Digital
Organizations
RESEARCH
GROUP

Empowering Communities Through
Digital Innovation & Government Efficiency

Dr Christos Berberidis

Find Us:

✉ dorg@ihu.edu.gr

💻 https://dorg.ihu.edu.gr

📍 14th km Thessaloniki, Nea Moudania 570 01Macedonia, Greece

INTERNATIONAL
HELLENIC
UNIVERSITY

University Center of
International Programmes
of Studies (UCIPS)

Digital Organisations Group (DORG)

Delivering high-quality research, teaching, training and consulting in the following areas of expertise:

- Semantic Technologies and Interoperability
- e-Government
- Machine Learning and Natural Language Processing
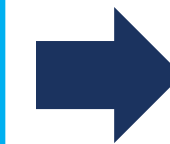- Digital organisations and e-Business management and strategy

School of Science and Technology

University Center for Postgraduate Programmes (UCIPS).

Master programmes
- Data Science
- e-Business & Digital Marketing
- Mobile & Web Computing: IoT Apps
- ICT Systems
- Smart Cities & Communities (Erasmus Mundus Int'l Joint Master Degree)

Courses at Master level:
- Digital Organisations & e-Commerce
- Natural Language Processing
- ICT Management
- Digital Strategy
- Data Science for Business
- Exploratory Analysis & Visualisation

https://dorg.ihu.edu.gr

Projects &
Expertise

Portfolio of innovative and impactful projects, demonstrating our expertise and commitment to delivering exceptional results

Full list of projects:
https://dorg.ihu.edu.gr/projects/

https://dorg.ihu.edu.gr

Projects & Expertise

- Towards a European Digital Single Market

- **"Once-only" principle (OOP) for cross-border public services**

- Member State-driven pilot

- Aligned with strategic eGovernment Action Plan 2016-2020 and European Interoperability Framework Implementation Strategy and with full regulatory compliance.

- 24 partners, including 10 Member States, (Austria, Belgium, Denmark, Luxembourg, Netherlands, Portugal, Romania, Slovenia, Spain, and Sweden).

- Total budget: €7,997,860.50

https://www.de4a.eu/

Horizon 2020
European Union funding
for Research & Innovation

DORG Contribution:

✓ Semantic interoperability requirements, architecture and toolkit, based on European and international standards (Task leader)

✓ Machine learning for the improvement of service delivery

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Projects & Expertise

- **National Interoperability Framework** (2022)

- Part of the "New National Interoperability Framework for Public Services"

- In line with the **European Interoperability Framework (EIF)** and the national law.

- **Guidelines** for the development of interoperable public services

- Complete **governance model**, including the supervising mechanism for monitoring the implementation and the performance.

- Introduces an "**Interoperability Ecosystem**" which includes EIF elements and an "**Interoperability Toolkit**".

- **"Knowledge and Support Center"** to bring together stakeholders and bridge the skills gap.

https://www.e-gif.gov.gr/

HELLENIC REPUBLIC
Ministry of Digital Governance

DORG Contribution:

✓ Semantic Interoperability

✓ Process Modelling and Standardization

✓ E-Governance

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Projects & Expertise

- Machine Learning & NLP for the **extraction of organizational structure and responsibilities** from legal documents
- **Standardization** of government portals architecture
- Representation of processes of the National Registry of Public Services (MITOS) using **BPMN**
- Evaluation of the **data quality** of MITOS public services portal
- Recording state-of-the-art technologies in use in **Justice systems**
- Study to create a practical guide to **assessing registry maturity**
- Deep analysis of MITOS using **NLP & Knowledge Graphs**

DORG Contribution:

- ✓ R&D in Semantic Interoperability
- ✓ Machine Learning and NLP and Knowledge Graphs
- ✓ SOTA Technologies for Justice Systems
- ✓ Registry Maturity Assessment
- ✓ Data Quality Evaluation and Visualization

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- Empowering citizens, journalists, and policymakers with co-created socio-technical solutions, to increase resilience to misinformation, and to generate more informed behaviors and policies.

- Policymakers, fact-checking journalists and citizens convene in different countries to test technological tools, platforms and fact-checking methods.

- Budget: €4,110,758.75

https://coinform.eu/

European Commission
Horizon 2020
European Union funding
for Research & Innovation

Projects & Expertise

DORG Contribution:

✓ Co-creation framework, incentives and stakeholder engagement

✓ Pilot implementation and workshops

✓ Policy impact assessment and analysis

✓ Big data processing for sentiment analysis toward misinformation

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Projects & Expertise

- Focuses on resolving the data and application portability issues in the Cloud PaaS market through a flexible and efficient deployment and migration approach.
- Specifies and delivers a thin, non-intrusive Cloud-broker, to implement the enabling tools and technologies, and to deploy fully operational prototypes and large-scale demonstrators.
- Budget: €2,023,000.00

DORG Contribution:

✓ Co-creation framework, incentives and stakeholder engagement

✓ Pilot implementation and workshops

✓ Policy impact assessment and analysis

✓ Big data processing for sentiment analysis toward misinformation

SEVENTH FRAMEWORK PROGRAMME

https://dorg.ihu.edu.gr

Projects & Expertise

- Feasibility study of data visualisation tools and comparative analysis of cloud-based text analytics.
- Extensive experimental evaluation of various Amazon (AWS) and Microsoft Azure cloud tools, focusing on:
  - Querying document databases
  - Retrieval of structured information from documents
  - Cost, portability and ease of use
- Part of ICON's "Framework contract on Methodology (ESTAT.B1)"
- Under the supervision of DIGIT IT and funded by the European Commission, Eurostat.

DORG Contribution:

✓ Cloud computing

✓ Text analytics

✓ Natural Language Processing

✓ Information retrieval

✓ Data visualisation

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digiGOV innoHUB

- Enable the development of a new generation of Public Services for the Central Administration, Local Governments etc. utilising advanced Digital Technologies.
- Provide access to Entrepreneurial Innovators to emerging technologies
- Foster the creation of a Coalition of AI initiatives and the practitioner's community.
- Support the growth of an innovation ecosystem
- Provide the necessary skills
- Facilitate innovation

https://digigov.innohub.gr/

Co-funded by the European Union

ΕΣΠΑ 2021-2027
Εταιρικό Σύμφωνο για το Πλαίσιο Ανάπτυξης
Partnership Agreement 2021-2027

DORG

Projects & Expertise

DORG Contribution:

✓ Digital skills education and training

✓ Digital transformation workshops

✓ Pilot implementations

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Resilience, inclusiveness and development: Towards a just green and digital transition of Greek regions

- Focusing on Digital Transformation
- Assessment of the current situation in Greece
- Recording of opinions, attitudes, value orientations and behavioural predispositions of both the general public and individual social groups
- Provision of technological solutions and tools that support policy proposals (data-driven policy making)
- Positive and negative effects of transitions, in the content of public policies regarding the (individuals / households / businesses etc.)

https://www.justredi.gr/en/home-en/

DORG
Projects & Expertise

DORG Contribution:

✓ Mapping, analyzing and evaluating public policy measures for digital transformation

✓ Organization of actors in communities of practice

✓ Digital skills needs assessment

✓ Socio-economic effects of digital transformation policies on the economy and businesses

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Vassilios Peristeras
Associate Professor

Associate Professor
at the International Hellenic University,
School for Science and Technology in
Thessaloniki, Greece

Associate Research Fellow
at the University of Leuven (KU Leuven),
Public Governance Institute, Belgium.

Teaching & Research Focuses on the areas of:

- eGovernment
- e-Participation
- Interoperability

- Open and Linked data
- Semantic Web Technologies
- Digital Organisations Management and Strategy

Top 25
Most Influential People
In Digital Governance

Over 140
Publications

Over 3100
Citations

2021- today:
IT Strategic Analyst at Council of the European Union

2018 - 2021:
European Commission, DG Informatics,
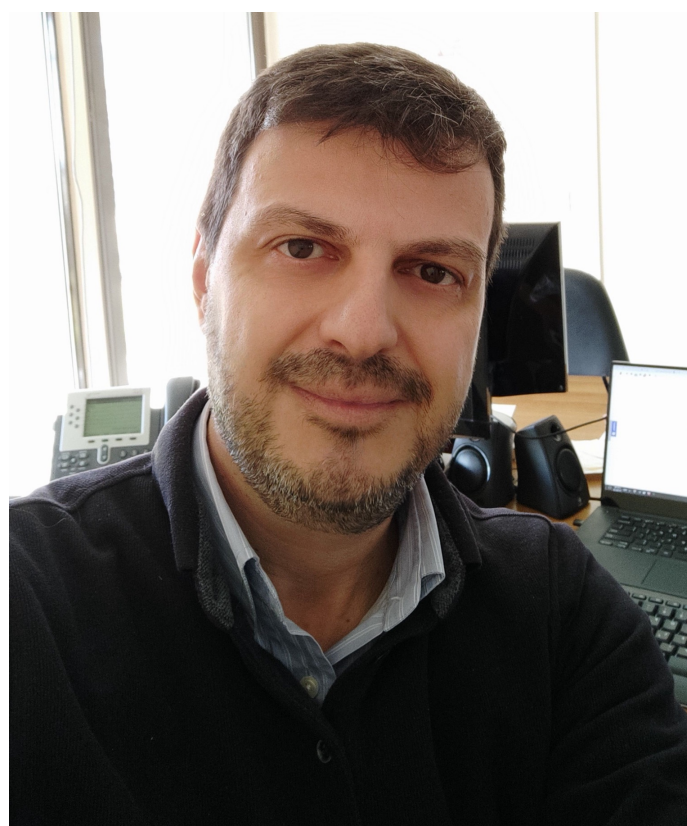DIGIT.01 "Digital Transformation and Coordination"

2010 - 2016:
Programme Manager in the European Commission, Interoperability Solutions for European Public Administration (ISA) Programme (DG DIGIT)

Additional:
-Coordinator of European Interoperability Framework revision.
- Researcher and consultant in various organizations

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Research Associates
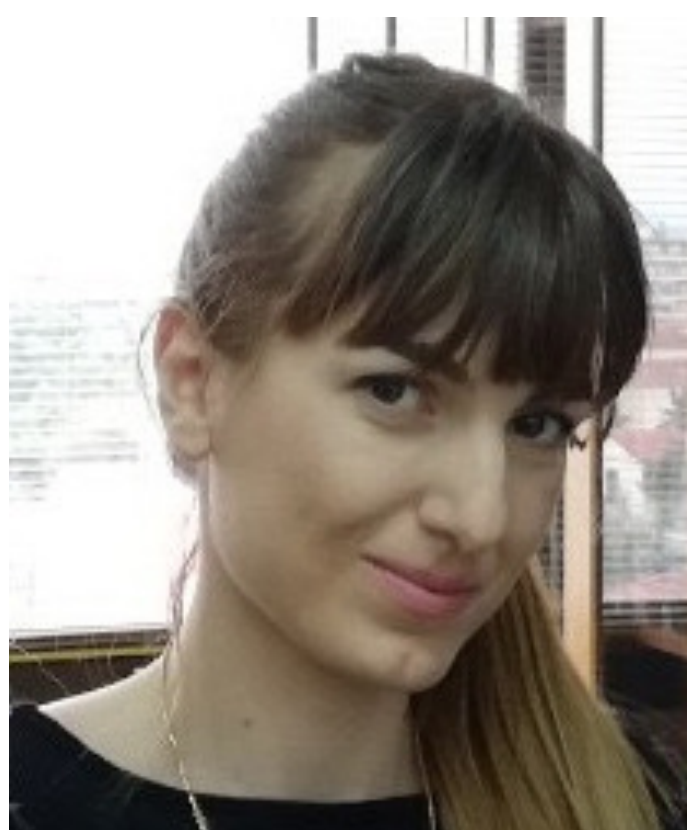
Dr Christos Berberidis
Lab Teaching Faculty
- PhD in Knowledge Discovery in Databases (Aristotle University of Thessaloniki) and an MSc in Information Systems Engineering (University of Manchester, UK).
- His research and teaching focuses on machine learning, text mining and natural language processing.
- He has published 22 articles in peer-reviewed journals and conferences and he has received more than 1000 citations.
- Previously he has worked at Purdue University (USA) as a visiting researcher
- Participated in more than 15 European and national, funded research projects

Dr Ioannis Magnisalis
Academic Asssociate
- European Commission DG Informatics, IT Strategy and Planning Officer, focusing on data science projects.
- PhD in Standards-based architectures for collaborative e-learning systems.
- Specializes in metadata, semantic web, linked open data, and data analysis technological areas with emphasis on e-Learning and e-Government analytics.
- He has published 28 articles and his work has received more than 390 citations
- His teaching focuses on ICT management, web technologies and e-commerce.

Dr Aikaterini Tzafilkou
Academic Asssociate
- Ph.D in the field of Human-Computer Interaction
- Postdoctoral researcher in the field of Technology Enhanced Learning at University of Macedonia
- Her research interests include learning analytics, academic emotions, emotion detection, consumer behavior, food marketing, sentiment analysis, game-based learning and digital education.
- She has published 48 articles in peer-reviewed journals and conferences and she has received more than 800 citations.

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Meet our Team

Meet our highly skilled and experienced team, dedicated to delivering innovative solutions and exceptional results.

Expert team with extensive research experience delivering innovative and insightful solutions to complex problems.

Thomais Gkrimpizi
PhDc in Digital Transformation

Research associate in national projects

Athanasios Deligiannis
PhDc in Open Government, Open Innovation

Responsible for e-Justice initiatives as a member of the first Greek team at former PM's Office.

Syed Iftikhar Shah
PhD Candidate in e-Government

Director Digital Research – Digital Cooperation Organization dco.org

Ioannis Konstantinidis
PhDc in Machine Learning and NLP for digital organisations

Consultant at European Commission DG Informatics, focusing on data science projects

Eleni Kapantai
PhDc in Machine Learning and NLP

Research associate in H2020 and other projects

Partners

Trust our team for delivering reliable and high-quality results, built on a foundation of integrity and expertise.

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Services & Expertise.

Enhancing online sales, unlocking insights, streamlining government processes, optimizing technology, empowering learning, and combating misinformation with expert services.

DORG members have cumulatively:

- More than 170 publications in peer-reviewed journals and conference proceedings, with more than 4000 citations

- Experience in over 40 R&D projects in the public and private sector

- A network of over 30 current and past collaborating organisations (Universities, Research Centers, Businesses, Public administrations etc.)

01 Research, development, consulting and training in:

1. e-Government
2. Semantic interoperability
3. Machine learning & NLP, indicatively:
   - *Recommendation systems*
   - *Conversational Agents (chatbots)*
   - *Sentiment/Opinion and Trend Analysis*
   - *Customer behaviour*
   - *Prediction models*
   - *Knowledge Graphs*
4. Data visualization
5. Business Intelligence

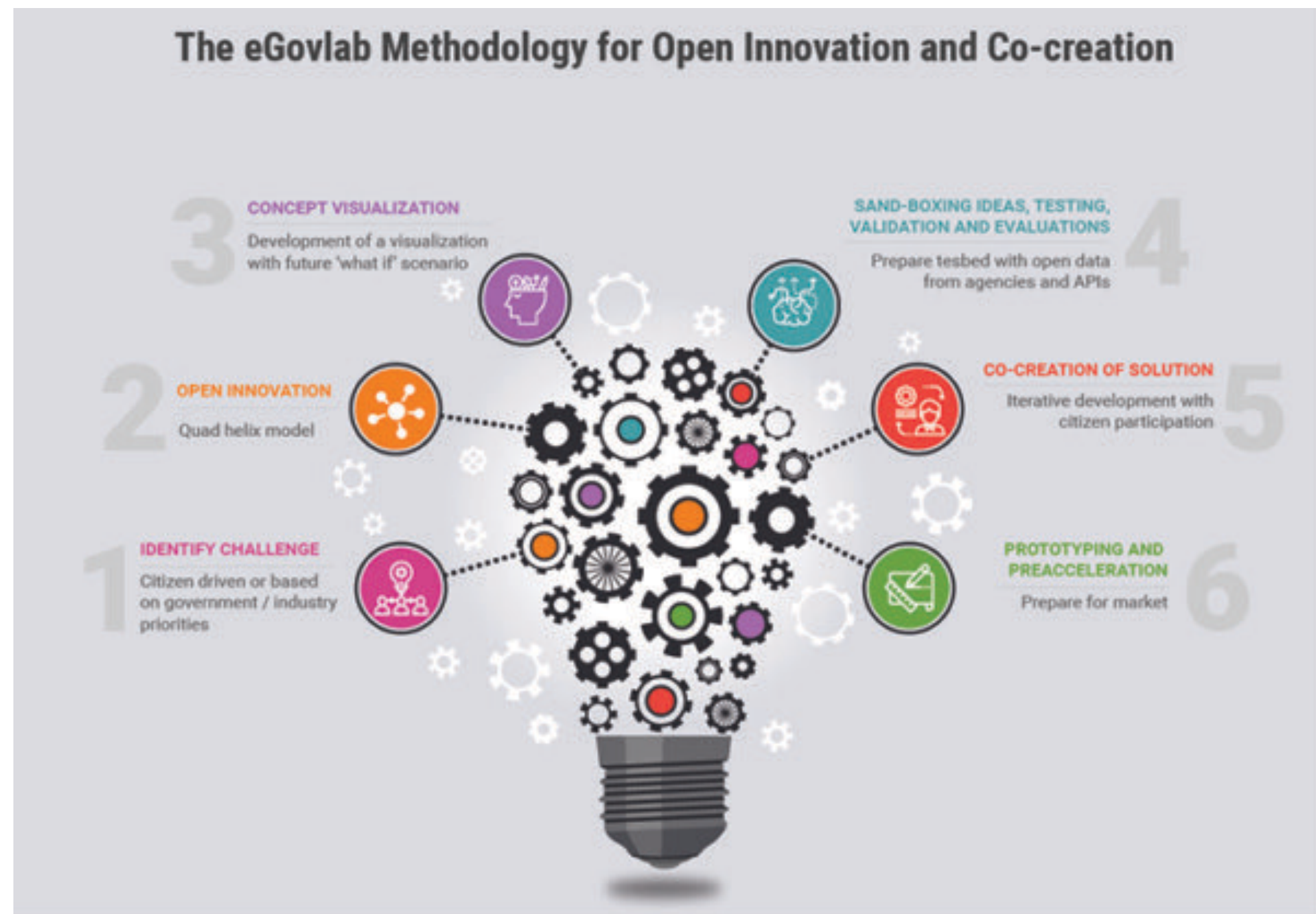**02** Co-creation & co-design workshops and pilots

03 Project Management

04 Website & Mobile app development

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Services &
Expertise.

The eGovlab Methodology for Open Innovation and Co-creation

https://egovlab.eu/workshops-co-creation/

https://dorg.ihu.edu.gr/elearn/

https://dorg.ihu.edu.gr

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