

# Dopyt po developeroch v Európe 2020-2025

Analýza frontend, backend a cloud technológií

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# Research otázky

Ako sa vyvíjal dopyt po **frontend** vs **backend** developeroch počas 2020-2025?

Ktoré **frameworky** sú najžiadanejšie v ktorých krajinách?

Ako sa líši dopyt po **cloud** technológiách naprieč Európou?

Ktoré technológie zaznamenali najväčší rast/pokles?

**22 európskych krajín**



# Metodológia

Dátové zdroje:

- Stack Overflow Developer Survey 2020-2025
- LinkedIn Job Data
- JetBrains State of Developer Ecosystem
- Národné štatistiky (Eurostat, DESI)



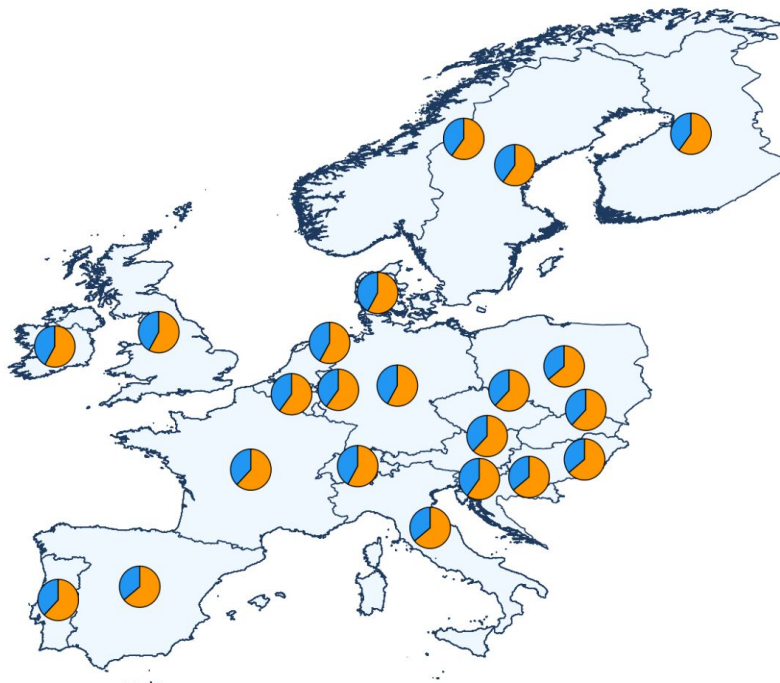
# Spracovanie

- Extrakcia dát pre 22 krajín
- Normalizácia na percentá (%)
- Vizualizácia: QGIS pie charts

Nástroj: Python + PyQGIS + AI (Research mode)

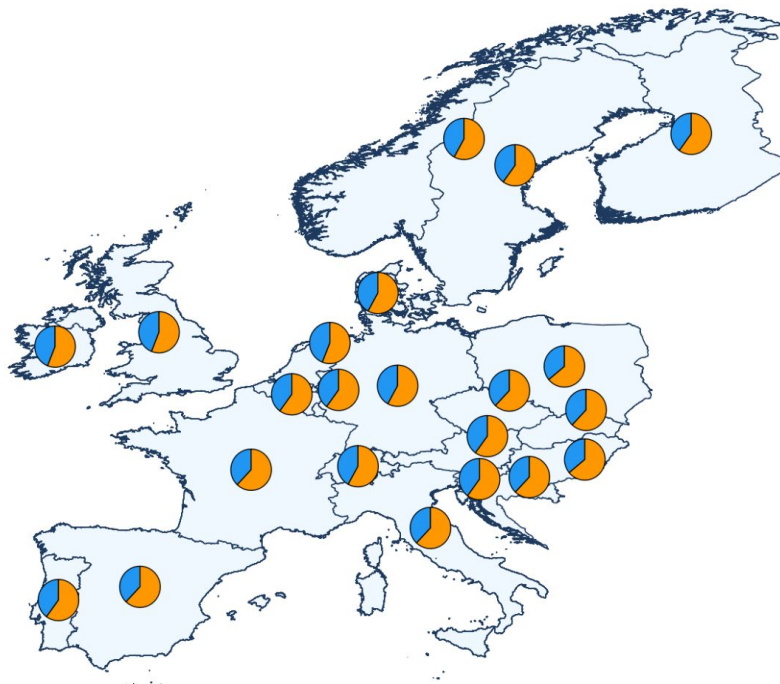


# Frontend vs Backend - Pomer 2020



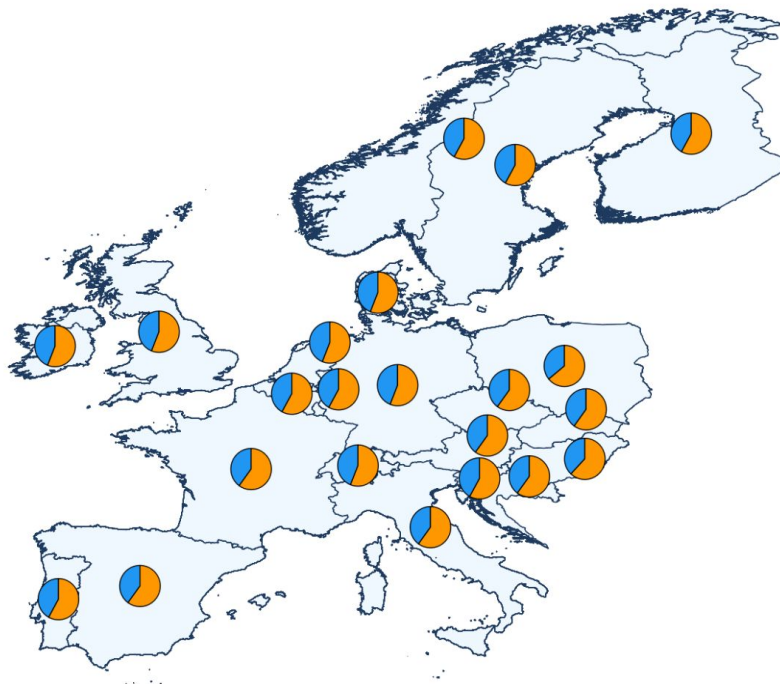


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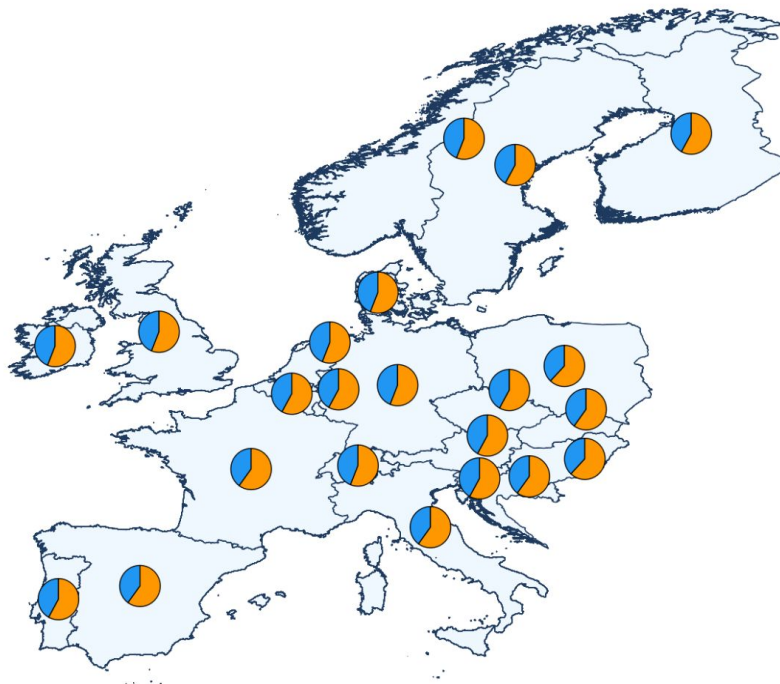


# Frontend vs Backend - Pomer 2022





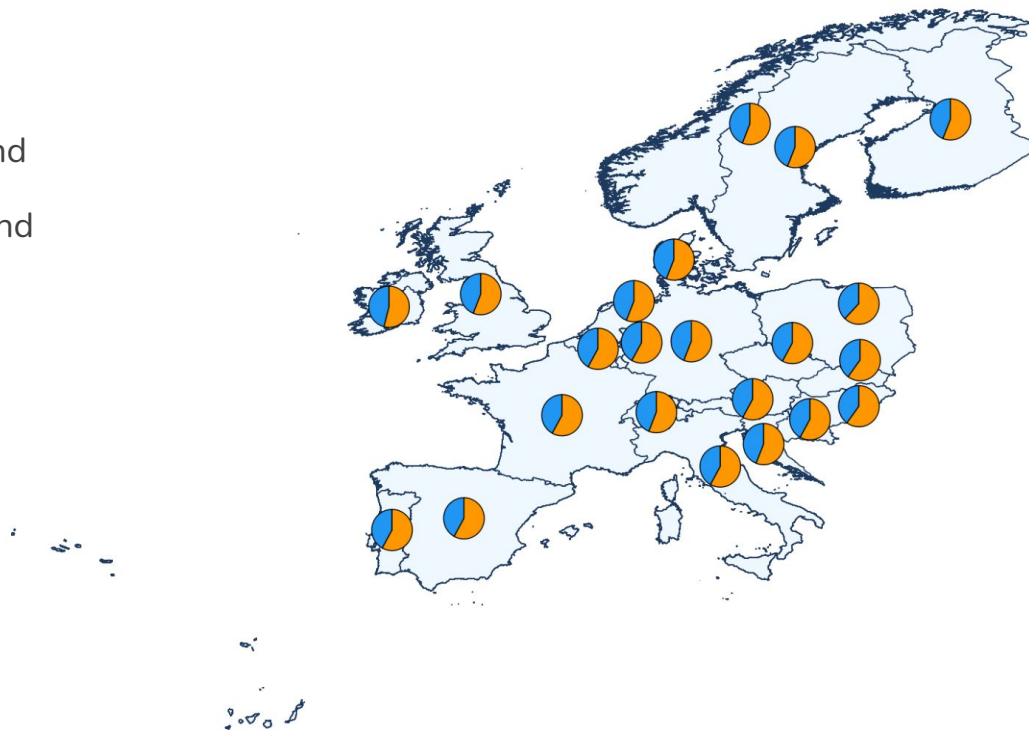
# Frontend vs Backend - Pomer 2023





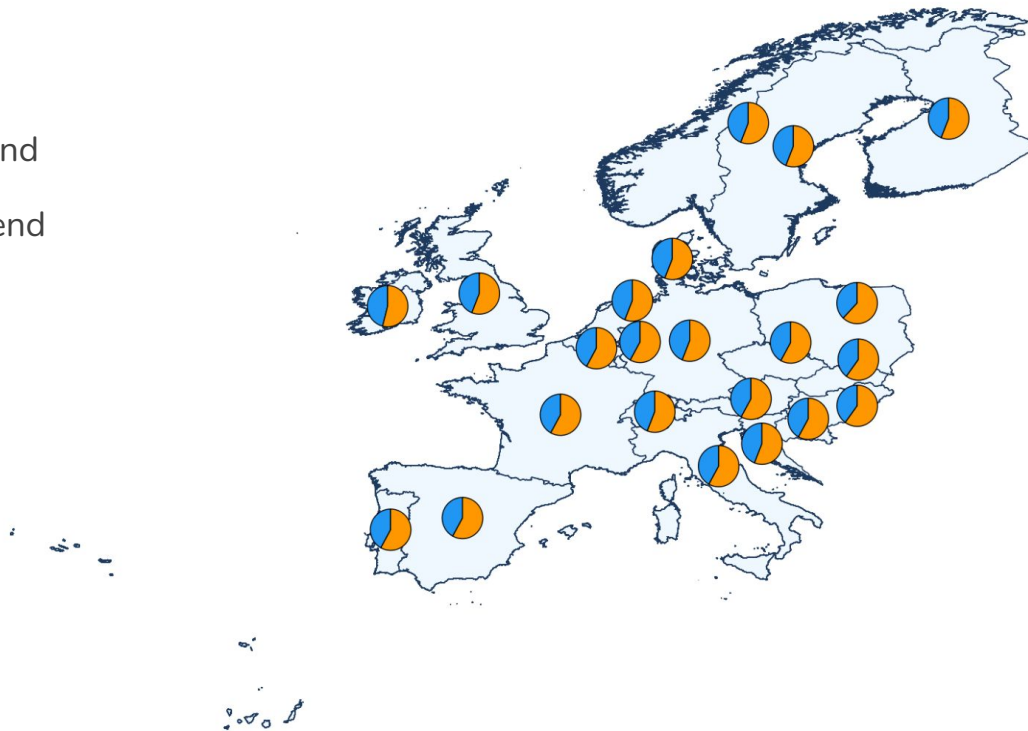


# Frontend vs Backend - Pomer 2024





# Frontend vs Backend - Pomer 2025



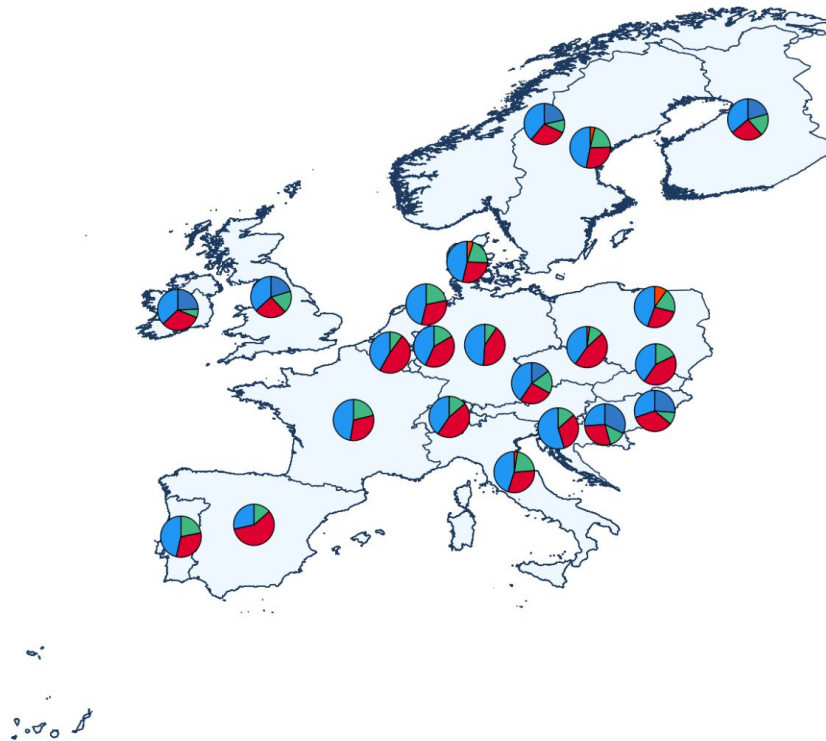


# Frontend vs Backend 2020 - 2025

- Backend: 57-61% dopytu vo všetkých krajinách
- Frontend: 39-43%
- Pomer stabilný počas 2020-2025
- Frontend +4% za 5 rokov
- Dôvod: komplexnejšie UI, TypeScript adopcia



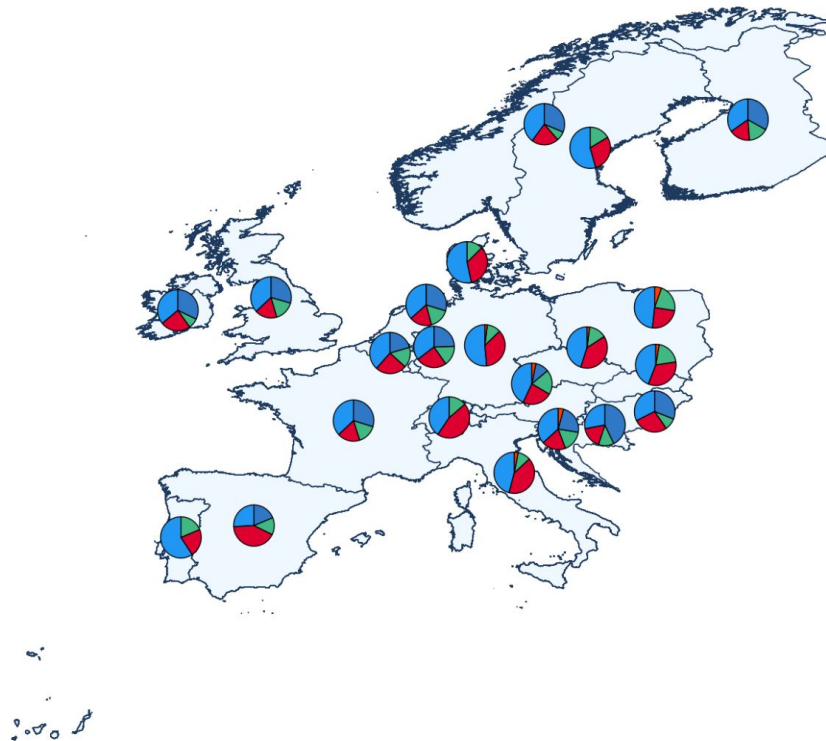
# Frontend technologie 2020



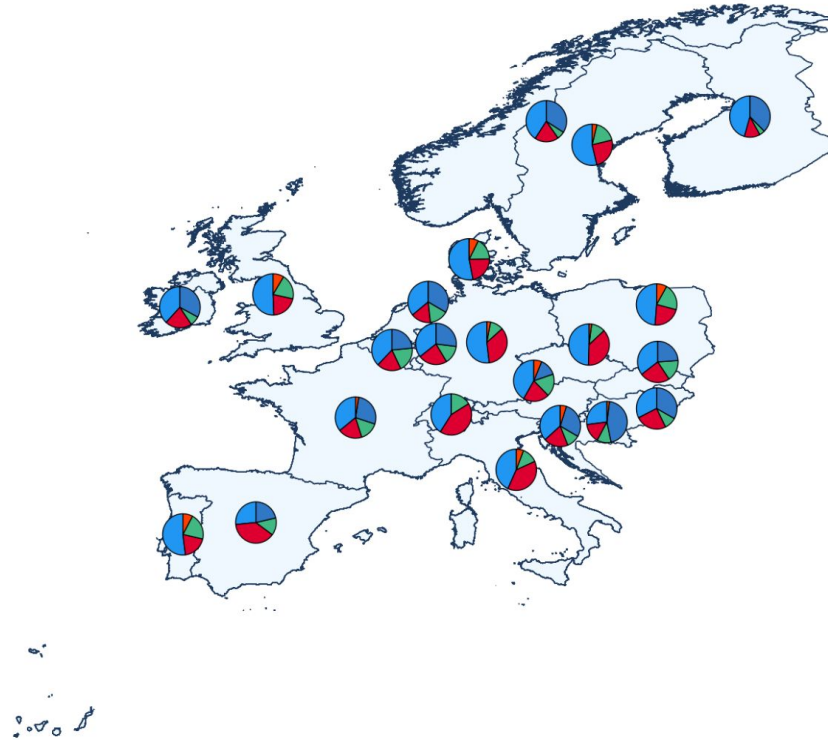
# Frontend technologie 2021



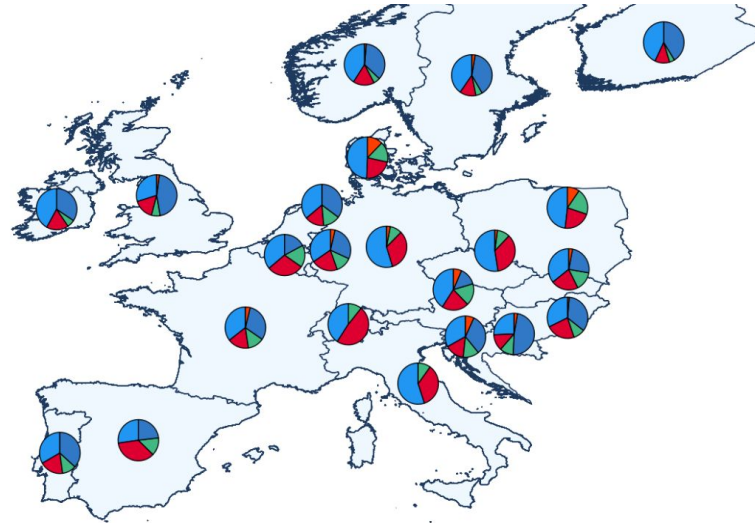
# Frontend technologie 2022



# Frontend technologie 2023



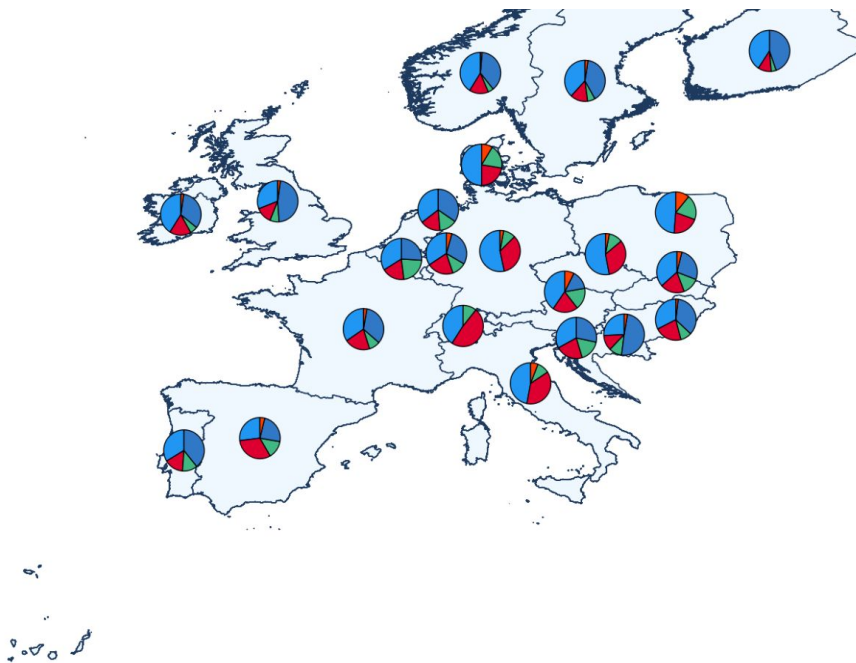
# Frontend technologie 2024







# Frontend technologie 2025



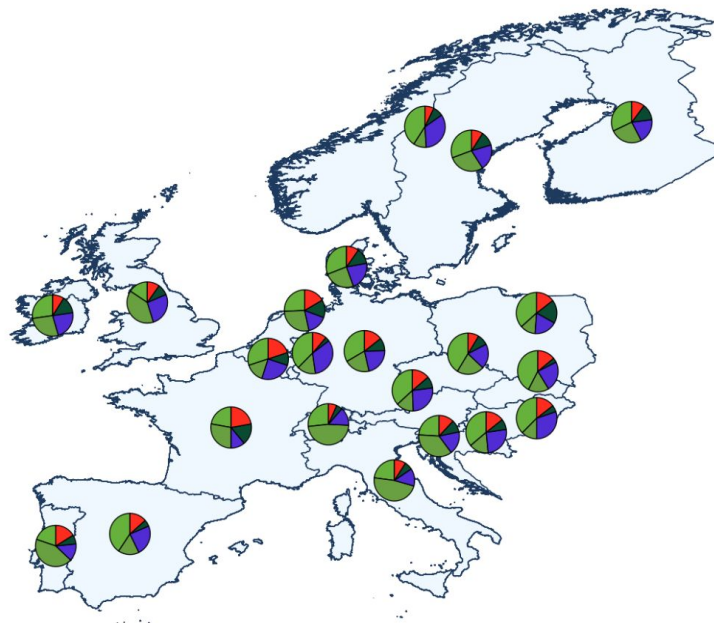
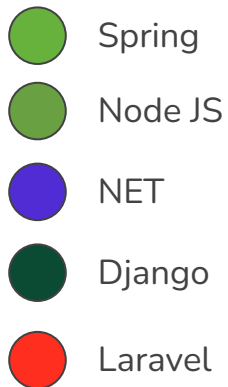


# Frontend technológie 2020 - 2025

- React: 38% → 55% (dominantný framework)
  - Angular: 40% → 20% (pokles o polovicu)
  - Vue.js: 12-18% (stabilný)
  - TypeScript: 15% → 45-80% (nový štandard)
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- Švajčiarsko: Angular 45% > React 38%
  - Španielsko: Angular 41% > React 35%

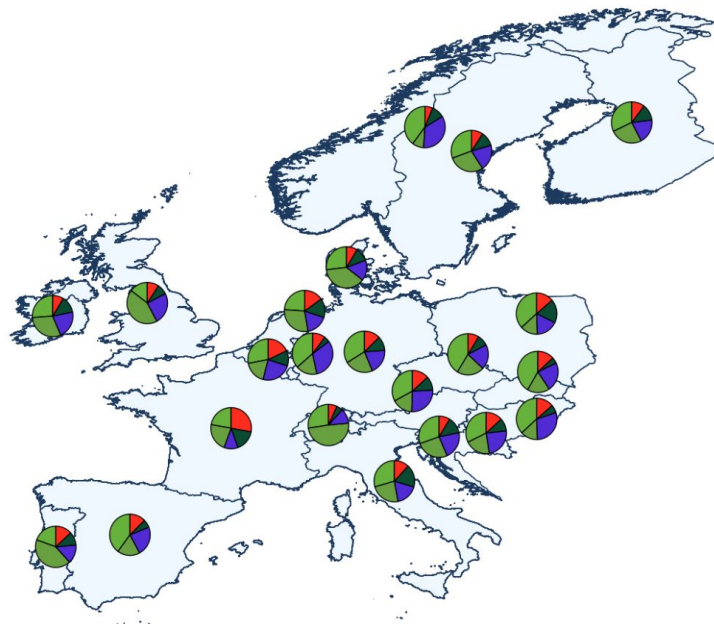
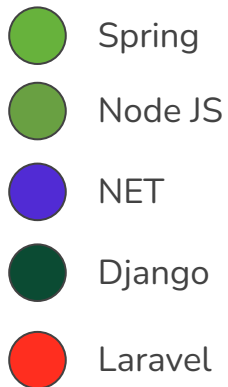


# Backend technologie 2020



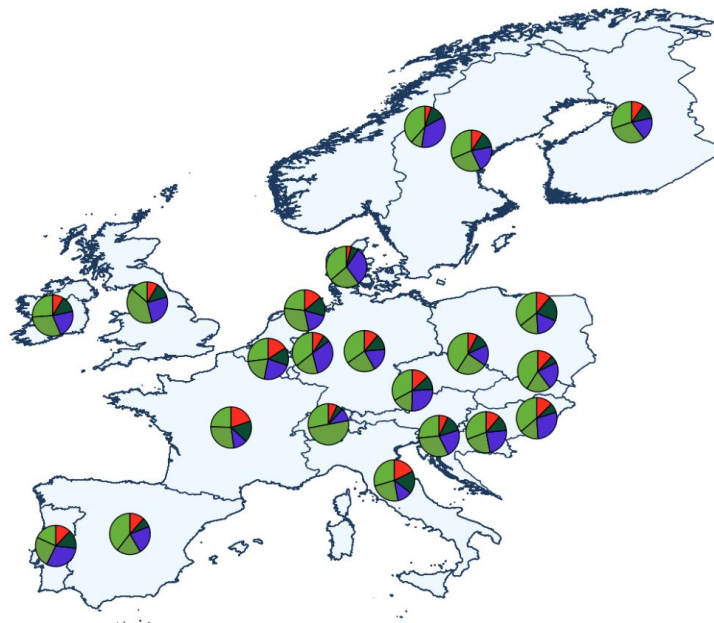
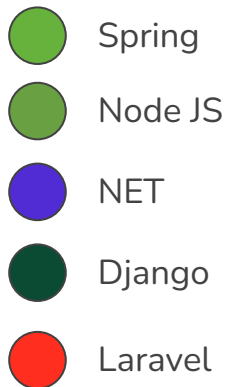


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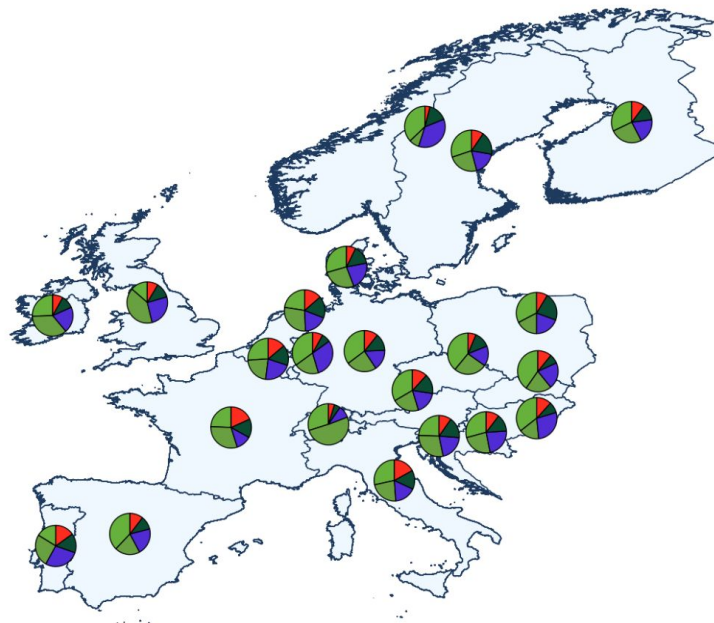
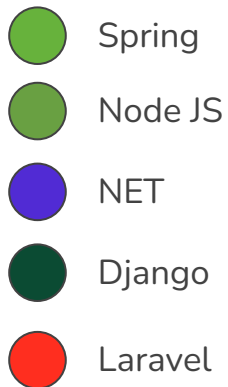


# Backend technologie 2022



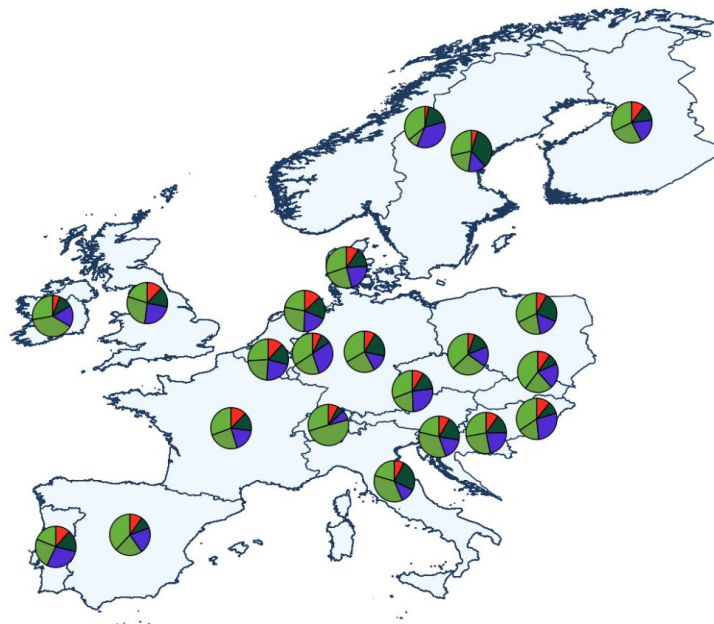
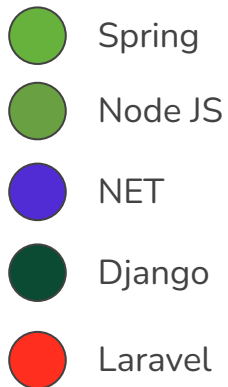


# Backend technologie 2023



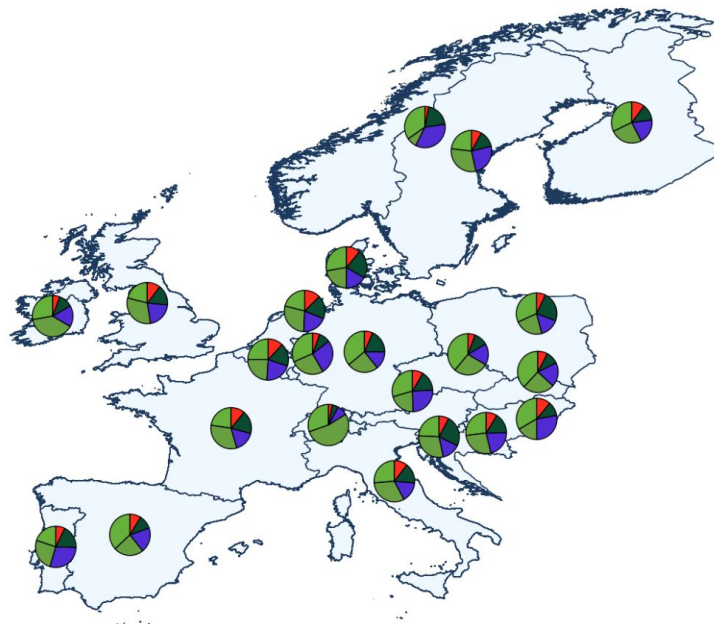
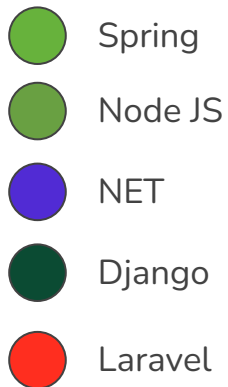


# Backend technologie 2024





# Backend technologie 2025





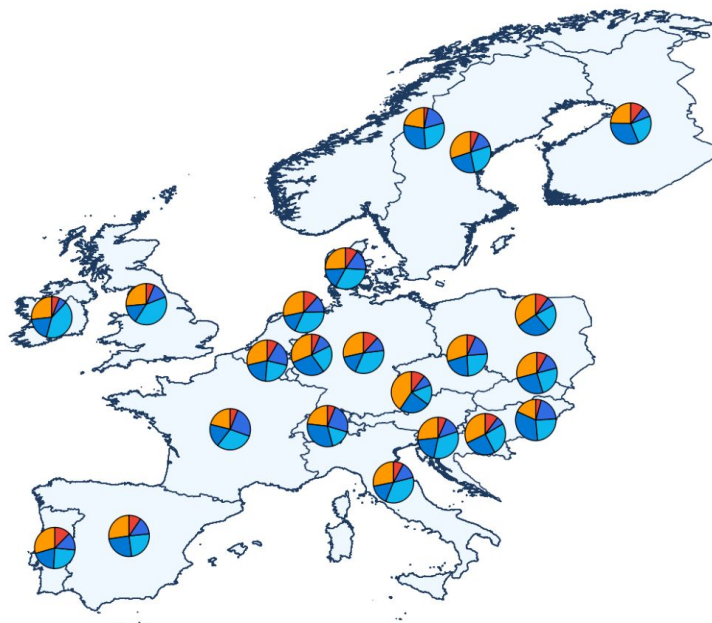
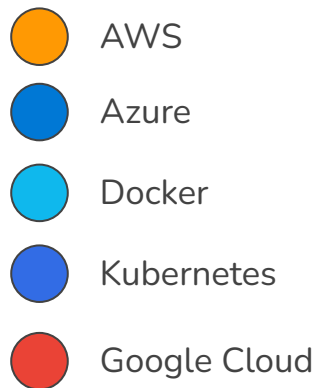


# Backend technológie 2020 - 2025

- Node.js: 15% → 40% (najväčší rast)
  - Spring Boot: 35% → 28% (mierny pokles)
  - .NET Core: 20% → 25% (stabilný rast)
  - Django: 8% → 20% (AI/ML boom)
  - Laravel: 15% → 8% (pokles - PHP klesá)
- Trend:
- Node.js rastie vďaka full-stack developerom
  - Django profituje z Python/AI popularity

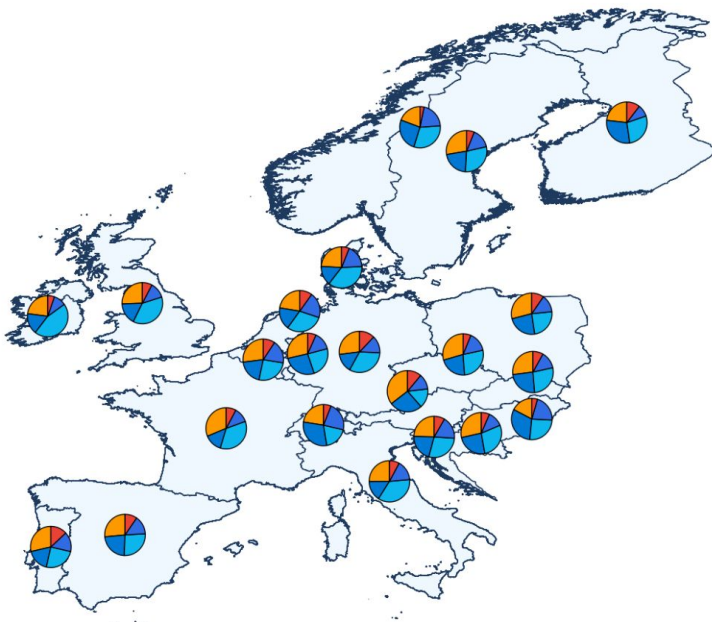
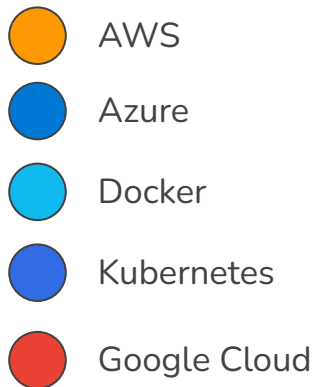


# Cloud technologie 2020



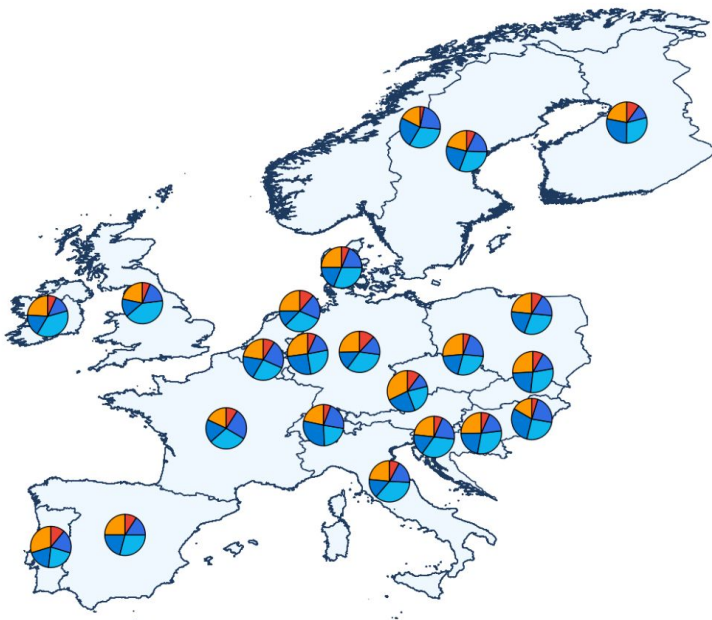
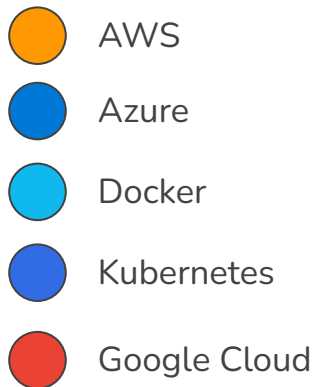


# Cloud technologie 2021



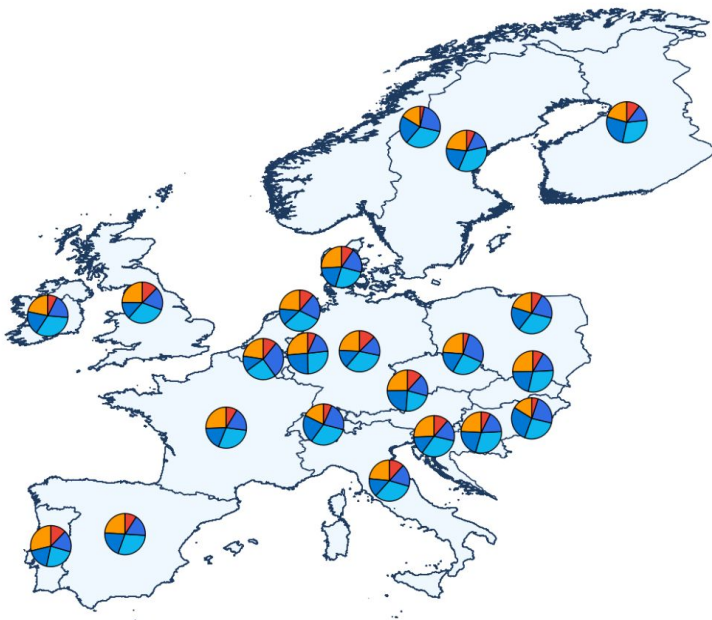
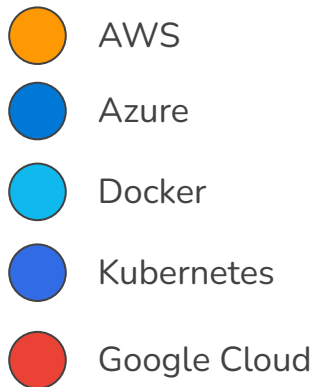


# Cloud technologie 2022



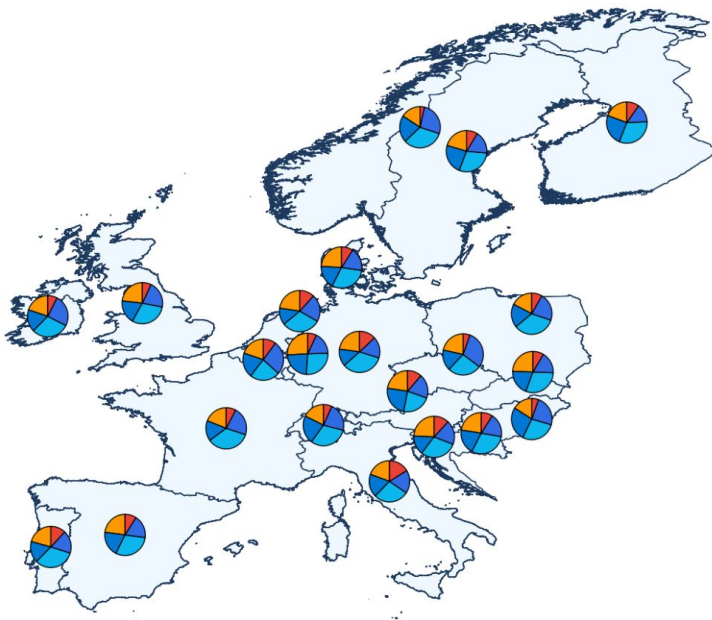
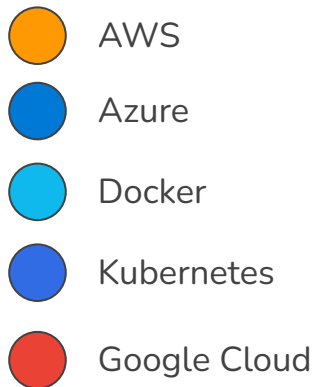


# Cloud technologie 2023



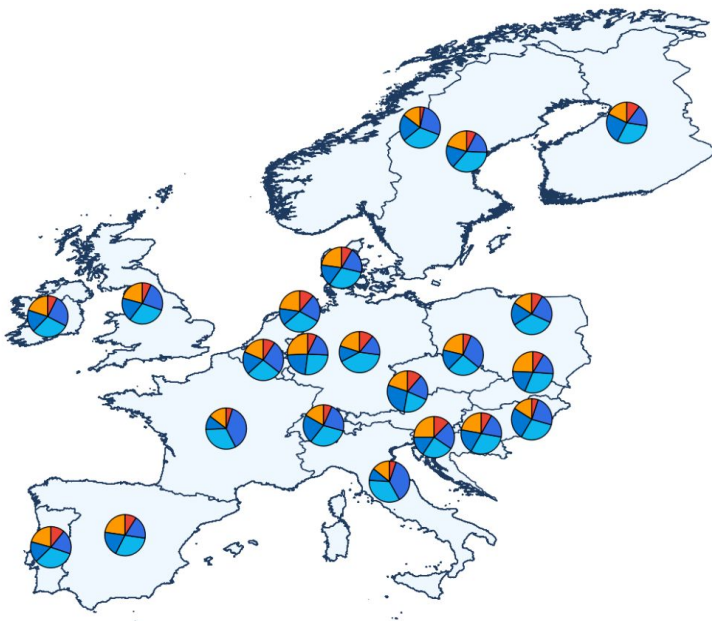
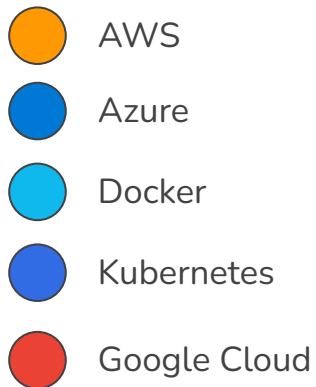


# Cloud technologie 2024





# Cloud technologie 2025





# Cloud technológie 2020 - 2025

- Docker: 25% → 75% (univerzálny štandard)
- Kubernetes: 10% → 50% (produkčný štandard)
- AWS: 40% → 45% (stabilný líder)
- Azure: 25% → 40% (najväčší rast medzi cloud providers)
- GCP: 10% → 15% (pomalý rast)
- Cloud-native je nová norma
- Docker povinný skill pre každého developera
- Kubernetes z "nice to have" na "must have"
- AWS vs Azure vyrovnaný boj





# Vyhodnotenie

- Ideš do Nordics? → Azure + React + TypeScript
- Ideš do CEE? → Spring Boot + React
- Ideš do UK/NL? → Node.js + AWS + React
- Zostávaš na SK/CZ? → Spring Boot + React + Azure



**Ďakujem za pozornosť**

