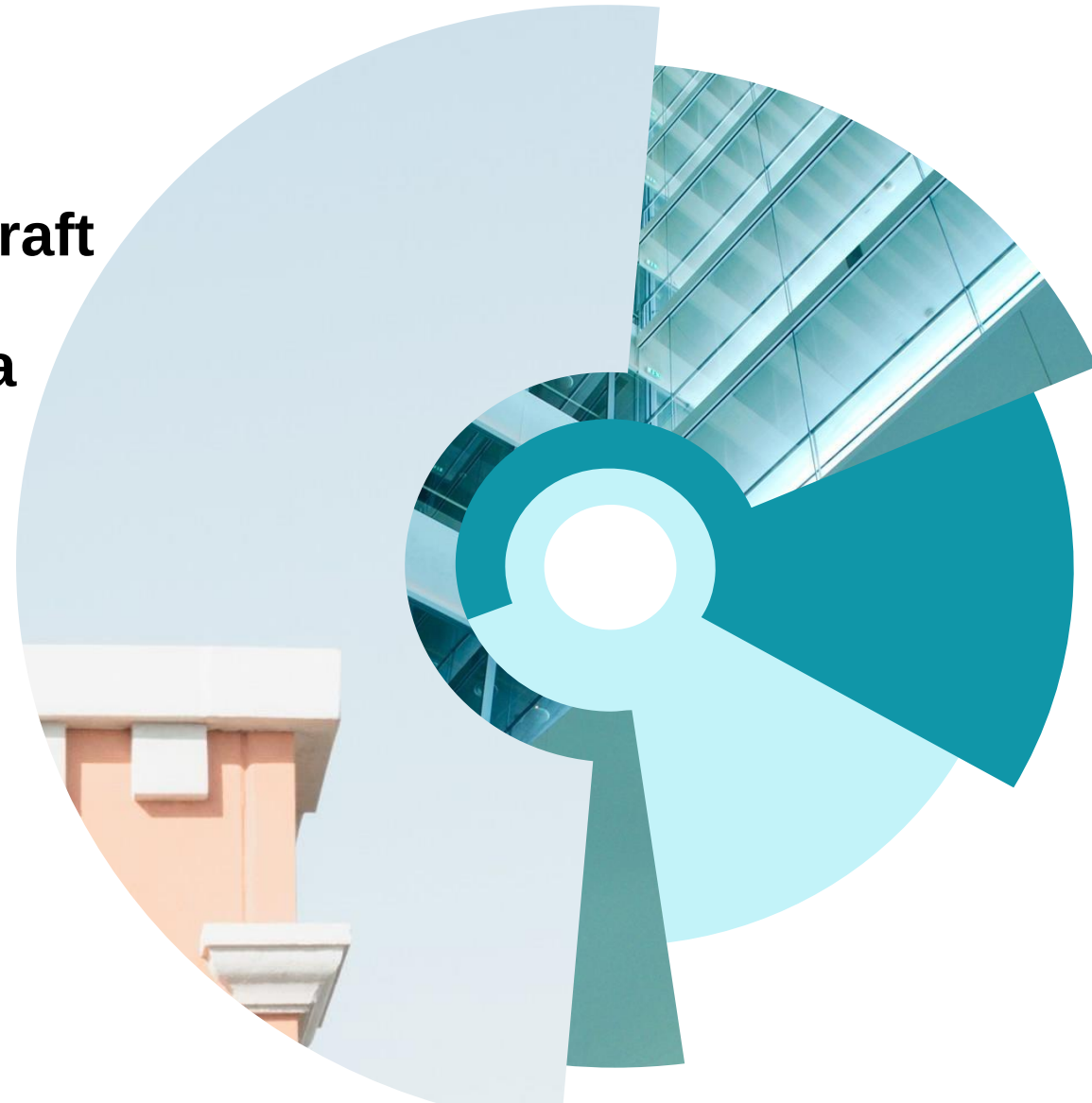


Civil applications of Unmanned Aircraft Systems – the enabler for drone economy in the Republic of Moldova

„Advanced technologies with UAS applications in monitoring and modeling of environmental factors” workshop

Valeriu Cazan

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2. Research question
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5. Final considerations



1. Problem identification



Problem

Lack of resources for classical (non-tech) industries
Missed opportunities
Lack of vision at State level for UAS industry



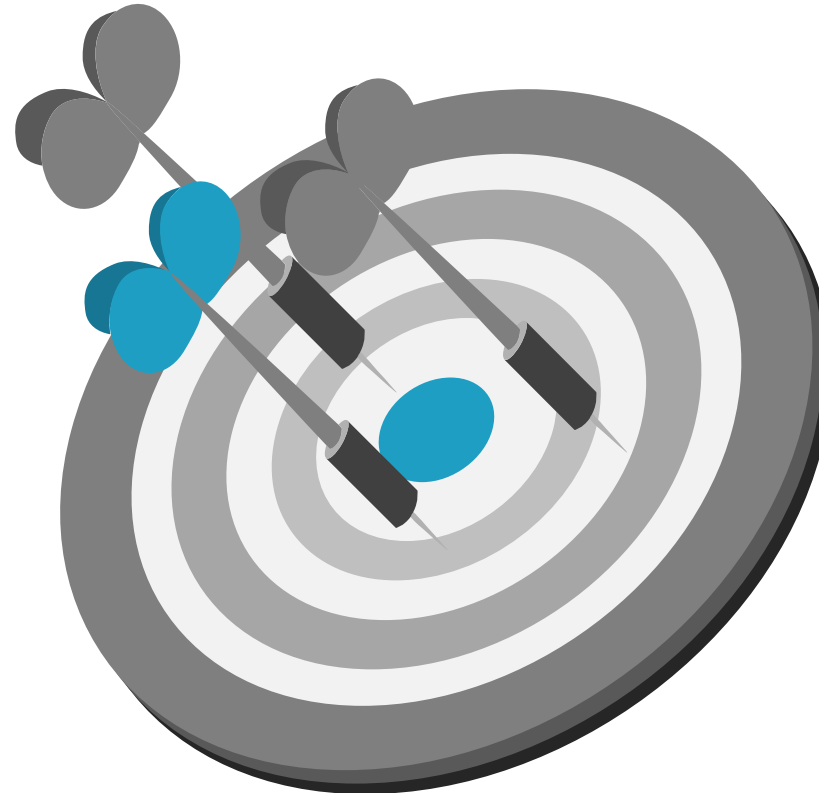
Objective

Collection of UAS civil applications
Feasibility evaluation of UAS technology in Moldova
Identification of 3 best applications
Identification of legal and economic implications



Motivation

Subject's actuality
Own experience and interest
Potential benefit



2. Research question

1st sub-question

How should national legislation adapt to UAS technology?

2nd sub-question

What are the UAS civil applications that are feasible for the Republic of Moldova?

How can the Republic of Moldova benefit from UAS civil applications, and what are the economic and legal aspects of this new technology implementation?

3rd sub-question

What are the top 3 domains in which UAS technology can be implemented?

4th sub-question

What will be the benefits and the economic added value as a result of UAS utilization?

3. Methodology



Overview of UAS technology
Best civil applications
Legislation and drone economy

Official documents, literature, financial reports,
journals, online platforms

**Literature
review**

**Expert
interviews**



National legislation
Feasible applications and top 3
Added value of UAS applications

9 structured interviews with experts from public
and private sectors

4. Findings

Application in many sectors of economy

Media & entertainment, agriculture, transport, infrastructure, security, telecommunications, search & rescue, mining, weather forecasting, wildlife study and preservations, civil aviation;

Future growth

Initial phase of industry's development. 20,5% (market value) and 15,5% (UAS production) CAGR.
Drivers: demand, business opportunities and R&D

Balanced systematic approach needed

Legislation, privacy, security, integration in shared airspace are the main challenges. Significant efforts of international community are made, but the processes are lasting due to bureaucracy. Current Moldovan UAS legislation doesn't meet industry requirements.

Moldova can adopt almost all UAS applications

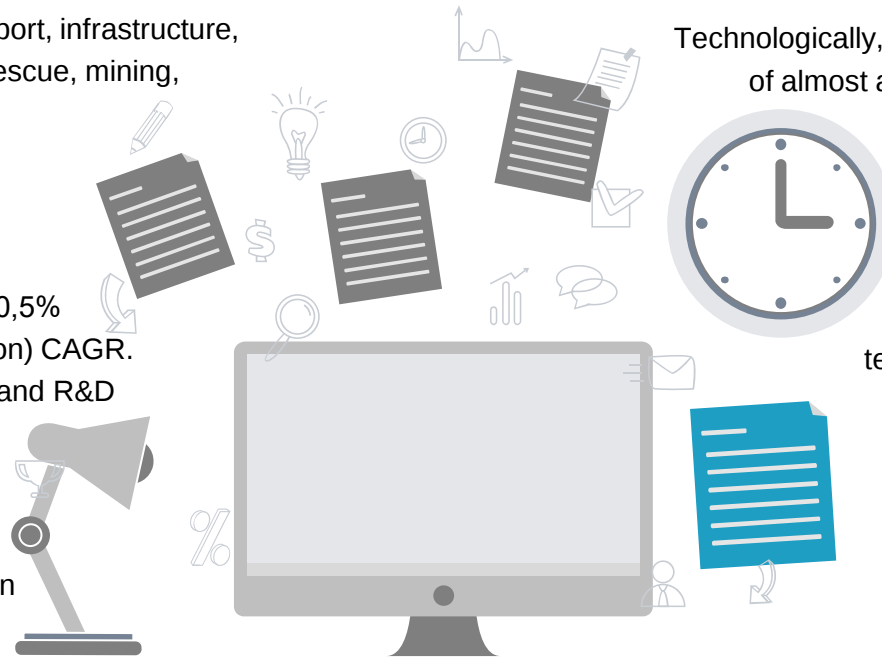
Technologically, the country is apt for the implementation of almost all current UAS civil and commercial UAS applications available worldwide.

Top 3 application in Moldova

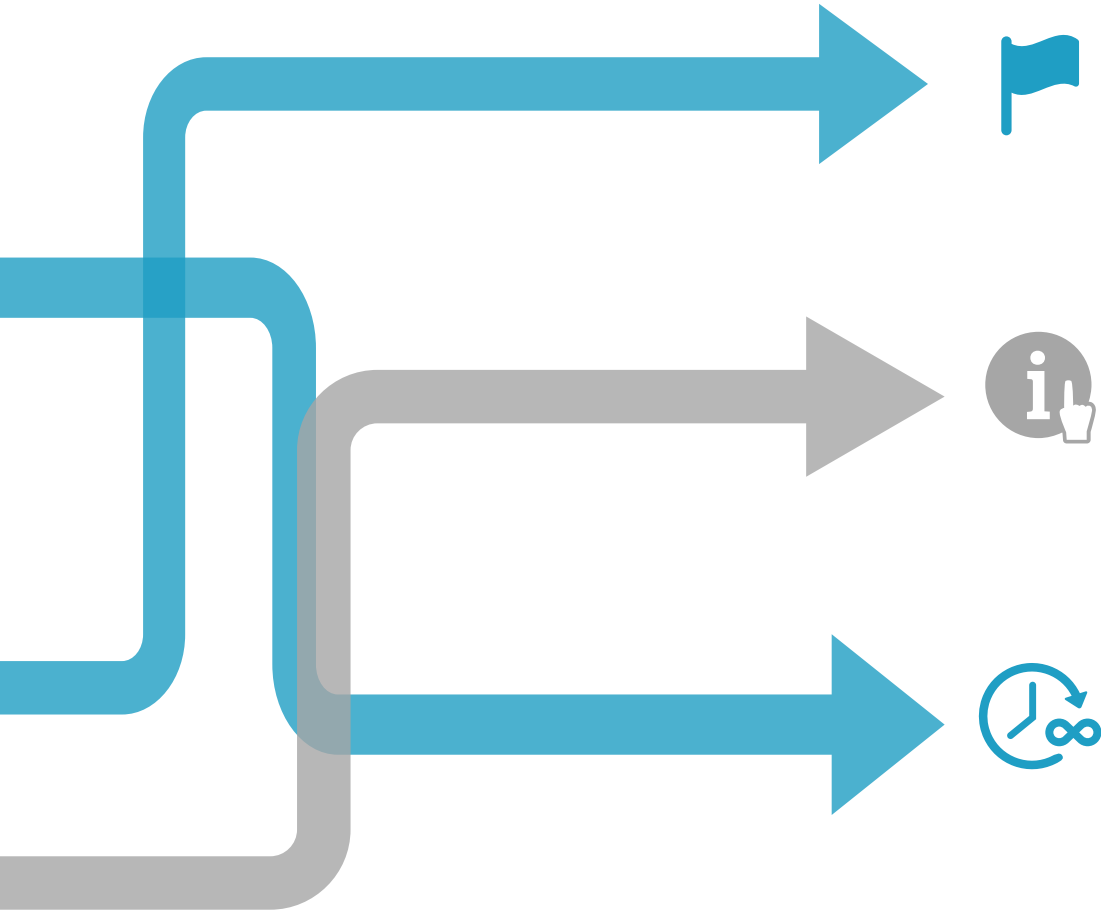
The most promising domains for UAS technology implementation in Moldova are agriculture, surveillance, and mapping.

UAS adds value

The adoption of drone technology will decrease time and operational costs. UAS civil applications will boost efficiency, productivity and will create new job opportunities.



5. Final considerations



Conclusions

- The Republic of Moldova can benefit by adopting the UAS technology in agriculture, surveillance and mapping, as a priority. Other applications can also be implemented.
- This will improve the efficiency, financial performance and will create new job opportunities
- Currently, the legal aspect is a constraint

Recommendations

- A balanced and systemic approach of regulators in order to create the necessary premises for industry development, while assuring the acceptable level of safety
- The regulators should be flexible, innovative and listen to the industry
- Time to consider the entrance on the market due to low competition and low local costs

Future developments

- Further global growth and development, technological progress and innovation
- The Master thesis can be used by investors, Moldovan Government and institutions
- More detailed research can be done by evaluating the drone economy of Moldova with concrete numbers: market size, economic added value, new job creation etc.



Thank you for your attention!

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