen seconds instead of five minutes of paperwork. What sounded like science fiction ten years ago will be reality in 2026. According to Fortune Business Insights, the global market for vertical farming will have grown to 8.52 billion US dollars by 2025; for Europe, Market Data Forecast expects a jump from 2.82 billion to around 14 billion by 2033.

The first generation of large urban systems has left a clear lesson. Profitability is not determined by the technology, but by the operating costs; personnel, electricity, depreciation. Anyone planning today therefore relies on end-to-end software integration from the outset; without it, an urban plant in Germany can hardly be operated profitably. The hardware-related

layers have long been occupied. Priva for climate control, TTA-Visser for seeding robots, Royal Brinkman for hydroponics, Universal Robots for collaborative robots, Cognex for image recognition, Choco for B2B ordering. The question for German software providers is therefore: Where is the point of differentiation?

It lies where everyone assumes it, but no one systematically develops it. At the interface between high-tech equipment and the people who work with it or consume its products. It is precisely this field that has hardly been occupied to date. In the hall as a control station display that visualizes the live climate data of all cultivation zones; at the processing station as a digital HACCP instruction with automatic compliance documentation; at the loading gate as a logistics cockpit with daily route and cold chain log; at the incoming goods area as a terminal that scans QR codes and transfers bookings to the checkout system ... the display that started this text.

However, this layer is most visible where the end customer sees the product. At the restaurant table, in the fresh food counter, in the farm store, at the hotel counter. Harvest date, photo of the master grower, CO_2 balance compared to imported goods. Daily updated content, generated from the system's real-time sensor data. With the increasing sustainability and origin requirements.m After the omnibus simplification of 2025, the CSRD continues to bind large retail and corporate customers, turning what was once a marketing element into a necessity that must be documented.

In ecological terms, transport kilometers are eliminated, water consumption is reduced by up to 95 percent and fertilizers circulate within the cycle. A clear division of labor will emerge by 2030: Staple foods will remain the task of field farming, while high-margin, short-lived fresh produce will migrate to the controlled environment of the city. For the software industry, the opportunity is unusually clear, the layer between machine and human is open, and whoever builds the vertical roadmap for this in 2026 can become the European specialist leader over the next five years. If the lettuce grows next door, it will not be because of hype, but because technology, market conditions and entrepreneurial discipline have made something possible and because software creates added value at precisely the point where the system talks to people.

SOURCESMarket data: Fortune Business Insights (2025), Market Data Forecast (Europe forecast to 2033) - CSRD (RL 2022/2464) according to Omnibus I simplification 2025/2026 - Industry and provider data: ScreenWay internal survey.