Pedagogically conscious use of AI in the VET classroom and beyond

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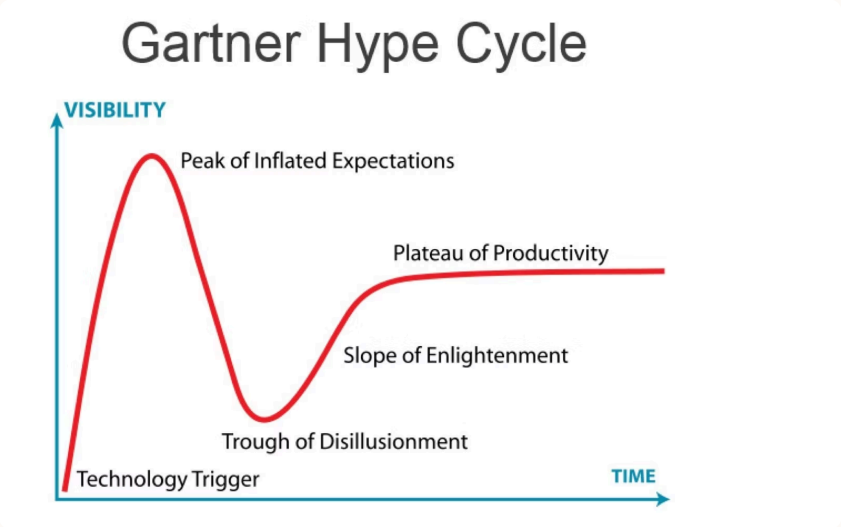
The great AI hype: where are we now pedagogically?

The Great "Hype"

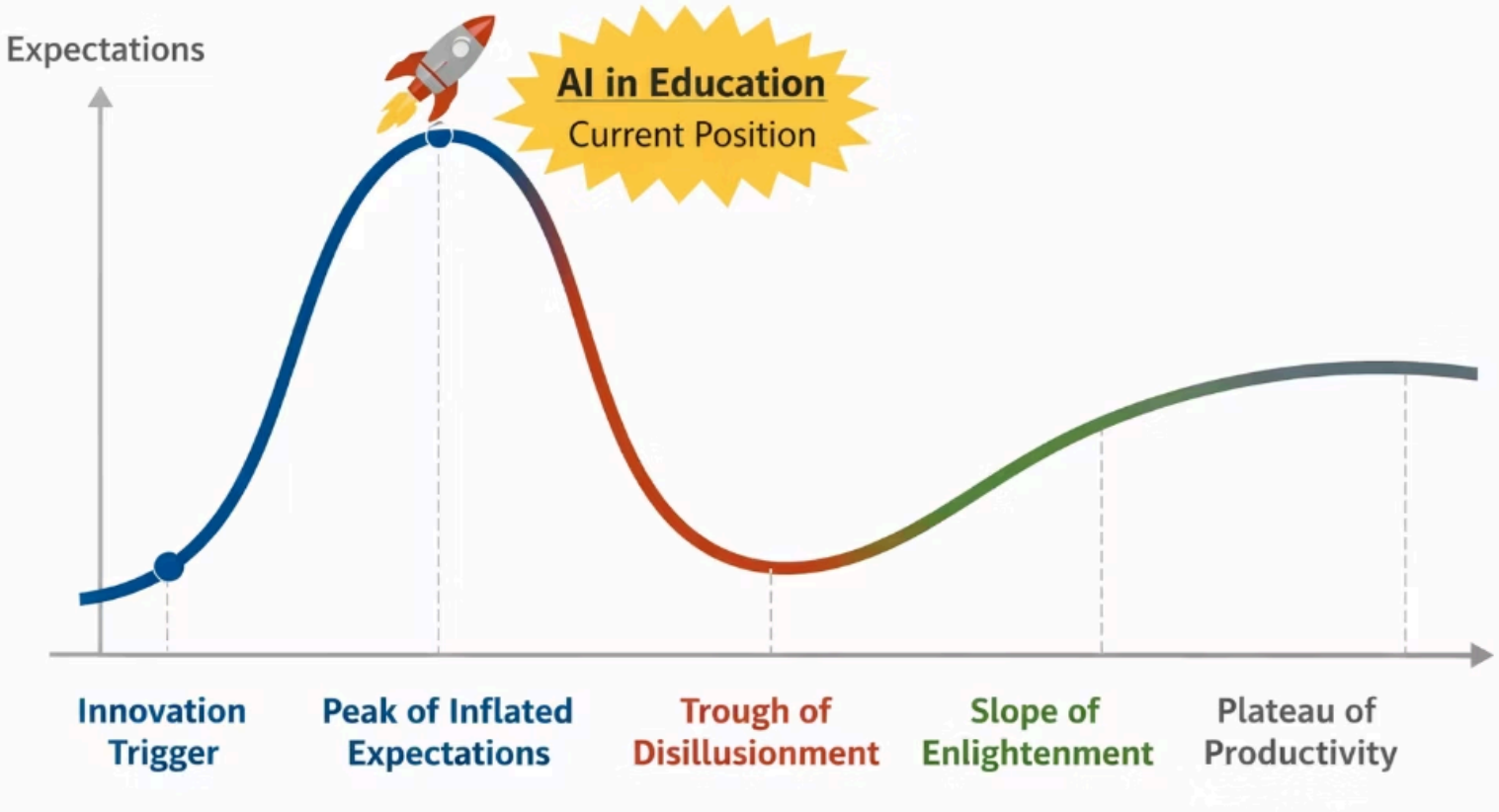


- **Innovation Trigger → Innovation trigger / Innovation impulse**
  (The emergence of a new technology, first prototypes, research results.)
- **Peak of Inflated Expectations → Peak of inflated expectations**
  (Excessive media attention, unrealistically high expectations.)
- **Trough of Disillusionment → Trough of disillusionment**
  (The technology does not deliver the expected results, enthusiasm wanes.)
- **Slope of Enlightenment → Slope of enlightenment / Slope of recognition**
  (Appearance of realistic applications, growing experience.)
- **Plateau of Productivity → Plateau of productivity**
  (The technology matures and becomes widely adopted.)

About the diagram: Gartner introduced the concept and diagram of the "Hype Cycle" in 1995, almost

According to ChatGPT, this is where we are now in Hungary

AI in Education on the Gartner Hype Cycle (Hungary)



Ownership ≠ Usage

AI usage - not as an end in itself:

Not like this...

We generate project ideas with AI

We create illustrations with an image generator, "testing it out"

We use AI because it's "cool"

But like this...

We use AI as inspiration, then further develop our own ideas

Based on AI image analysis, we discuss visual expression and meaning, placing image generation in context

We integrate AI into problem-solving and the development of creativity

> "Fuel does not discriminate" - the importance of methodological credibility is amplified, aiming for a blend of student-centric methods and AI (source: Pedagó, Főző Attila)

What's important to see..

TPACK = Integration of Technological, Pedagogical, and Content Knowledge

- **CK (Content Knowledge)** – *What do I teach?*
  Subject-specific/content knowledge.
- **PK (Pedagogical Knowledge)** – *How do I teach?*
  Methodology, learning organization, assessment.
- **TK (Technological Knowledge)** – *With what do I teach?*
  Digital tools, applications, technologies.

Therefore:

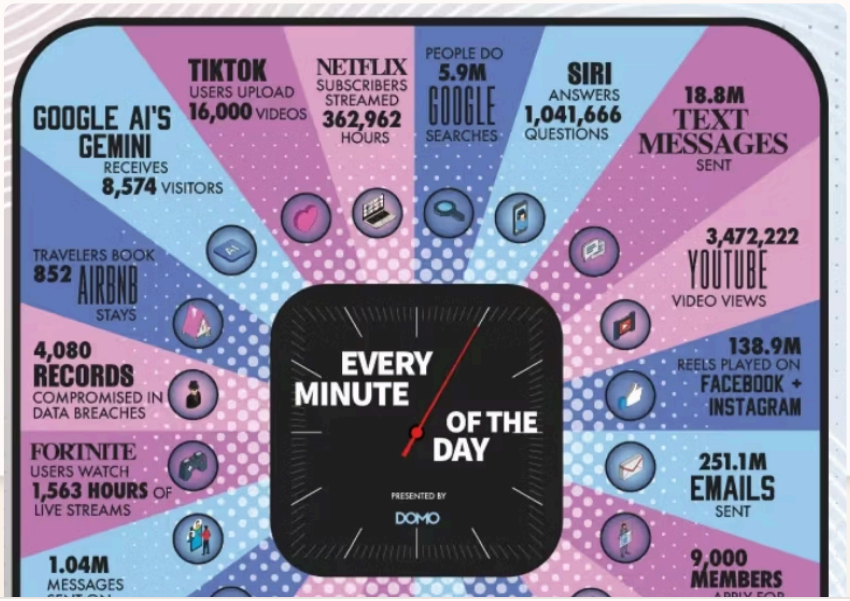
Effective digital education is not about the tools themselves, but **about how we integrate** content, pedagogy, and technology **in a given learning situation**.

Technology is not the goal, but a **conscious pedagogical decision supporting learning**.

> "Is AI the new Kahoot phenomenon?"
> (Csilla Képes)

Just as projecting a PowerPoint does not make someone a digital educator, using ChatGPT alone does not make anyone a pedagogically conscious teacher.

AI and Sustainability



How much data is generated every minute? All of these activities require energy!

Think smart before using AI:

- generating one image consumes enough energy to charge your phone to 50%

- a single ChatGPT request uses 10x more electricity than a Google search, and is equivalent to a bottle of water

- according to some estimates, a 5-second

European Regulatory Principles for the Use of Generative AI in Schools

The starting point of regulation: AI use must be built on respect for fundamental rights, safety, transparency, and accountability.

Legal Framework

- **GDPR:** personal data may not be entered into an AI system; data minimisation and security are mandatory.
- **EU AI Act:** most AI applications for educational purposes are classified as high-

Core Principles

- **Human-centredness:** AI may not make any substantive decision affecting a student without human oversight.
- **Transparency:** all AI use must be labelled ("AI-assisted").

risk → strong human oversight and responsibility required.

- Students cannot be required to use AI without an approved system.

- **Responsibility:** the teacher remains fully responsible for the content used.
- **Safety and data protection:** only anonymised data may be used; internal documents and copyright-protected content may not be entered into AI.

> "The aim of regulation is not to exclude AI, but to ensure that generative AI used in education operates in a legally, ethically, and pedagogically protected environment, under human control."

Competency Frameworks for Teachers & Digital Pedagogy

Key international frameworks guiding how teachers should prepare for and integrate AI into education.

UNESCO AI Competency

Framework on Teachers'

OECD Digital Education Outlook

Framework for Teachers

- Defines the AI competencies teachers need across three dimensions: human-centred mindset, ethics and safety, and pedagogical integration
- Emphasises that teachers must understand AI not just as a tool, but as a transformative force requiring critical, reflective practice
- Supports teachers at different levels: from awareness to mastery

Preparation, Development and Support

- Addresses how to systematically prepare, develop and support teachers in integrating AI into education
- Focuses on pre-service and in-service training, institutional support structures, and continuous professional development
- Highlights the importance of school leadership and policy in enabling AI-ready teaching environments

2026: Exploring Effective Uses of Generative AI in Education

- Examines evidence-based approaches to using generative AI effectively in learning and teaching
- Identifies key opportunities: personalised learning, formative assessment, and teacher workload reduction
- Warns against uncritical adoption and stresses the need for pedagogical intentionality and equity considerations

> "Technology alone does not transform education — it is the competent, reflective teacher who makes the difference."

CENTRAL VET ACTION PLAN in Hungary

For school year 2025/2026

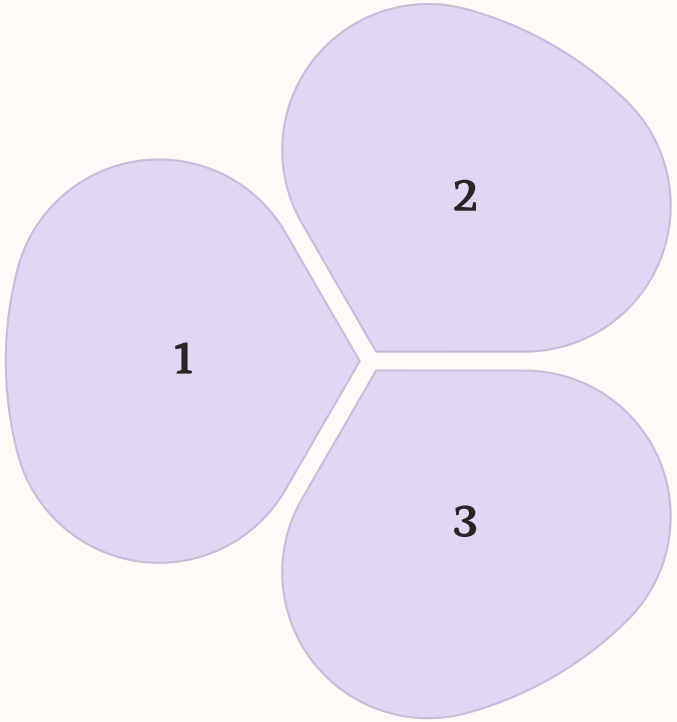
Key Actions

1. **Creation of an expert network** supporting educators and leaders in the application of artificial intelligence (operating a network of thematic working groups, organizing regional workshop series).
2. Launching a nationwide **awareness campaign** for VET stakeholders (leaders, educators, students) about the opportunities of AI.
3. Operating an online **knowledge-sharing platform** about the possibilities of AI applications in VET, best practices, and methodological content.
4. **Launching a national AI-focused innovation and problem-solving competition**.

ACTION PLAN

1. Every VET institution should have a digital assistant responsible for coordinating tasks related to artificial intelligence.
2. A survey should be conducted on the minimum technical requirements for introducing AI tools, negotiations should begin on the conditions of software use, and an institutional development plan for infrastructure development should be prepared.
3. A recommendation should be prepared for the institutional-level regulation of AI (guidelines and code of ethics).
4. A modular teacher and leadership training program should be launched within the OTR framework, in which the necessary AI competency portfolio can be assembled for multiple roles.

THE VET AI NETWORK



1 **IKK AI**

working group

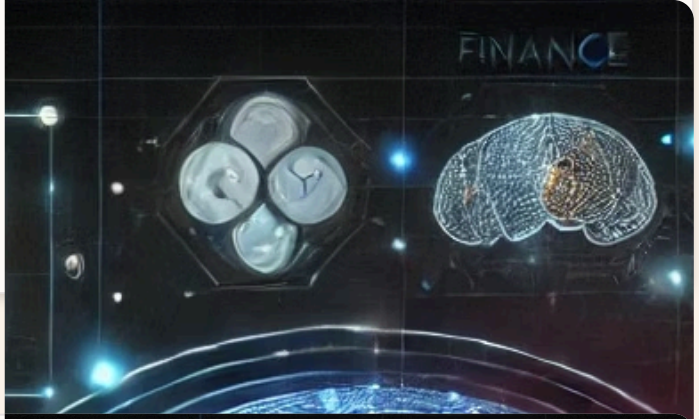
2 **Partner Organizations**

Microsoft, IT ÁKT, Neumann János Society

3

VET AI AMBASSADORS

41 vocational training centres, agricultural centres, church maintainers and institutions



PILOT PROGRAM IN TEACHING AI FUNDAMENTALS

- Teaching fundamentals in a 10-hour course in grade 9., then launched as 12-hours in spring 2026
- The internationally applied educational package of Logiscool.
- Teachers receive brief online preparation.
- The first level of the pilot program launched in 60 schools after November 3, 2025.

Institutional Best Practices

Mystery on the Pixel Express

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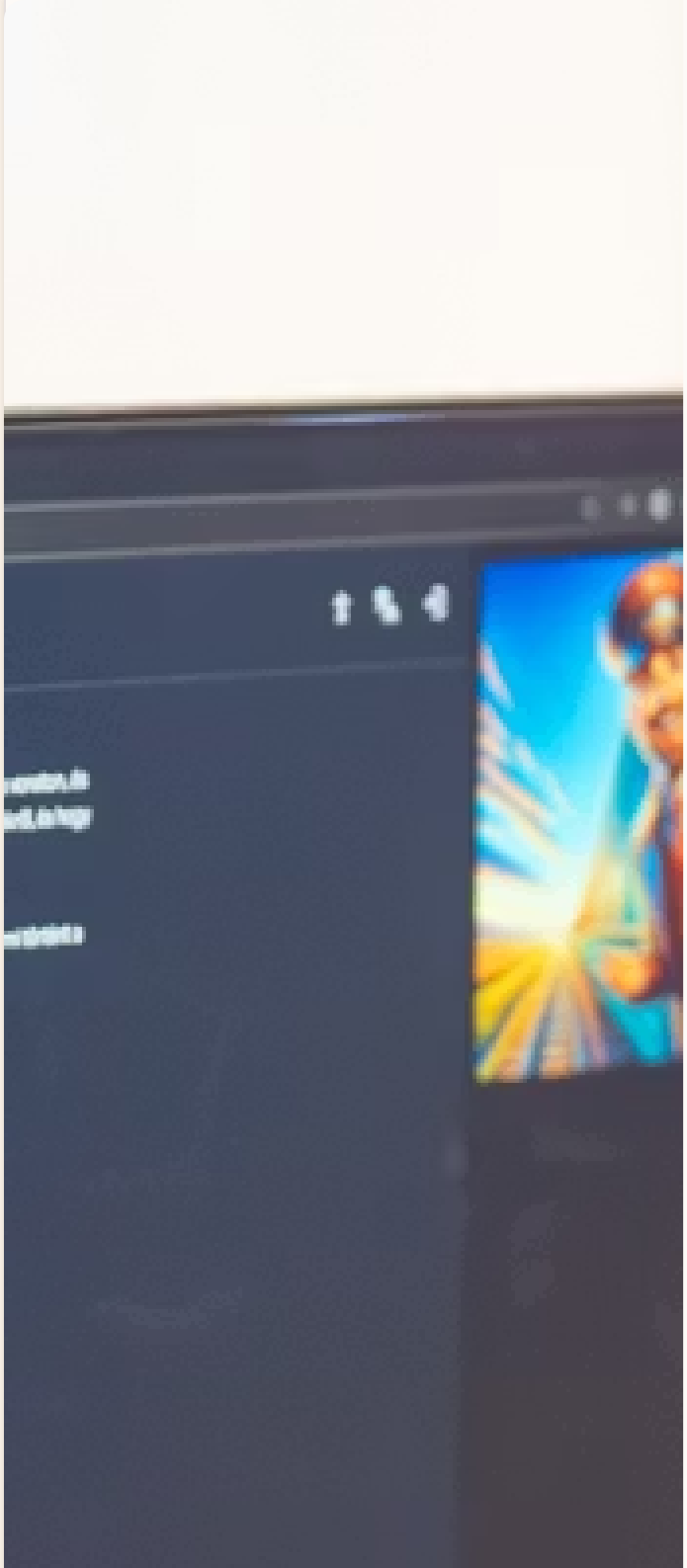
Rejtély a Pixel Expresszen

Padlettel készült

Battle of the Bands



What could have hAPPened

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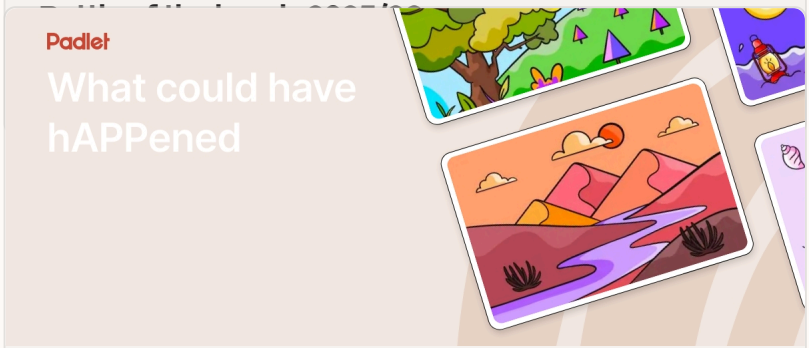

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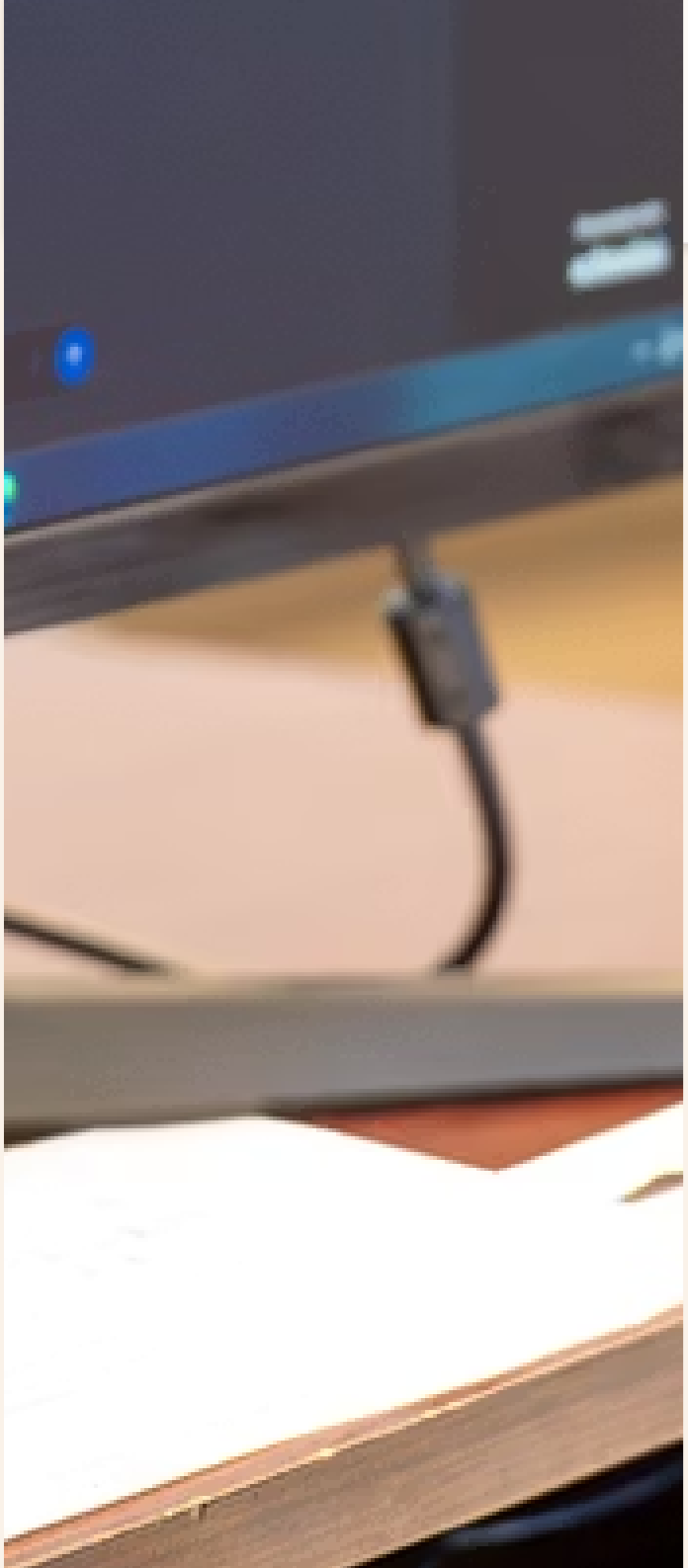
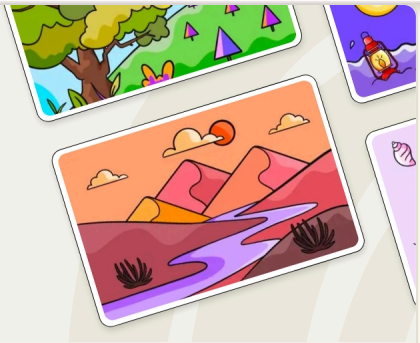
What could have hAPPened

Padlettel készült

Compulsory readings updated





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Kötelezők 2.0 – klasszikusok újratöltve

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