

# GovTech in Europe: Critical Influencing Factors for Cross-Border GovTech Practices

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## Background

### 2. Purpose, objectives and scope

Within public sector operations, public procurement is the most common way for public administrations to acquire innovative digital solutions if not developed in-house. This work will investigate the influencing factors affecting the uptake of innovative digital solutions designed for and adopted by public administrations. The study will explore GovTech practices to support a successful digital transition and modernization.

In this context, the analysis will focus on the role of SMEs in the design, provision and maintenance of innovative digital technologies for public administrations. One of the advantages of applying SMEs is their ability to work in an agile way and can bring innovative solutions to the market. This proves to be even more important in the context of public sector operations, and contextualization of digital solutions in different contexts.

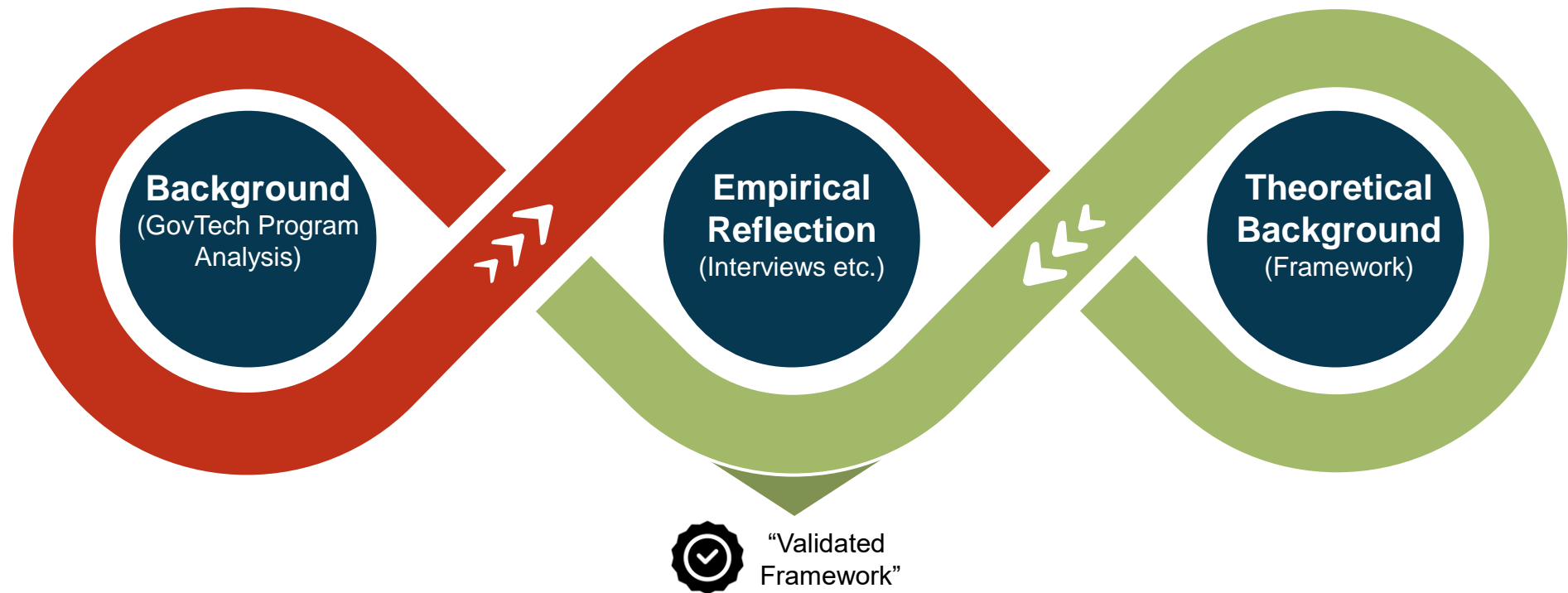
A recent JRC study suggests that the use of agile methodologies, adaptive Public Procurement (PP) processes, and 'co-design' can help public administrations' and their partners offering the natural evolution of innovative digital solutions.

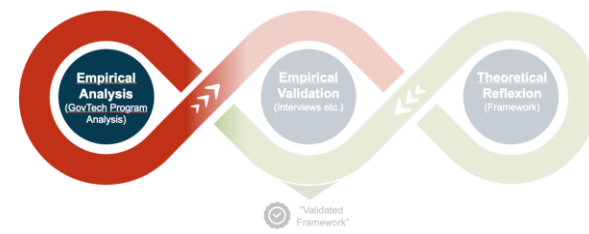
However, while being more agile, adaptive and many times more innovative than bigger companies in answering procurers' need (also in terms of interoperability and contextualisation requirements), for small enterprises the costs for complying with procurement processes are highly impactful on their resources. It is therefore important to support the innovative processes and practices of both SMEs and PAs, on the one hand for these small companies to enter the market, and on the other to allow PAs PP Processes the necessary agility and sustainability of their ecosystems (e.g. continuity and coherence in the maintenance of PP systems).

**Research Question:**  
*What factors critically (positively and negatively) influence cross-border GovTech\* practices in Europe?*

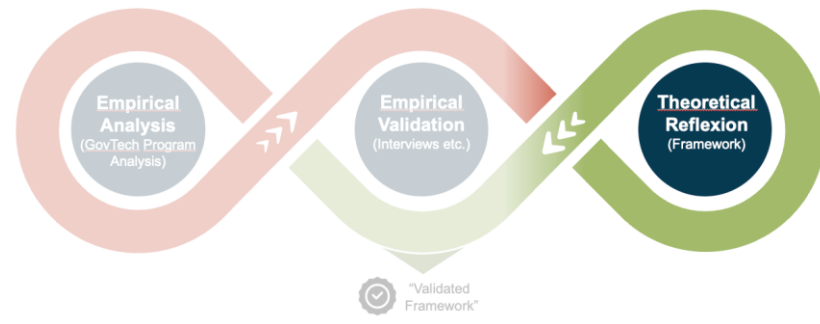


# Methodological Approach





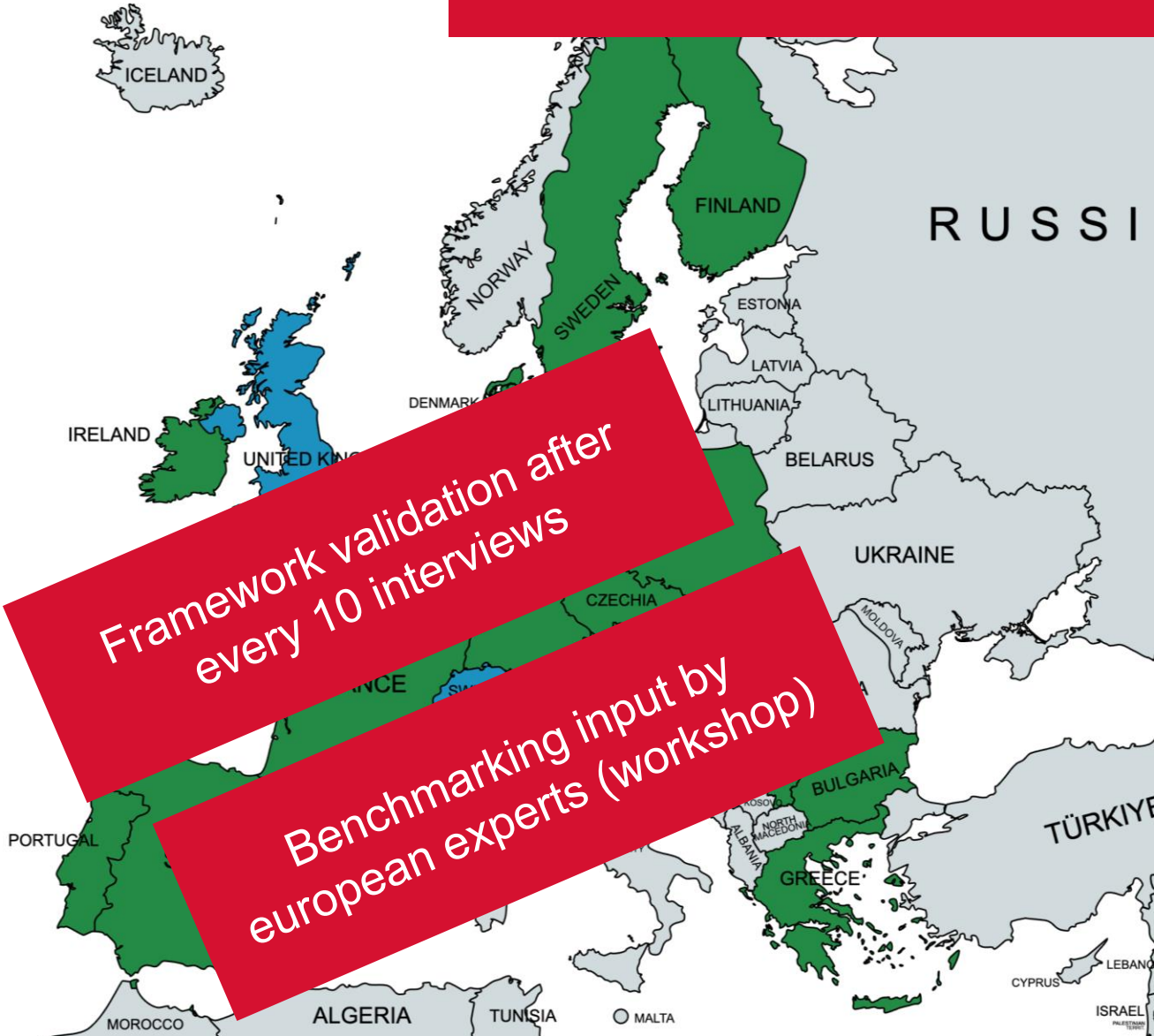
Country	National Program	Market Entry (Direct Support)	Economic Development	Data Standards	Security Standards	Regulations	Open Source	Data Protection/ GDPR	Public Appearance/ Marketing
Denmark	AI Hotspot Based on Trust	X	X	X	X	X	X	X	
Denmark	Unique Hub for Innovative Solutions	X	X						
Denmark	Digital Visitor Centre	X	X						X
Sweden	GovTech4All	X	X		X				X
Sweden	Digital Public Administration factsheet 2020	X		X	X				
Sweden	Swedish Association of Local Authorities and Regions (SALAR)	X		X	X				
Estonia	Enterprise Estonia	X							X
Estonia	Digitalisation Hub in Tallinn	X	X						X
Estonia	Accelerate Estonia	X	X	X					
Estonia	Taxonomy of Sustainable Financing	X	X	X					X
Estonia	Countering Information Warfare	X	X		X				X
Estonia	Environmental Impact Metrics	X		X	X				
Estonia	Digital Real-Time Ecosystem for Logistics	X	X	X					
Netherlands	The Globaliser	X							
Netherlands	Vectrix	X	X						
Netherlands	EIT Digital Venture Program	X	X						
Netherlands	Masters of Scale International Breakthrough Scaling	X	X						
Netherlands	weGrow	X	X						
Netherlands	Startup in Residence (SiR)	X	X	X	X	X	X		
Netherlands	GoGlobal Programmes	X	X						X
Spain	Agenda (GovTech-Program)	X							X
Spain	Innovación GovTech	X				X			X
France	Standards set by the Open Government Partnership	X	X	X	X				
France	Regularien catalogue.numerique.gouv.fr	X	X						
Austria	Schnittstellen der Verwaltung	X		X		X			X
Austria	OOP	X	X					X	
		26	18	10	8	4	2	2	10
		100%	69%	38%	31%	15%	8%	8%	38%





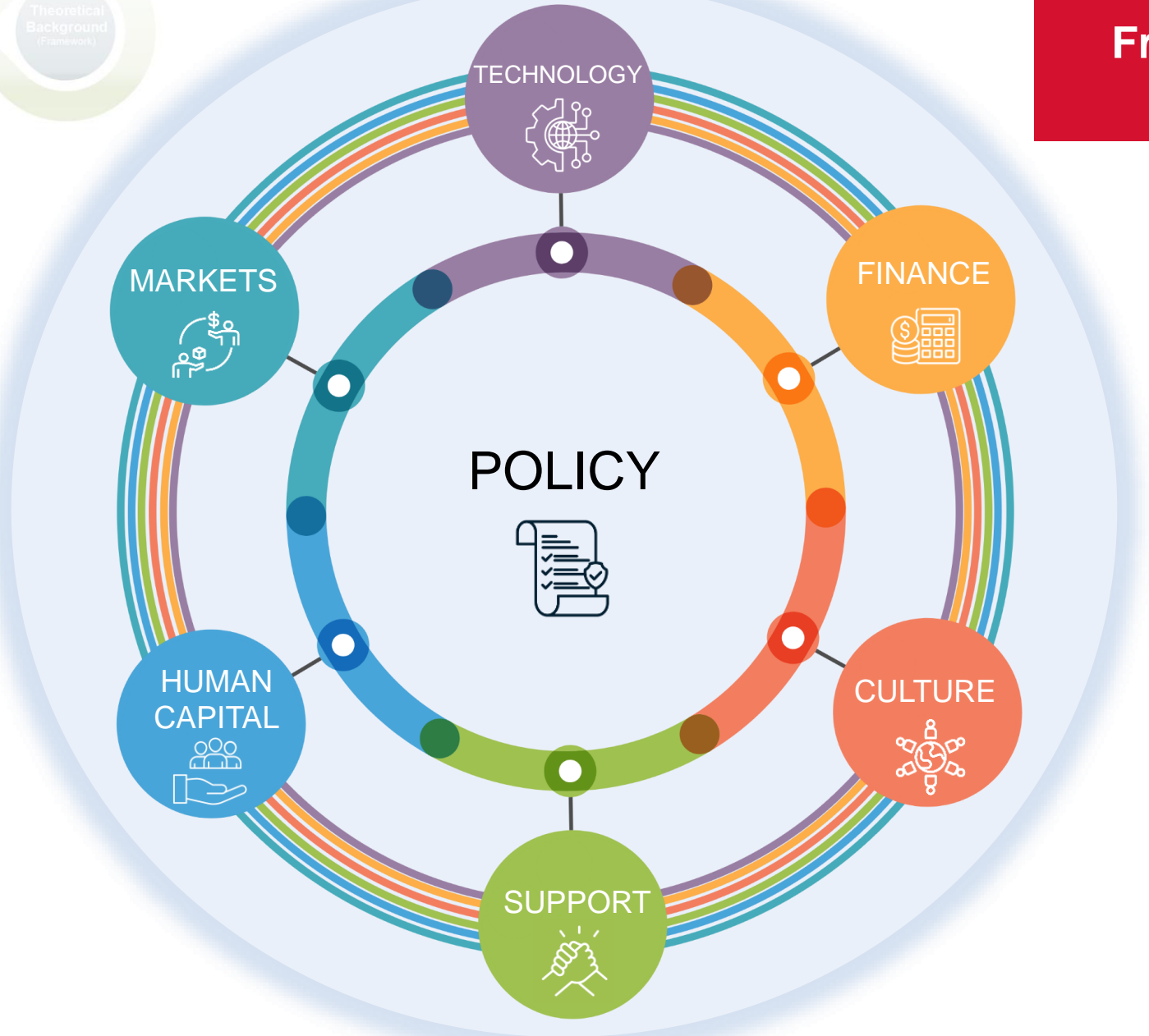
# Semi-structured interviews

**111** Interviews  
17 Countries in Europe  
15 EU-Countries





# Framework Adaption



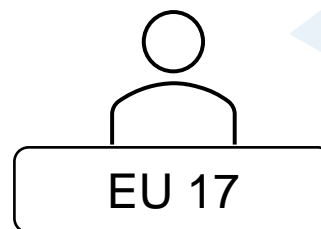


## Regulatory Navigation

- **Means of Regulatory and Legal Navigation**
  - Uncertainty about status quo
  - General strategies
  - Cloud & server stationing
  - certification
  - Language barrier for Legal navigation
- **Standard setting Institutions**
  - GDPR standards
  - Data standards
- **Data Protection Laws in Procurement**
  - Variation in procurement legislation

## Burning Issues

- Lack of uniformity in legislation across countries → e.g. (local) demands extending above standards set by EU
- Intransparency of institutions responsible for GDPR standards (and enforcement)
- Existing standards lack implementation → e.g. UBO (**U**ltimate **B**eneficial **O**wners) API
- Lack of legal/procurement translations in eng.
- Lack of political expertise on opensource and IOP



*“Perhaps because the second country that we went to was the Netherlands. And in the Netherlands, they asked a lot of things to us that they were not asking us in Spain. I mean, so in this second project, we learned a lot about privacy and these kind of things. And well, when we go to other countries out of Europe, yeah, we have some things that we have to check.”*





## Regulatory Navigation

- **Means of Regulatory and Legal Navigation**
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## Policy Recommendations

- ❗ Inhibition of stricter national standards than set by EU policy **OR** EU-wide adoption of strictest policy
- ❗ GDPR certifying institution for GovTechs on EU-level
  - ❑ Force implementation of i.e. UBO, monitoring and publicly accessible documentation
  - ❑ **Repository of national legal/procurement documents in eng.** ⚡

### Policy Implications:



1. Current GovTech relevant policy does not lack political backing, but rather enforcement.
2. Policy fragmentation is regarded as more detrimental to startup success, than overregulation.

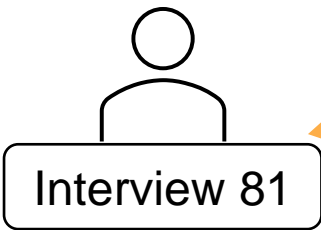


## Financial & Operational Management

- **Strategic Partnerships**
  - Scaling
  - Financing
- **Financial and Operational Management**
- **Financial Constraints and High Operational Costs**
- **Risks Associated with International Expansion**
  - Social Legitimacy
  - Financial
- **Development and Scaling Costs**
  - Individualization as Inhibitor
  - Costfactor Time
  - Public Sponsoring
  - Domestic Preference in Procurement

## Burning Issues

- Costs of development and scaling
- Reliance on public funding
- Possible loss of former clients, because of focus on expanding into new markets
- Pilots and PoCs require upfront investments
- Finance problems mitigation through funneling strategic partnerships with homemarket institutions and companies
- Limited budgets in public sector, high development costs, financial constraints of startups



*„I don't think the ecosystem has much to gain from continuing in the style of contract development. This is always very dangerous, because no successful scale-up in fintech, venture tech, proptech or other areas would ever think of developing different features for different customers on a contract basis. That's actually why we always have this centrality. You have a central roadmap for a central product. And nobody is allowed to influence that. It's your decision how you offer it in your standard product.“*



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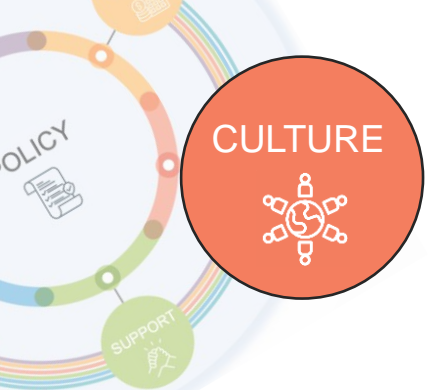
## Policy Recommendations

- ❑ Reduction of hurdles in applying for funding in non-home markets
- ❑ Removal of barriers to participation in tenders in non-home markets
- ! Funding of scaling programs to bring start-ups that create public value into new markets, e.g. through tax exemptions
- ! Reduction of falsely claimed need for customization (through *Public Sector Tech Watch* monitor) showing lack of market research
- ❑ Fund for the acquisition of European GovTech solutions

## Policy Implications:



1. Legislation should focus on reducing arbitrary hurdles in public tenders for foreign GovTechs.
2. Financing policy needs incentives for buying SaaS over developing individual solutions.

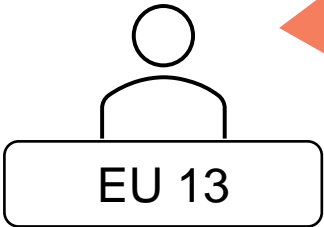


## Trust Building & Security

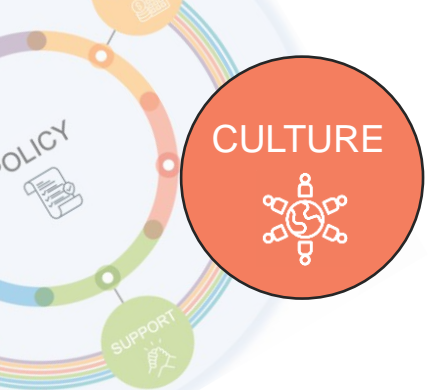
- **Trust Building and Security**
  - Reference customers
  - Home country image internationally
  - Intermediaries
  - Country attitudes towards own governments
  - Networks/political support
  - Regulatory expertise
  - Language
- **Trust and Credibility with Foreign Governments and Clients**
  - Classic GDPR, ISO, etc.
  - Publishing of expertise
  - Regional office
  - Regular in-person Meetings
  - Public value > cheaper processes
  - Test licenses/free data Sharing
- **Disposition to Trust Technology(-Innovation)**
  - Expected use/usefulness/risk in public administrations
- **Change Resistance in Public Administrations**
  - Resistance in changing processes/vendors in public administrations

## Burning Issues

- Language and communication barriers
- Institutional design isomorphism between countries as en-/disabling factor
- (local/national) procurement protectionism  
→ going as far as funding export of national solutions
- (un-)certified forms of credibility
- Partaking in innovation, Open-source, and expertise groups (e.g. climate council)
- Claim for regional/local office




*“We realized this right from the start, and we also received many offers to set up our start-up business in France. We set up a branch very quickly.”*



## Trust Building & Security

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## Policy Recommendations

- ❑ Implementation of national anchor places for European GovTech localization
- ❑ Active invitation of GovTechs to European expert groups (e.g. *Expert Group on Urban Mobility*)
- ❑ Implementation of matching programs: *Local administration seeks innovative (GovTech) solution* 
- ❑ Anti-Protectionism legislation
- ❗ Implementation of GovTech (credibility) certificate

## Policy Implications:



1. Creation of (Regional) International Company Spaces
2. Anti Protectionism Legislation

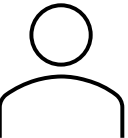


## Assisting and Underpinning Infrastructure

- **Supporting Institutions and Partnerships**
  - LE-SME Partnerships
  - Intermediaries f.e. IT-Providers
  - Municipal Networks
  - Consultancies
  - Government Sponsored Trustability Certification
    - Trade Council
    - State Agencies
    - Chamber of Commerce
    - Institution Informing about Changing Standards
- **Technical Challenges and Innovation**
  - Internet and Data Infrastructure
- **Collaborations and Global Innovation Networks (OS)**
  - Marketplaces
  - Politically Sponsored Networks
  - Topic/Product Networks
  - Personal Networks
- **State/chamber of Commerce Sponsored Expansion**

## Burning Issues

- Challenges in working with large governmental institutions
- Navigating different vendor standards and local manufacturing
- Reliance on external networks and partnerships for market entry
- Lack of marketplaces for trans-national solutions

  
Interview 12

*“Danish Trade Council reaching out to German municipalities. And it's on the official Danish paper, with the Danish, [...] shield with three lions. So it's put up in the top and it's official. So it's officially Denmark that reaches out to the public customers. They said “we have this recommendable Danish IT solution, they would like to have a meeting. Would you like to meet them?” And because it's the government reaching out, we get high level meetings at first point”*



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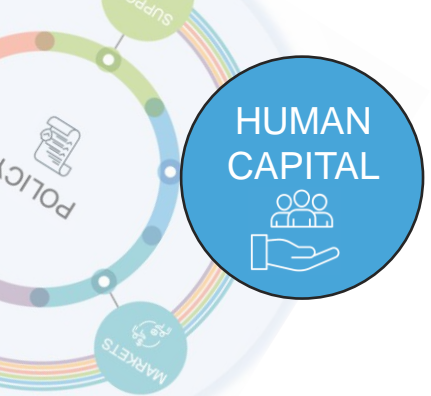
## Policy Recommendations

- ❗ Simplification of procurement processes
  - ❑ Implementation of dedicated support institutions for SMEs in government contracts (i.e. legal, financial etc.)
- ❗ Harmonization of IT infrastructure in Europe
  - ❑ Creation of platform for up-to-date information on regulations and established standards
  - ❑ Implementation and promotion of networking platforms (i.e. GovTech Connect) and marketplaces 

### Policy Implications:

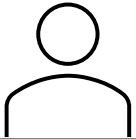


1. GovTechs are in need of governmental credentials verifying cred- and trustability.
2. Support infrastructure should focus on building regional and contextual centers for connection with industry and government experts in home market.



### Trust Building & Security

- **Headhunting**
- **Cross-border Hiring Policy**
- **Trust Building and Security**

  
EU 19

*"If there were two things, I would like to share, is that first of all, I would like to have unlimited access to the talent in Europe."*

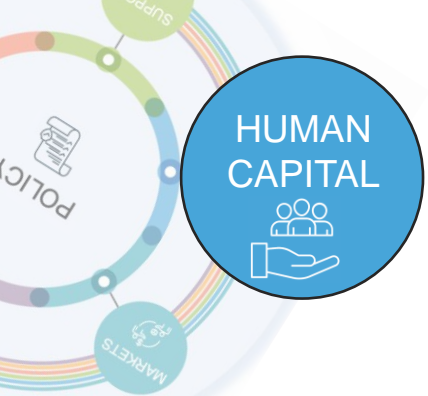
  
EU 12

*"There's a lot of talent in the EU. But I cannot easily hire someone let's say in Germany or Portugal without having an entity there or having a company that will essentially allow me to do this for a certain share, as there a lot of companies is doing that. Just essentially, even though someone can work from anywhere from EU, If I want to hire someone in other countries, then it gets tricky. And it shouldn't really be trickier because then there's so much amazing human capital don't have access to."*

## Burning Issues

- Administrative burden of remote international employment
- Difficulty in accessing talent across the EU without local entities
- Challenge of navigating cross-border hiring and employment laws
- Lack of overview for recruiting international StartUp interested talent





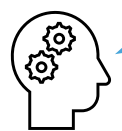
### Trust Building & Security

- **Headhunting**
- **Cross-border Hiring Policy**
- **Trust Building and Security**

## Policy Recommendations

- ❗ **Harmonization of hiring legislatures across EU**
  - ❑ Implementation of transnational subcontracting and personell placement agency (focus on IT skills)
  - ❑ Implementation of EU-wide knowledge platform for hiring abroad (including local differences/processes ⚡)
  - ❑ European workforce education for public sector technology

### Policy Implications:



1. EU hiring legal framework does not meet 21th century digital work requirements.



## Market Adaption & Entry

- **Networks and Local Presence in New Markets**
- **Brand Visibility and Recognition in New Markets**
- **Policy as Market-creation**
- **Market Adaptation and Entry**
  - Test development/RampUps
  - Sales partnerhsips
  - Local certification
  - Event-based networking with public Sector officials
  - Fast time-to-market
  - Public marketplaces
  - Topic/product related expertgroups
  - Public programs
- **Understanding and Adapting to Local Market Needs and Preferences**
  - Market research
  - Procurement expertise
  - Product or business model specificity
  - GDPR
  - Technical challenges and innovation
  - Market presence (see also regional offices)

## Burning Issues

- Lack of access to decision-makers, understanding governmental processes, building trust
- Lack of visibility in government procurement platforms, ease of access for public sector clients
- High demand for proof of concept (PoC) and pilot projects, need for demonstration of product viability, market scepticism
- Subsidy of local companies
- Tedious legal systems

Interview 8

*"That's the other thing, by the way, that I will not bring the company to Greece, well because Greece has tons of great things but the legal system here is just too slow."*



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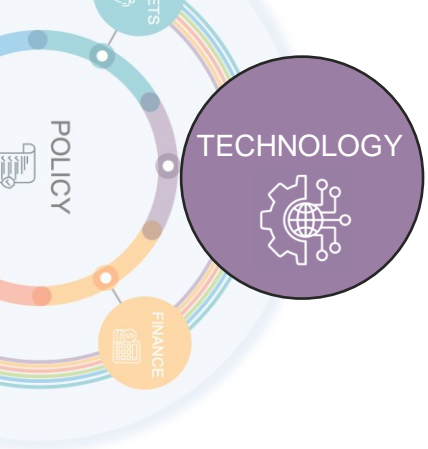
## Policy Recommendations

- ! Creation of mandatory public procurement directories
  - Enforcement of tender translation (value independent)
  - Launch of GovTech-Showrooms
  - Implementation of EU-wide directory with PoCs for the public administration
  - Prohibition of subsidy by nationality
  - Provision of legal advisory

### Policy Implications:



1. Both for brand visibility and market entry, there is a pressing need for event-based connection formats.
2. The national procurement bias hinders govtech development and scaling in EU.



## Compatibility and Interoperability of Solutions Across Borders

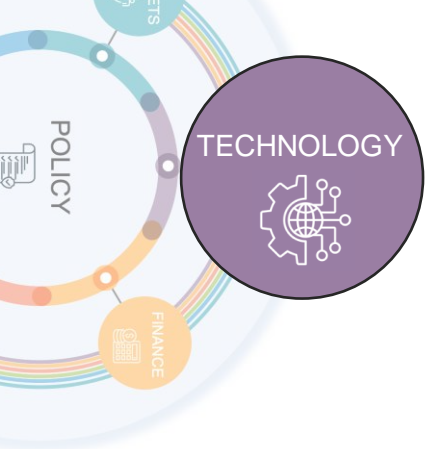
- **Customization Needs Due to Varied Data and Security Standards**
  - Lack of market knowledge by bureaucracies
  - Overambitious bureaucracies in f.e. GDPR
  - Power relation
- **Data Integrity and Reliability in Different Systems**
  - Benchmark as soft standard
  - OpenSource/OpenData
- **Lack of APIs/Standards**
  - Fragmentation of the standard landscape
  - Lacking implementation of standards/APIs
- **Absence of GovTech Standards**

## Burning Issues

- Diverse data standards/APIs across regions
- Integration with local data and IT infrastructure
- Balancing product customization with global standardization
- Feedback-based development
- Incoherent OpenData/OpenSource initiatives
- Existing standards lack implementation → i.e. UBO (ultimate beneficial owners)

Interview 65

*"[...] this is something that could be very easy to do and standardize. And we were invited by the European Commission to go to a task force where they were talking about the [standardization of product specifics]. And they had discussions because some countries, they don't want to agree about the minimum width of the [standard]."*



## Compatibility and Interoperability of Solutions Across Borders

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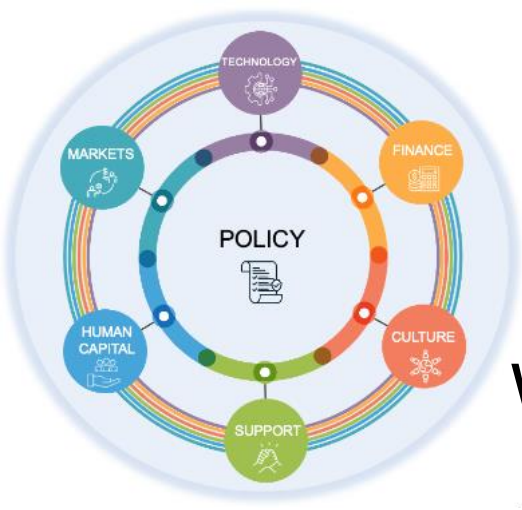
## Policy Recommendations

- ❗ Creation of uniform of data standards/APIs
  - ❑ Centralized market observation of public authorities through the vehicle of IT-providers to not copycat GovTech-solutions
  - ❑ Implementation of OpenData/OpenSource as procurement criterium (e.g. CC BY NC SA)
  - ❑ Strengthening of GovTech patenting to create European USP

### Policy Implications:



1. Creation of coherent OpenSource & OpenData framework → e.g. curated Gaia-X.
2. Implementation of Techwatch for governmental deviance and renunciation of standards.



## Overall Reflexion

What if your primary goal was ...

... to digitally transform/modernize **public administrations**?

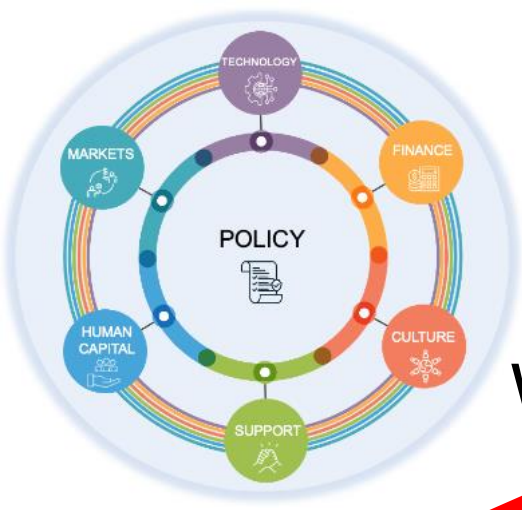
→ Make use of the huge European (or global) GovTech market and  
facilitate the IMPORT of cutting-edge services / GovTech solutions

... to nurture and protect your own **local digital economy**?

→ Facilitate the EXPORT of locally developed GovTech solutions

→ Develop locally specific features that foreign GovTechs won't adapt to

→ Over-emphasise local cultural knowledge and language skills in  
the procurement process



## Overall Reflexion

What if your primary goal was ...

**What we DIDN'T find!**  
(with very few exceptions)

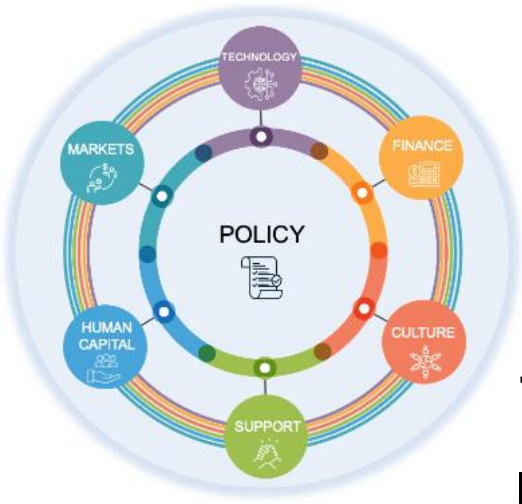
... to **fully transform/modernize public administrations?**

- Make use of the huge European (or global) GovTech market and facilitate the **IMPORT** of cutting-edge services / GovTech solutions

**What we DID find!**

... to **develop and protect your own local digital economy?**

- Facilitate the **EXPORT** of locally developed GovTech solutions
- Develop locally specific features that foreign GovTechs won't adapt to
- Over-emphasise local cultural knowledge and language skills in the procurement process



## Overall Reflexion | Open Issues

- Is current GovTech ecosystem-building only/primarily about local/national economic development rather than administrative modernisation?
- Do current export-focussed and “protectionist” practices help or sabotage GovTech ecosystem development in the long run?
- How to create a “free market” for GovTech solutions and best practices in Europe?

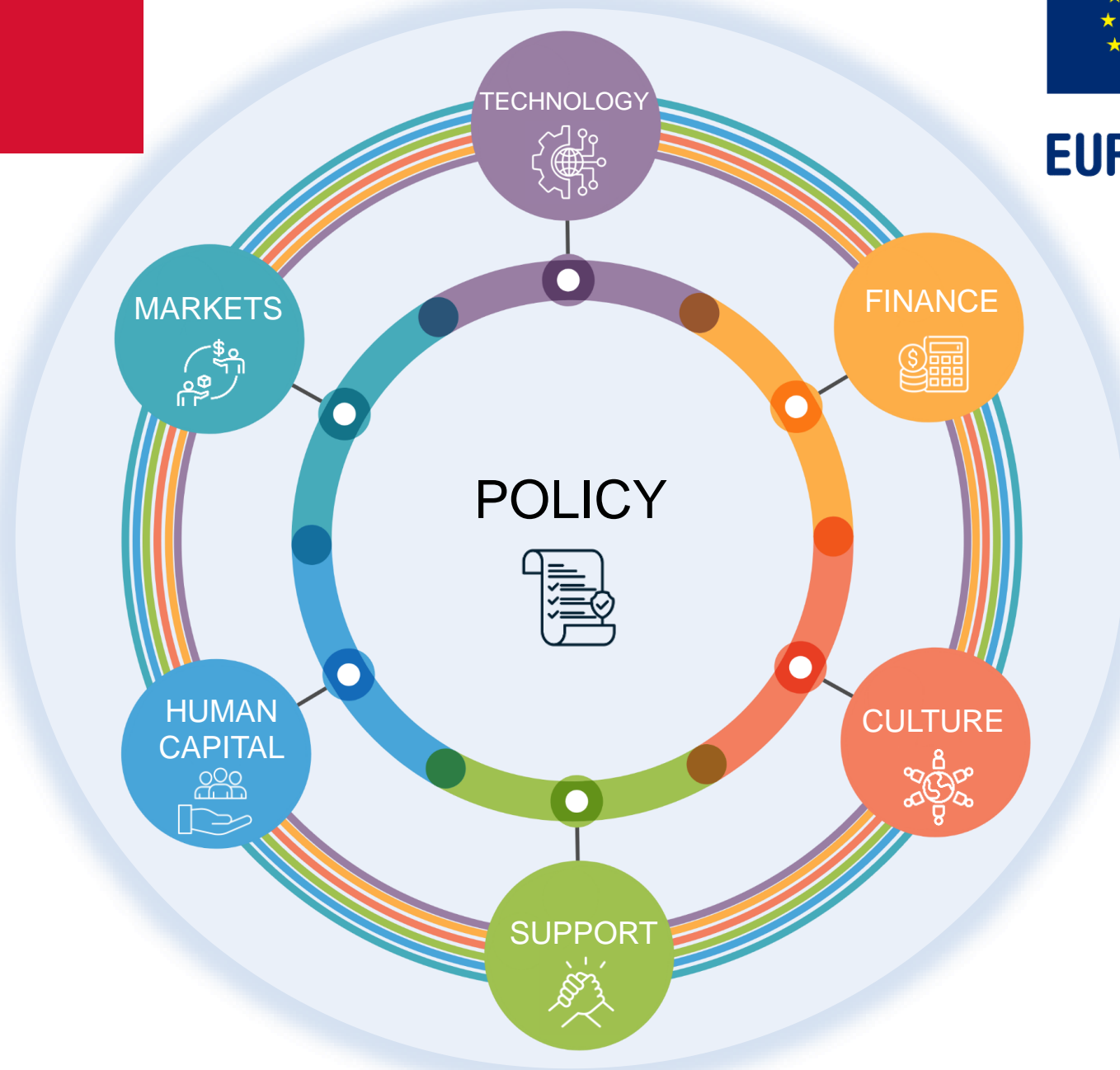


Thank you!



JRC

EUROPEAN COMMISSION



Thank you!  
Grazie!  
Gracias!  
Danke!  
Dzięk!  
Merci!  
Obrigad!  
Äitäh!  
Dankon!  
Kiitos!  
Ευχαριστώ!  
Paldies!  
Благодаря!  
Bedankt!  
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