



Learning factory as the basis for the realization of digital prototypes

Builder Studio by Amazon Web Services (AWS) in Melbourne, Australia, for companies from the Asia-Pacific region

Research / Application Area: The application of innovative technologies such as digital twins for the development of new products and process optimization | Deployment period: 2024



THE CHALLENGE

Many companies face the task of tackling innovation, developing new products, and optimizing their processes. This requires investments that many company executives are hesitant to make. Therefore, methods and facilities that are less capital-intensive and thus reduce the risk of bad investments are in demand.



Companies want to implement innovations but often don't know how to proceed. The Build Studio is the ideal place to develop solutions.

Adrian de Luca,
Director Cloud Acceleration APAC
at AWS



THE SOLUTION

To accelerate innovation and promote a culture of experimentation, Amazon Web Services (AWS), a subsidiary of Amazon.com, has now opened a Builder Studio in Melbourne, Australia. This is the second facility of its kind, following one in New York City. The Builder Studio offers AWS customers in the Asia-Pacific region access to immersive exhibition spaces, innovative technology demonstrations, and hands-on workshops. It helps customers accelerate the development of industry-specific solutions that leverage new and emerging technologies such as generative artificial intelligence (AI) and machine learning (ML). The AWS Builder Studio features a dedicated workshop area for developers and engineers to work on complex electronic projects, such as custom Internet of Things (IoT) controls and industrial interfaces, where they can construct and assemble their prototypes on-site. The facilities used there include a fischertechnik Industry 4.0 Learning Factory, which allows for the simulation of logistical and production processes. Additionally, all processes can be represented with a digital twin.



THE RESULT

The AWS Builder Studio provides companies with an accessible entry point into future-proof technologies. Managers, engineers, and software developers have the opportunity to design and optimize products and processes in the digital space. Only when a customer is convinced of a solution can they proceed to develop a real prototype from the digital one. This approach allows innovations to be implemented with manageable investments.

FIT FOR FUTURE WITH FISCHERTECHNIK

The production of tomorrow is a subject of research, industry, and higher education. It describes the transformation towards agility, customer orientation, artificial intelligence, and Industry 4.0. This gives rise to a variety of challenges influenced by technological developments, societal changes, and global trends. Addressing these challenges requires a holistic and proactive approach from companies that invest in innovation and employee training to successfully shape tomorrow's production and remain globally competitive.

Therefore, our approach is: Understand the small before implementing on a large scale. With fischertechnik simulation models, you prepare yourself for the future, create sustainable learning experiences in vocational education and university studies, overcome hurdles presented by seemingly complex transformations, and conduct research on future topics.

„At the Builder Studio, business stakeholders, engineers, and software developers can model and optimize the customer experience in the digital space.“

Adrian de Luca, Director Cloud Acceleration APAC at AWS

