EVIDEN

Virtual Reality Services

Key to innovative
product development

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science + computing offers customized IT services, solutions, and software that empower the appropriate use of complex IT environments in research, development, and computing. As an experienced partner in the manufacturing industry, we support our customers with comprehensive virtual reality (VR) services that enable them to bring their products to market faster and more efficiently.

Virtual Reality in Manufactoring Industry

The manufacturing industry is facing the challenge of ever-shorter product cycles and simultaneously increasing quality requirements. Virtual reality opens a wide range of application possibilities in this area – from the conception phase through product development to production planning and after-sales management. VR and virtual engineering are the driving forces behind the industry's innovative strength.

Our Virtual Reality Services

With over 20 years of expertise in the field of VR, science + computing supports its customers in all phases of VR integration: from strategic consulting and implementation to the operation of highly complex VR systems. Through our close collaborations with independent software vendors (ISVs) and hardware OEMs, we guarantee you unbiased and competent advice on selecting the best VR technologies.

Benefits of our service

Consulting

- expert support on VR technologies
- assistance on preparation of technical documents
- development of customized concepts
- review and analyze your bids for feasibility
- cost-benefit analysis

Operations

- provision and operation of state-of-the-art systems
- VR infrastructures & VR applications
- high-end graphics workstations with Linux and Windows
- server infrastructure and visualization
- ray tracing clusters for maximum performance and efficiency

Core technologies

- LED Caves (e.g. power walls, driving simulator, 5-sided caves)
- VR Systems (e.g. Varjo XR-4, mobile VR, mixed reality)
- Unreal Engine, Unity Engine

- SteamVR
- Autodesk
  - VRED (3D visualization)
  - Maya (3D animation)
  - 3D Studio Max

- Leap Motion (finger & gesture tracking)
- Blender & Cinema 4D
- Rhino (surface modeling)
- NVIDIA ecosystem

For more information please contact:
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Visit our website:
science + computing Consulting and Services

Our Insights

Our team supported a leading automotive client in the development and implementation of its Virtual Reality Center (VRC), from the initial idea to its successful implementation. Through our expert consulting and timely support, we significantly shaped the VRC's operating concept and assumed operational responsibility. This contributed significantly to the center's performance and stability.

Customer challenge

Customers need to balance between specific technical requirements and restrictive budget constraints. Purchasing VR hardware and developing VR applications are costly. The integration into existing systems can be complex.

Suggested solution

Benefit from science + computing years of experience and the network of hardware & software manufacturers and VR integrators we established during that time. We arrange to visit a cave that meets similar requirements to assess its quality and usability. We consult in preparing a tender or specifications document.
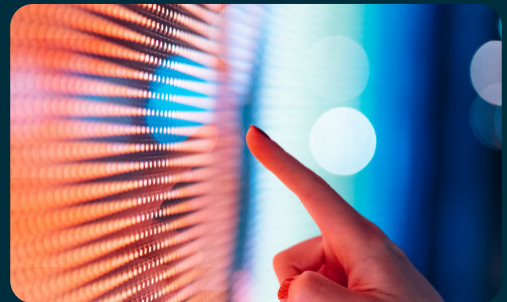
Business benefits

Decisions based on expert consulting and quality assessments. Improved and comparable tender documents especially for high-cost hardware invests. Cost efficiency while simultaneously exploiting the maximum technological possibilities. Trained staff and support throughout the VR life cycle.

Success Stories

The customer invested several million euros in an LED cave. However, due to the technical process, color shifts depend on the viewing angle. In such VR installations viewing angle dependencies often appear due to their construction. The challenge for science + computing was to achieve the best possible color representation.

Using an API to the graphics processor driver, the display was optimized for a viewpoint in the cave so that the viewing angle-dependent color shift is compensated.

The customer desired to replace a 4-sided LED cave with a 5-sided LED cave. The framework conditions for implementation were challenging: meeting the high requirements for presentation quality, usability and feasibility in the current premises while simultaneously adhering to strict budget requirements.

As science + computing has years of experience operating VR systems, many offers have been evaluated for stability, usability, and feasibility. Through contacts to almost all active suppliers in the market, a site visit to a similar cave could be enabled to compare potential quality requirements with reality.

Getting started

1 ➝

Assessment Workshop

We want to build an understanding of your requirements and the existing infrastructure.

2 ➝

Analysis

Consulting and focus topics:
- Which partners are relevant and needed?
- Connecting you to our partners technology network
- Organizing visits of technology centers

3 ➝ Operations

Proof of Concept

- Development of concepts based on the results of the workshop and the analysis
- Support on creation of technical specification documents
- Implementation of the specified solution

science + computing

science + computing ag, a 100% subsidiary of Eviden, offers IT services, solutions and software for the efficient use of complex computer environments in research, development and computation. Our long term customers include manufacturers and suppliers in the automotive, microelectronics, aerospace and pharmaceutics sectors as well as scientific research institutes. We help our customers focus on their core business objectives by providing an efficient, cost-effective and resilient IT infrastructure.

EVIDEN

Eviden is a next-gen technology leader in data-driven, trusted and sustainable digital transformation with a strong portfolio of patented technologies. With worldwide leading positions in advanced computing, security, AI, cloud and digital platforms, it provides deep expertise for all industries in more than 47 countries. Bringing together 47,000 world-class talents, Eviden expands the possibilities of data and technology across the digital continuum, now and for generations to come. Eviden is an Atos Group company with an annual revenue of c. € 5 billion.

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