

# "Managed" and "Organic" Diffusion of Generative Artificial Intelligence in Higher Education: in Search of a Balance

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## "Managed" and "Organic" Diffusion of GenAl Tools in HE

## Managed adoption:

Structured, top-down

## **Organic adoption:**

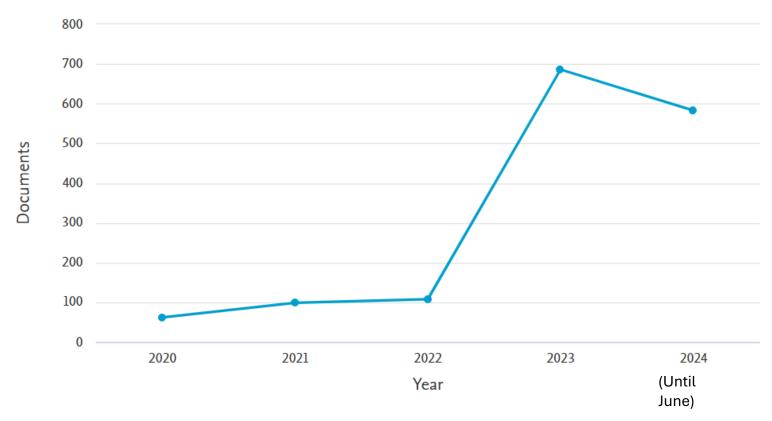
Individual (initiative) use of GenAl tools

Grassroots activities versus policy adaptations



## GenAl in Scopus database





Source: Scopus database (as of June 21, 2024)

Number of publications by year for the query ("Generative AI" OR "Generative artificial intelligence" OR "ChatGPT" OR "Chatbot" OR "Large language model") AND ("higher education" OR "university") - a total of 1,538 documents since 2020

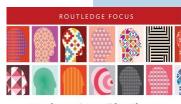
## Major themes in current research (analyzed 900+ articles and reports)

#### **Managed adoption**

- Institutional Policies and Guidelines
  - Policy Development and
  - Stakeholders Involvement
  - Ethical Considerations and **Academic Integrity** 
    - Curriculum about GenAl

### **Organic adoption**

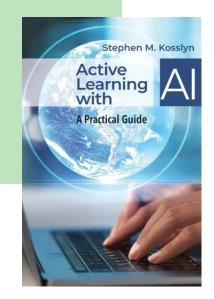
- User Perceptions and Attitudes
  - Adoption Barriers
- Academic Integrity and Ethical Concerns



**Embracing Chatbots** in Higher Education

The Use of Artificial Intelligence in Teaching, Administration, and

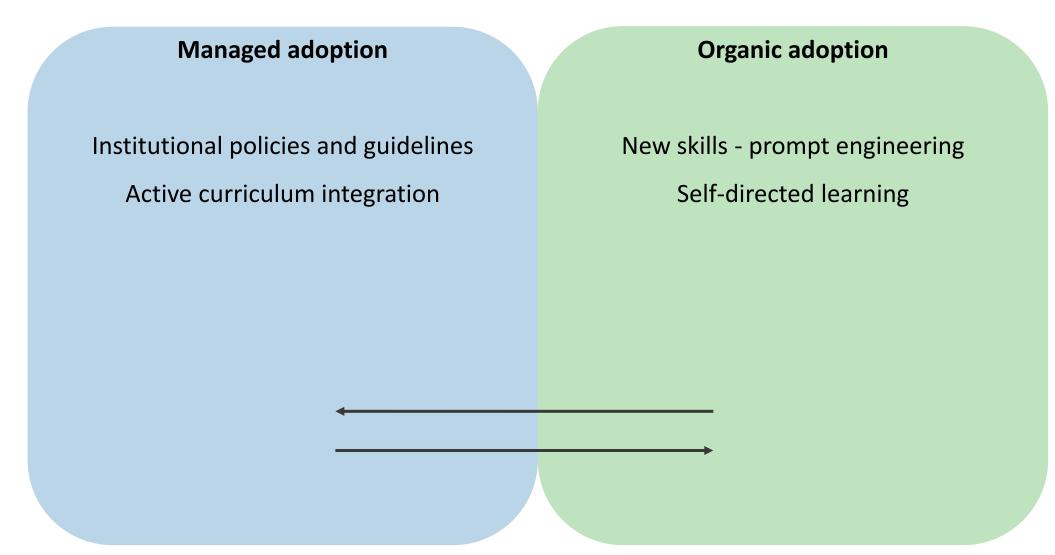




General focus of universities on risks and difficulties - not on opportunities.









#### **Managed adoption**

- Necessity of studying the potential for training specific professional skills
  - Lack of comprehensive comparative global perspectives
- Limited empirical evidence on implementation challenges and best practices

#### **Organic adoption**

- Need for longitudinal studies
- Demand for understanding the necessary skills
  - Lack of in-depth analysis of new skills

There are almost no studies on the balance between "managed" and "organic" adoption



#### Managed adoption

- Content analysis of institutional policies, guidelines
  - Surveys of administration and faculty across multiple institutions and countries
    - Focus groups
  - Case studies and comparative analyses across multiple institutions

#### **Organic adoption**

- Surveys targeting faculty, students, and staff
  - Qualitative analyses of stakeholders
    perspectives through interviews, ethnography
    methods, and focus groups
- Laboratory studies of individual adoption of the tools to understand new skills
  - A longitudinal study
- Build balance between grassroots innovations and policies
- Institutional strategies enhance individual practices
- Feedback loops enhance both managed initiatives and "organic" practices