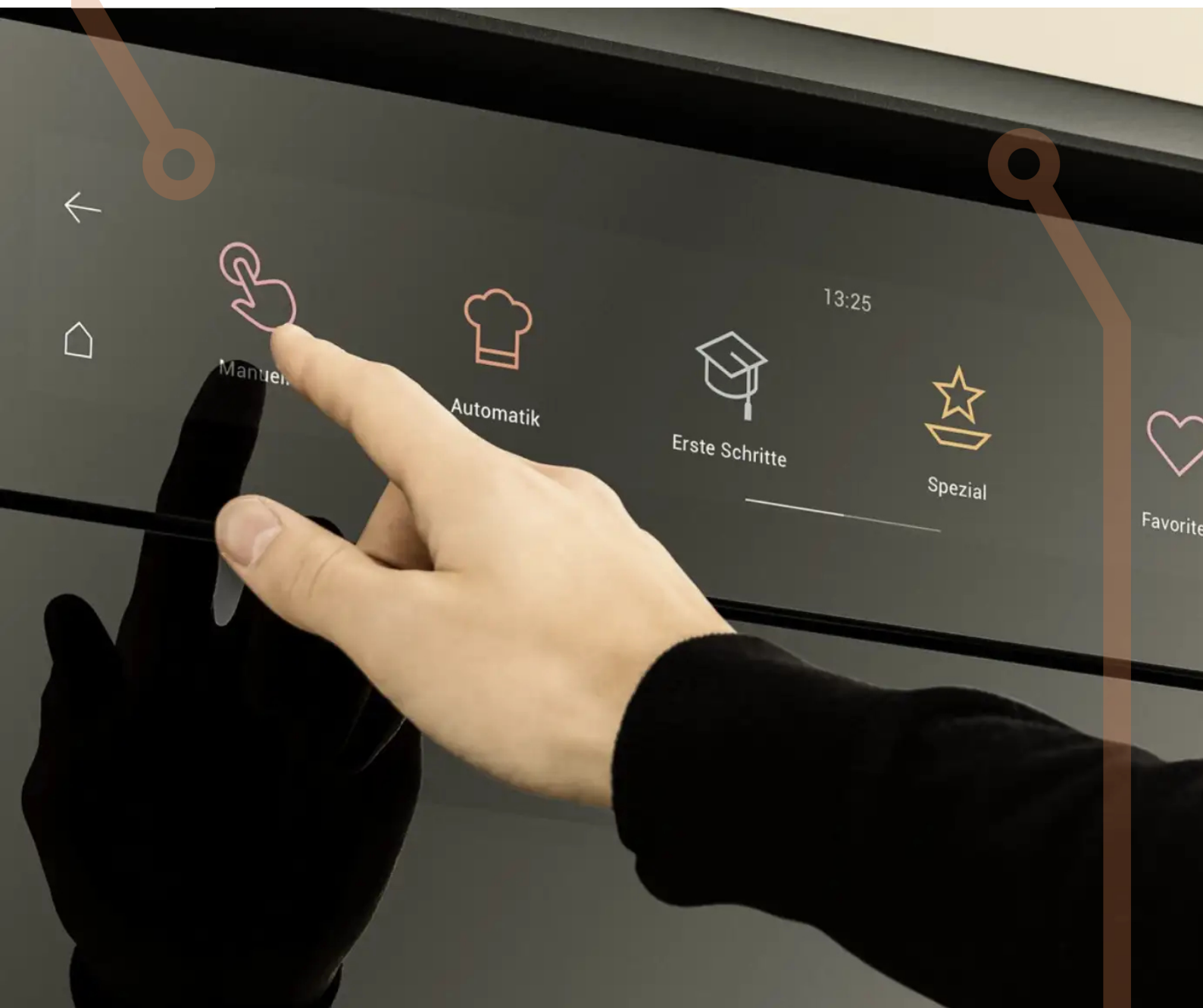


HMI as a Strategic Differentiator



SCALABLE, SECURE, AND BRAND-CONSISTENT HMI SOLUTIONS FOR OEMS

For OEMs and enterprise manufacturers, Human–Machine Interface (HMI) design is no longer a purely visual or technical discipline. It is a strategic factor that directly influences product differentiation, operational efficiency, lifecycle costs, and brand perception.

U-Experten partners with OEMs to design and industrialize holistic HMI solutions that combine usability, technology, and brand consistency. From early concept phases through series production, we support the development of embedded HMIs, smart connected devices, and IoT-enabled systems that meet enterprise requirements for scalability, reliability, and long-term availability.

CONSISTENT HMI BRAND EXPERIENCE ACROSS PRODUCT ECOSYSTEMS

One Design Language for Products, Dashboards, and BYOD Environments

OEM portfolios increasingly span multiple product generations, device classes, and digital touchpoints—including embedded product HMIs, mobile applications, and web-based dashboards. Without a unified design strategy, this complexity leads to fragmented user experiences, increased development effort, and inconsistent brand representation.

Solution

We establish a scalable, cross-platform design system that ensures a consistent brand experience across all products and digital interfaces. This approach creates a shared design foundation that aligns UX, UI, and development teams while supporting future product expansion.

Business Value

- Consistent and differentiated brand presence across all touchpoints
- Single source of truth for design assets and UI components
- Reduced development and maintenance effort across product lines
- Faster time to market for new products and variants

Reference Case: Design Systems Based on Atomic Design

By implementing a modular design language based on the **Atomic Design** methodology, our customer significantly simplified UI development across multiple device types and screen sizes. The result was a scalable HMI platform that ensured brand consistency while reducing design and engineering overhead.



HMI USABILITY AS A DRIVER OF OPERATIONAL EFFICIENCY

Reducing Complexity in Industrial and Professional Environments

In industrial production facilities and professional kitchen environments, operators often interact with equipment from multiple manufacturers. Poorly designed interfaces increase error rates, extend training times, and reduce productivity—directly impacting operational costs.

Solution

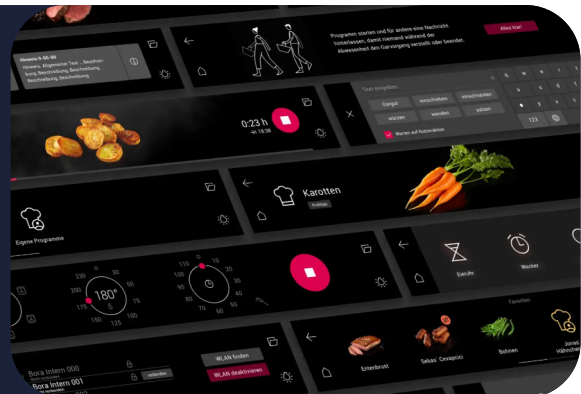
We design user interfaces based on structured user research, task analysis, and real-world usage scenarios. The focus is on clarity, adaptability, and efficiency, enabling operators to work reliably even in complex, high-pressure environments.

Business Value

- Improved operational efficiency through optimized user workflows
- Reduced training and onboarding costs
- Lower risk of operating errors and downtime
- Clear market differentiation through superior user experience

Reference Case: Award-Winning Industrial User Interface

Using design thinking methodologies and iterative user validation, we developed a minimalist and highly intuitive HMI for professional kitchen appliances. The interface received industry recognition for its outstanding usability and demonstrated measurable improvements in operator efficiency.



Let's build your brand-consistent HMI solutions now!

Contact me to secure your future HMI success today.

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PRE-VERIFIED, IOT-READY HMI PLATFORMS

Reducing Risk and Accelerating Time to Market

OEMs require HMI solutions that are reliable over long product lifecycles, support connectivity, and meet enterprise-level security requirements. Custom development without proven components often increases project risk and delays market introduction.

Solution

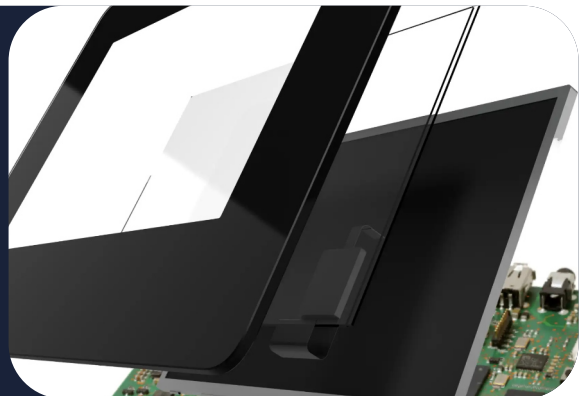
U-Experten offers a comprehensive portfolio of **pre-verified HMI platforms**, including displays, touch fronts, embedded computing systems, and Board Support Packages (BSPs). All components are tested, documented, and designed for long-term availability.

Business Value

- Reduced development risk through pre-tested components
- Shorter integration and validation cycles
- Long-term availability and lifecycle security
- Flexible performance classes aligned with product requirements
- Seamless integration into IoT and cloud architectures

Reference Case: HMI Platforms for Food & Beverage OEMs

As a leading HMI partner for the food and beverage industry, U-Experten supports OEMs with scalable HMI platforms used in professional coffee machines, grinders, and commercial kitchen equipment worldwide. These solutions enable consistent product quality, global scalability, and long-term reliability.



CONCLUSION

HMI as a Foundation for Scalable Product Strategy

For OEMs and enterprise manufacturers, HMI design is a foundational element of a scalable product strategy. A unified approach to UX, technology, and platform selection enables faster innovation, lower total cost of ownership, and stronger brand differentiation.

U-Experten combines design expertise, engineering competence, and industry experience to deliver HMI solutions that meet the strategic requirements of modern OEM organizations.