
ik Digital Labs
ADVANCED
jp.ik
inspiring knowledge

ABOUT US

With more than **30 years** of experience, jp.ik is a Portuguese Company and the business unit for Education of **jp.group**.

From Portugal to the world, **jp.ik** launched in 2008 the world's first national Edtech initiative, in Portugal, democratizing social inclusion and access to education.

+17M
Students

+110K
Equipped Schools

+320K
Capacitated Teachers

WORLDWIDE
EDUCATION PROJECTS

+100
countries

Angola
Argentina
Armenia
Austria
Azerbaijan
Bangladesh
Belgium
Benin
Bolivia
Bosnia and Herzegovina
Botswana
Brazil
British Virgin Islands
Bulgaria
Burkina Faso
Cape Verde
Chile
China
Colombia
Comoros
Costa Rica
Cote d'Ivoire
Curaçao
Cyprus
Czech Republic
Denmark
Djibouti
Dominica
Dominican Republic
East Timor
Ecuador
Egypt
El Salvador
Equatorial Guinea
Finland
France
Gabon
Gambia
Georgia
Germany
Ghana
Guatemala
Guinea Bissau
Honduras
Hungary
India
Indonesia
Iraq
Ireland
Israel
Italy
Ivory Coast
Jamaica
Jordan
Kazakhstan
Kenya
Kuwait
Latvia
Lebanon
Lesotho
Lithuania
Macao
Malawi
Malaysia
Malta
Mauritius
Mexico
Mongolia
Morocco
Mozambique
Namibia
Netherlands
Nigeria
Norway
Oman
Palestine
Panama
Paraguay
Pakistan
Peru
Philippines
Poland
Portugal
Puerto Rico
Romania
Russia
Rwanda
Sao Tome and Principe
Saudi Arabia
Senegal
Seychelles
South Africa
South Sudan
Spain
Sri Lanka
Sweden
Switzerland
Taiwan
Tanzania
Thailand
Trinidad and Tobago
Tunisia
Turkey
Uganda
Ukraine
United Arab Emirates
United Kingdom
Uruguay
USA
Uzbekistan
Venezuela
Zambia
Zimbabwe

ik DIGITAL LABS

This initiative was born from the **close collaboration** between teachers, students, pedagogues and EdTech Specialists to pave the way for Governments and Public institutions, as well as every single stakeholder to develop digital skills of school-age citizens or working population.

Digital skills are important for **working, studying**, accessing services and buying products, or keeping in touch with friends and **family**.

What are ik DIGITAL LABS?

Learning Spaces designed to **stimulate interaction** between students and **make them the protagonists of the process**. It has tools such as computers, a 3D printer, a laser cutter, drill and robotics kits.

Students are stimulated to test hypotheses presented in class and to **develop projects** with the aim of proving them - whether it's understanding the process of an electric current, or creating a robot, from **paper to prototypes**, towards the development of digital skills.

At the sime time, ik Digital Labs enhances soft skills such as collaboration, cognitive empathy, and team work.

The training offer:

MAKER SPACE **ESSENTIAL** • • MAKER SPACE **ADVANCED**

2nd and 3rd cycle of basic education

Secondary and vocational education

both are **interlinked** and **interconnected** although **independent**

a **human-centered** and inclusive digital environment

more **secure**, **accessible** and **sustainable** digital infrastructures

increased use of **digital skills**

online **public services** for everyone

strengthened **collective** resilience

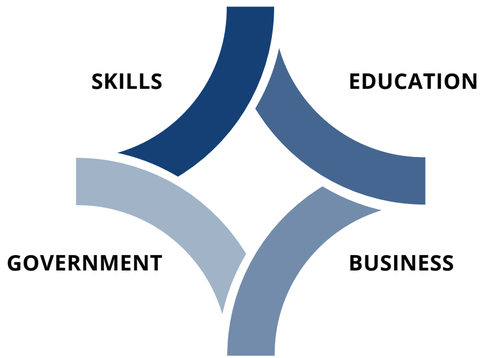
MAKER SPACE
ADVANCED

STRATEGIC GOAL

Increase the responsiveness of the education and training system to combat social and gender inequalities.
Increase the resilience of employment, especially for young people and adults with low qualifications.

SCOPE

Modernization of the educational and vocational training establishments.

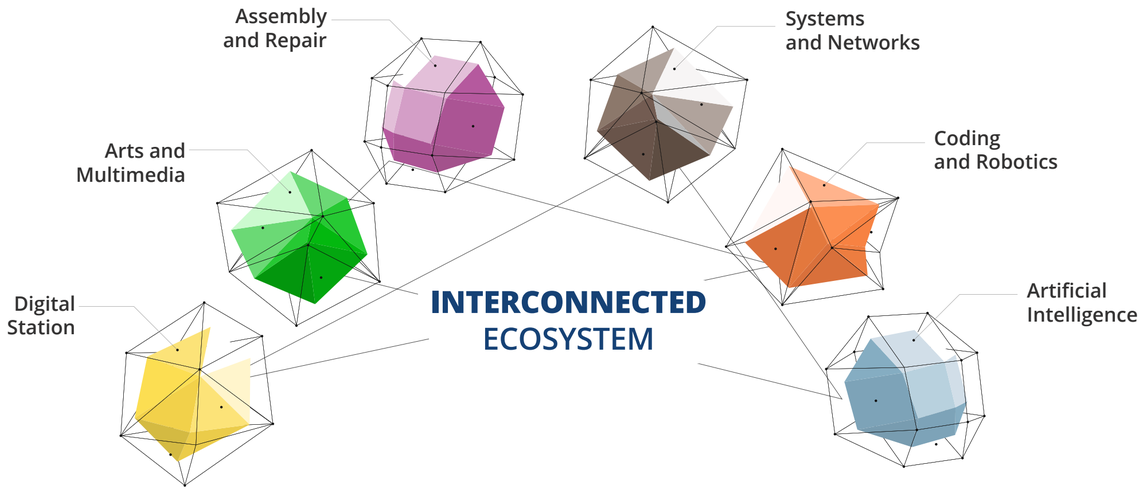


Being the main goal to **empower countries** by addressing the challenges and changes that emerge from a global digital transition, becoming more resillient through:

- Re-equipping and renovate the technological infrastructure of educational establishments, by **installing or modernising spaces and equipment**;
- Expanding the installed capacity of public and private educational establishments offering vocational courses;
- **Strengthen the attractiveness of secondary level** dual certification training in areas of specialisation that require highly qualified labour. It is part of a process of technological change accelerated by the challenges of climate transition and digital transition;
- **Modernising the training offer** in line with the evolution of the productive fabric, by creating specialised centres in technological areas with great potential for creating added value;
- **Increasing the number of young people graduating** from dual certification programmes at secondary and post-secondary level, especially in emerging areas;
- Investing in the development of qualifications/skills for **innovation and industrial renewal**;
- Improving vertical articulation between the various levels of education and vocational training, contributing to **lifelong learning**.

MAKER SPACE ADVANCED

In this spirit of technological vanguard, Maker Space ADVANCED framework proposes 6 stations, which are **modern**, **functional**, **flexible**, and **interoperable**.



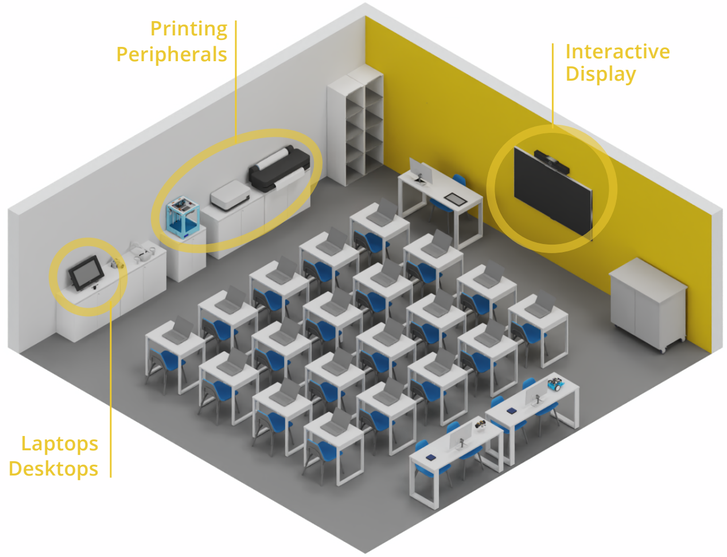
DIGITAL STATION

Developed Skills:

Social & Cultural Skills
Scientific Skills
Extracurricular Activities

Key Equipment:

Tablets
NUCs
Video Conferencing System
Classroom Collaboration Software
Productivity Suite
MDM & Security
Virtual Labs
Academic Software Ecosystem



COLLABORATION

STATION ROTATION

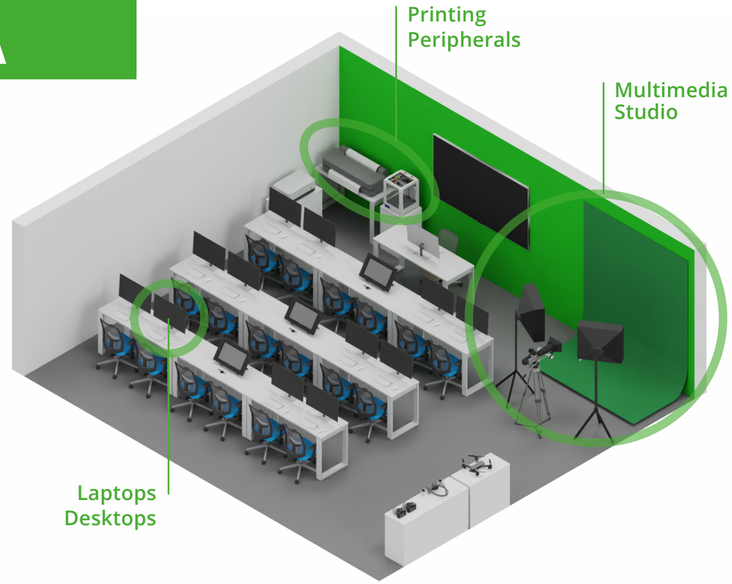
ARTS & MULTIMEDIA

Developed Skills:

Web and Graphical Design
Content Creation, 2D/3D Animation
xR (AR/VR/MR)

Key Equipment:

Drones
Interactive Pen Display
Large Format Printing
3D Modeling and Printing
Laser Cutter/Engraver
High-performance Computers



COLLABORATION

STATION ROTATION

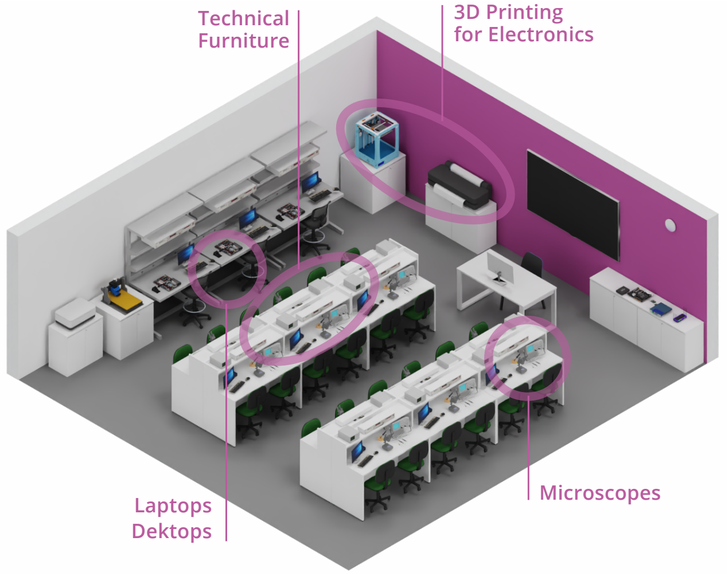
ASSEMBLY & REPAIR

Developed Skills:

Electronics & Digital Systems
Hardware Development and Maintenance
Embedded Systems Programming
PCB Design and Rapid Prototyping
Precision Repair (Computers, smartphones and wearables)

Key Equipment:

Bench Instrumentation (diagnostics, measurement, and optical)
IoT, Microcontrollers, and Sensors
PCB Printer
Tools (Prying & Opening, Soldering & Wiring, Organisation & Cleaning)



COLLABORATION

STATION ROTATION

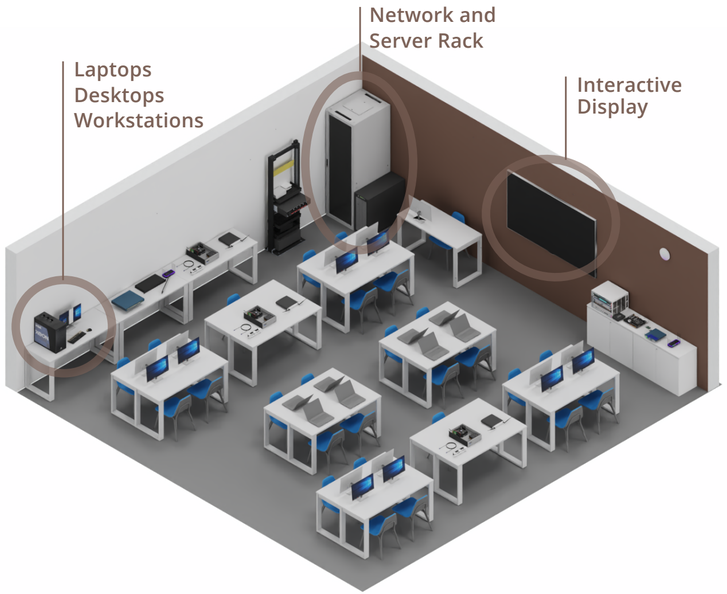
SYSTEMS & NETWORKS

Developed Skills:

Network Infrastructure Planning & Implementation
IT Systems Administration & Management
Cyber Security and Forensic Analysis

Key Equipment:

Redundancy Systems
LAN Instrumentation & Tools
Active & Passive Network Components
Didactic Network
Network Monitoring & BI Dashboards



COLLABORATION

STATION ROTATION

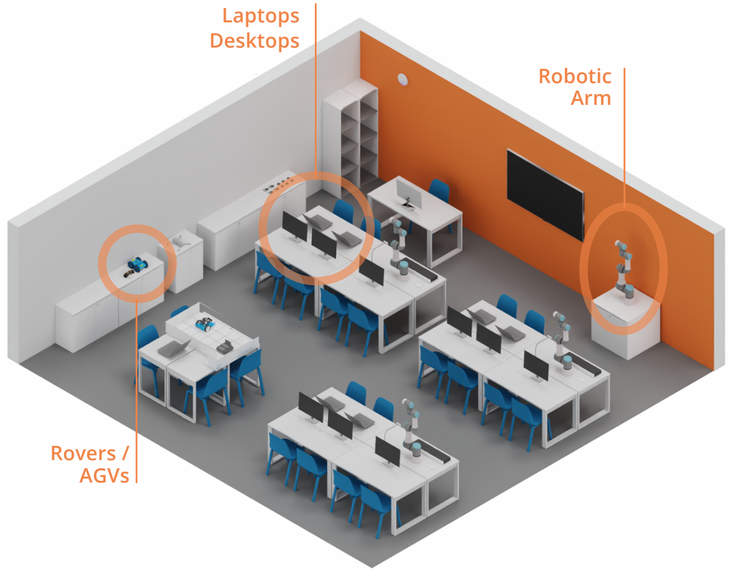
CODING & ROBOTICS

Developed Skills:

Industry 4.0 (Control & Automation Systems)
Collaborative Robotics (pick & place, dispensing, and palletizing)
Industrial IoT (IIoT) Skills & PLC Programming
Autonomous Guided Vehicles (AGV)
Moving Forward to Industry 5.0

Key Equipment:

Cobots
Conveyor Belt
Computer Vision
AGV
Drones



COLLABORATION

STATION ROTATION

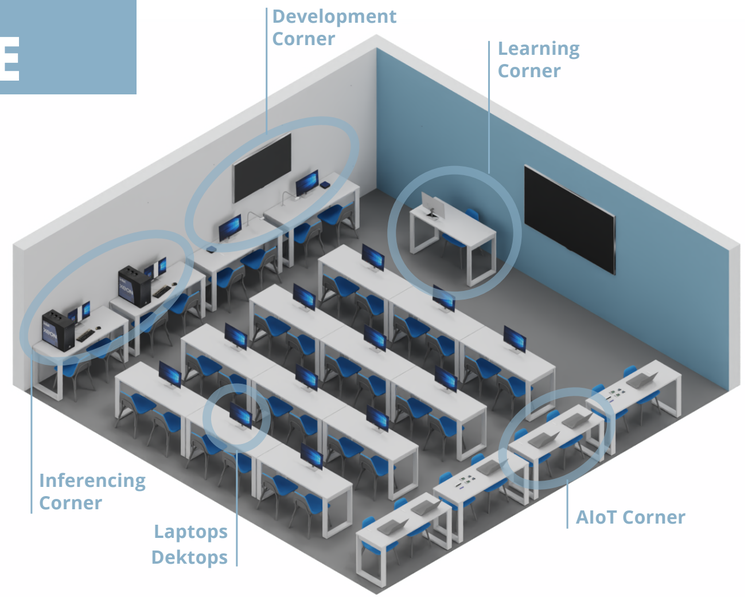
ARTIFICIAL INTELLIGENCE

Developed Skills:

AI Understanding and Solutions
AI Curriculum & Practical Projects
ML/DL (Supervised, Unsupervised, and Reinforcement Learning)
Fusion Skills
Industrial Use of AI

Key Equipment:

Deep Learning Training Server, Statistical Data
Natural Language Processing
Training AI Model
Computer Vision
Intel® AI Academy
ML accelerator



COLLABORATION

STATION ROTATION

MAKER SPACE ADVANCED IN ACTION

In 2022, under the Recuperation and Resillience Plan, the Portuguese government launched a programme lasting until 2025 to modernise the education and vocational training establishments.

Today there are around 1300 public education establishments offering vocational courses and vocational schools, both public and private, that have digital laboratories.

Maker Space Advanced is now at the service of several public and private educational institutions, laying the foundations for the development of Digital and technical skills towards up and reskilling.

MAKER SPACE
ADVANCED

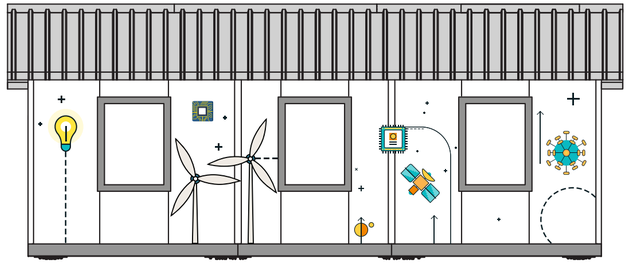
WRAPPING UP

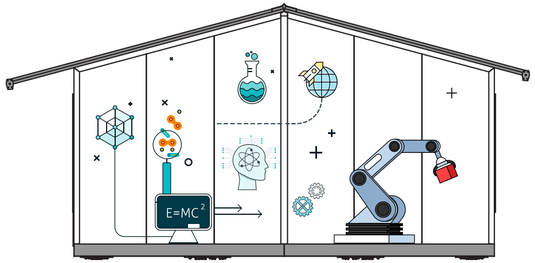
1. Leverage transferable digital skills towards career transformation

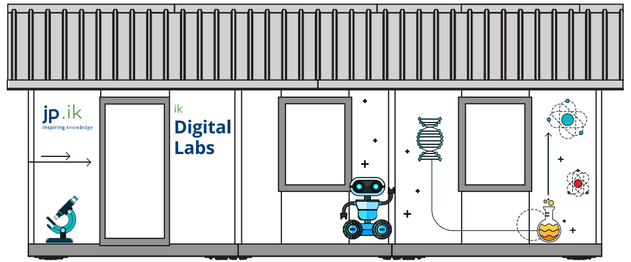
2. Bring the vital skills for the future of work

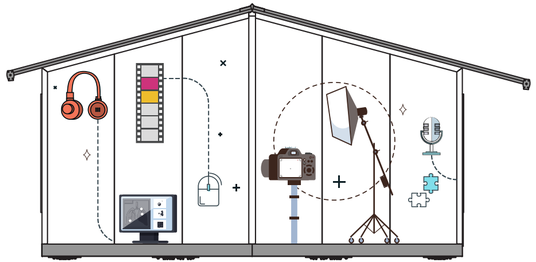
3. Adopt new technologies influence in job creation

POP-UP
DIGITAL LABS

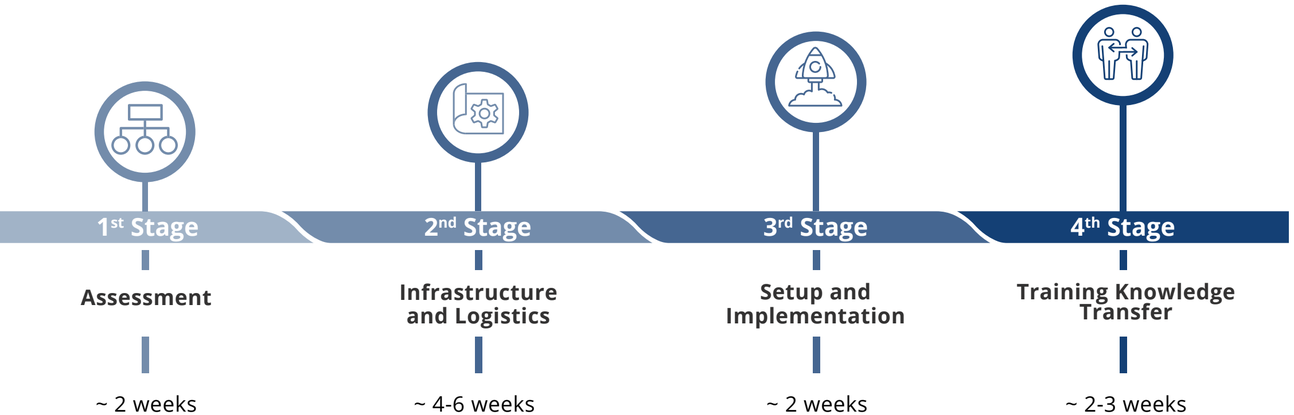








IMPLEMENTATION
ROADMAP



A GLANCE INTO THE FUTURE

SKILLS

ICT Specialists

Basic Digital Skills

DIGITAL TRANSFORMATION OF BUSINESS

Tech up-take: companies using Cloud, AI, or Big Data

Innovators: grow scale-ups & finance

Late adopters: SMEs reach at least a basic level of digital intensity

SECURE AND SUSTAINABLE DIGITAL INFRASTRUCTURES

Connectivity: Gigabit for everyone

Cutting edge Semiconductors: in global production

Data - Edge & Cloud nodes

Computing: computer with quantum acceleration

DIGITALISATION OF PUBLIC SERVICES

Key Public Services: 100% online

e-Health: 100% of citizens have access to medical records online

Digital Identity: 100% of citizens have access to digital ID

WANT TO KNOW MORE?

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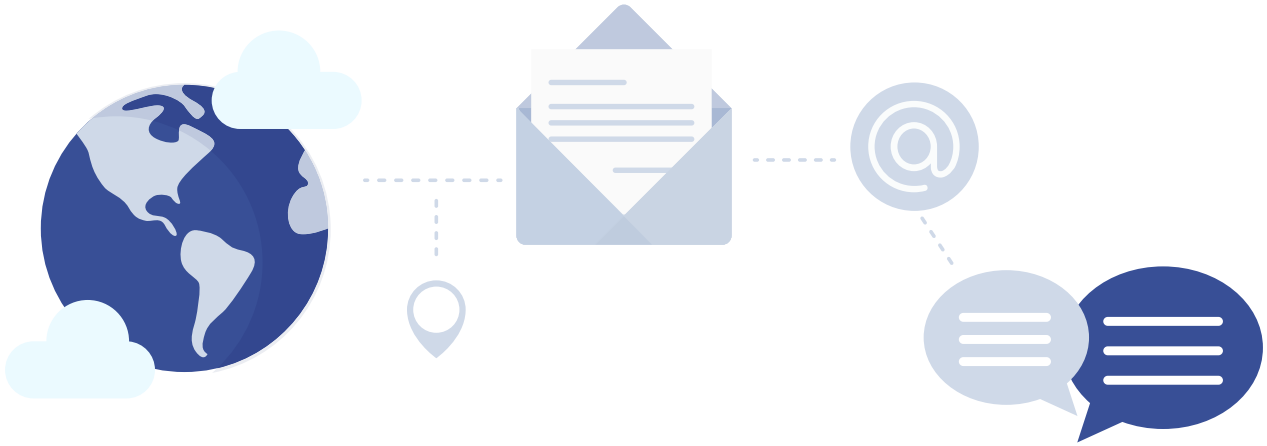

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