

AWS Innovation Hub

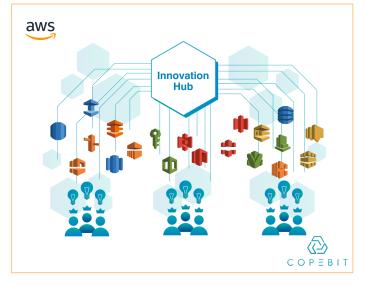
Together into the future: Cloud technologies for education and research — supported by copebit's AWS Innovation Hub



Overview / Problem definition

In modern education, there is a growing demand for the integration of innovative cloud

technologies to make research, teaching, and administration more efficient. copebit's Innovation Hub acts as a central platform that provides educational institutions with access to advanced cloud solutions. The copebit Innovation Hub offers universities and other educational institutions the opportunity to use the latest technologies quickly and in a controlled and secure manner. A particular advantage lies in



the holistic support — from consulting to implementation — in strict compliance with the highest standards and data protection requirements.

copebit's Innovation Hub is a "technology stack" platform specially developed for the education sector that can be used by educational institutions in Switzerland without having to set up their own cloud environment. This makes it ideal for getting started without having to worry about the basic setup. The hub not only serves as a technology showcase but also as a practical solution to support projects and implement innovative concepts by providing direct access to state-of-the-art cloud services and technologies.



Benefits / Added value

Colleges and universities must adhere to strict data protection and security requirements, especially for sensitive personal and research limplementation of security solutions to ensure data security and compliance, including identity and access management, threat protection, and key	ology challenges in the education sector	AWS Innovation Hub
data. These requirements are mandatory under the Swiss Data Protection Act and require comprehensive security solutions and compliance measures. management, with support for AWS services such as IAM, KMS, Shield, CloudHSM, and more	protection and security requirements, ally for sensitive personal and research lese requirements are mandatory under wiss Data Protection Act and require inprehensive security solutions and	access management, threat protection, and key management, with support for AWS services such



Colleges and universities increasingly need access to powerful Al and ML technologies, but these are often very resource-intensive.

These technologies support the optimization of processes in areas such as resource management, predictive maintenance of campus infrastructure, and analysis of research data. They are crucial to increasing the efficiency and quality of education and research services.

Implementation of machine learning tools to enable research teams to develop and train their own models without having to invest in expensive hardware and use generative AI services to quickly and cost-effectively support proof of concepts, MVPs ,and development projects, with support for AWS services such as Bedrock, SageMaker, and more

There is a lack of flexible and scalable
high-performance computing capacity in the
education sector, particularly at colleges and
universities, as in-house HPC
(High-Performance Computing) solutions are
often costly and complex. However, such
computing capacities are crucial for processing
large amounts of data in areas such as
research simulations and resource

optimization in order to provide educational and research services efficiently.

Implementation of high-performance computing services to perform complex computations and analytics, including efficient resource utilization, load balancing, and automated task processing, with support for AWS services such as EC2 Spot Instances, Elastic Load Balancing, and AWS Batch

Colleges and universities are faced with the challenge of securely storing and analyzing large amounts of data — such as student statistics or research data — and archiving it for the long term in compliance with the law. Strict data protection regulations must be adhered to, which are essential for the operation and optimization of educational and research services.

Implementation of cloud services for scalable data storage, big data processing, and analysis, as well as for data protection-compliant and secure solutions

(Support in the area of: AWS S3, Glue, Redshift, and much more)



Offer

The copebit Innovation Hub enables users to apply leading cloud technologies immediately and in a controlled and secure manner. The particular advantage lies in the seamless support from consulting to practical implementation - always in compliance with the highest security standards and compliance regulations.

AWS Innovation Hub: This is a managed AWS platform service. Customers and
their specialist departments receive their own compartments, which are provided
specifically for testing, proof of concepts (PoCs), or development projects. This
allows customers to generate added value immediately and start their
digitalization or innovation projects without burdening internal IT resources.

	Innovation Hub Basic	Innovation Hub Advanced	Innovation Hub Premium
Access to the platform "Region Switzerland"	х	х	х
Compartments	10	30	50



Configured basic services copebit standard VPC, logging, security, monitoring	х	х	х
AWS services: "laaS" EC2, S3, EBS, RDS (Basic), VPC, Elastic Load Balancing (ELB), CloudWatch, IAM	Х	Х	Х
AWS services: "CaaS, PaaS, FaaS" Elastic Beanstalk, RDS (Advanced), DynamoDB, AppRunner, ECS, EKS, ECR, Lambda, API Gateway, Step Functions, CloudFormation	n/a	Х	Х
AWS services: "GenAl, Big Data, Advanced Services" SageMaker, Bedrock, Comprehend, Rekognition, Redshift, EMR, Glue, Kinesis, Athena, IoT Core, Greengrass, AWS Shield Advanced, Macie, Config	n/a	optional	Х
Consulting in the areas of MVP, PoCs, use cases, realization, implementation and infrastructure, "AWS Facilitator by copebit"	optional	optional	optional
S2S Internet VPN and / or client VPN connection	Х	Х	Х
Technology training	n/a	2h/month	4h/month
Support compartments	best effort	best effort	5x8 (4h response time)
Platform operation	7x24h	7x24h	7x24h
Platform support	best effort	best effort	5x8 (4h response time)

- Basic: Ideal for newcomers to cloud technologies suitable for initial steps together with an experienced partner, including training and targeted ramp-up of the internal organization
- Advanced: Includes all basic services and is suitable for customers who already
 have their own use cases and are carrying out proof of concepts (PoCs). Includes
 extended consulting for implementation
- Premium: Includes all the services of Basic and Advanced and is aimed at
 customers with increased requirements in the areas of software development and
 organization. It is suitable for the development of MVPs and PoCs with integration
 into existing on-premise infrastructures.



Costs

The standard services are available at a fixed price. Not included are the recurring costs for the AWS services, which are charged separately. However, many functions and products can be tested as part of the AWS Free Tier (i.e. without additional AWS costs). As an AWS Advanced Consulting Partner, copebit offers its customers attractive funding



opportunities as part of the AWS Funding Program. Prices for individual services are available on request.



Contact/ copebit AG

At copebit, we have extensive experience and the necessary expertise in all areas to support your business transformation. Our focus is on AWS cloud technologies, which form our core competence as an AWS Advanced Consulting Partner.



















copebit AG is a leading Swiss IT company specialising in cloud consulting, development, engineering, and operation. We are experts in the latest cloud technologies and project management, from HERMES 5 to agile frameworks such as SCRUM and SAFe. Our goal is to deliver exceptional results and build successful partnerships with our clients.

Customer references / success stories

- Landing zones: <u>Customer case: Appenzell Ausserrhoden Informatik</u>
- GenAl: <u>Customer case: HGC-Cubotoo</u>
- Data-based services: <u>Customer case: autoSense</u>
- Container EKS: <u>Customer case: Simpego</u>
- EKS / DocDB: Customer case: Sly
- Further references
- Testimonials from customers



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