Impacts of digitalisation on reporting and visualisation with special regards to Performance Management

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Methodology and evidence

- Desk research
- Survey that started in August
  - 23 survey responses plus one written feedback that cover 21 countries and the Commission
  - Solid base for an overview of the direction of innovation in the public sector
- Workshops
Digital innovation in the public sector

- Digitalisation drives change in the public sector but other developments (e.g. change in societal values) demand restructuring too
- (Technology induced) Innovations must go along with organisational changes and (re)training of employees to develop their full potential
- The user perspective and involvement of stakeholder have also increased in important in recent years
- Institutional change might also be a prerequisite for successful adaptations in the public sector (i.e. changing laws, redefining how public accountability is achieved)
- The innovation process overall might be more demanding than in the private sector
Basic approach of study

Digitalisation

Data collection → Data processing → Data analysis → Reporting and visualisation

Innovation
Did you observe significant innovations in the reporting and visualisation workflow (including data collection, manipulation and aggregation and data analysis) in the public sector of your country between 2015 and 2017?

- Yes: 68%
- No: 32%
Planned innovations

Are you aware of significant innovations to be introduced in the reporting and visualisation workflow (including data collection, manipulation and aggregation and data analysis) in the public sector of your country between 2018 and 2020?

73% Yes
27% No

Community based innovation systems
Is your country making efforts to achieve a fully automated workflow from data gathering to reporting and visualisation?

- Yes: 73%
- No: 27%
Digital innovation and organisational change

Did digitalisation significantly impact work practices, the organisation of work and efforts to (re)train employees in the public sector in your country?

78% Yes
22% No
Supply and demand side factors
Supply side factors

- Digital or e-government: 55% (32%)
- Open Data (Portals): 29% (52%)
- New graphing tools for better communication through visualisation: 29% (48%)
- Data Warehousing: 15% (50%)
- Data Mining /Business Analytics: 20% (30%)
- Interactive online mapping capacities: 15% (20%)
- Increased use of Big Data methods: 5% (29%)
- Enterprise Resource Planning (ERP): 10% (20%)

Häufigkeit in %

Community based innovation systems
Demand side factors

- Intensified efforts to reduce internal bureaucracy and cut red tape
  - 41% + 55% +

- Increased efforts to treat service users as customers
  - 50% + 36% +

- Better and quicker dissemination of reporting data
  - 36% + 45% +

- Better informed citizens
  - 48% + 33% +

- Effort to increase overall public sector productivity
  - 33% + 48% +

- Transparency and open government
  - 45% + 32% +

- Data driven/evidence-based decision making
  - 36% + 36% +

- Shifted focus in performance management from input to output and outcome targets
  - 32% + 36% +

- Citizen participation methods/initiatives/citizen engagement
  - 24% + 29% +

- Efforts to reduce the number of public sector staff
  - 9% + 23% +

Community based innovation systems
Digital Workflow

**Digitalisation**

- Data collection
  - ERP
- Data processing
  - Data warehousing
- Data analysis
  - Data mining/business analytics
  - Big Data
- Reporting and visualisation
  - Open data portals
  - New graphing tools
  - Interactive online mapping

**Innovation**

- Less red tape, increased productivity
- Digital service delivery/government
- Better dissemination of reporting data
- Better informed and involved citizens
- Transparency
- Better decisions
Performance Management
Performance Management

Public sector provides
- Services to citizens and companies (e.g. health, education, security)
- Infrastructures and investments
- Regulations
- Policies
- ...

Performance Management provides a framework to achieve these outputs and outcomes efficiently and effectively rather than focusing on inputs

- Performance Management
  - Finding factors that impact on performance of an activity/process/area
  - Defining indicators needed to take decisions
  - Developing a process how to measure these indicators
  - Implementing the measurement of indicators
  - Taking evidence based-decisions based on data collected
  - Reviewing of outputs and outcomes
Performance Management

Does your public administration have a working Performance Management system in place?

- **Yes**: 73%
- **No**: 27%
Is there a specialised government organisation in charge of promoting Performance Management within the public service?

- Yes: 78%
- No: 22%
What is the scope of the Performance Management organisation's work? Please select all that apply.

- Whole central government: 61%
- Individual ministry: 17%
- Several ministries: 11%
- Directorate/unit within ministry: 11%
- Other (please specify): 39%
Goal setting in PM

Are the Performance Management goals set by

- A central authority based on political objectives
- The political sphere
- Each ministry independently
- Each agency independently
- Each department independently
- Other, please explain:
Automisation of PM workflow

Please estimate to what percentage (%) the Performance Management workflow is already automated:
PM reporting channels

Reports that analyse and communicate the outcome of Performance Management are released

- On a regular basis/Regularly: 45%
- Annually/annual reports: 23%
- Monthly/monthly reports: 18%
- Ad hoc messages: 9%
- Other (please specify): 5%
Please indicate the importance of different visualisation approaches in Performance Management between 2015 - 2017.

- Single variable visualisation: 12% (low) - 41% (high)
- Two or more variable visualisation: 18% (low) - 35% (high)
- Interactive visualisation containing 2 or more variables: 17% (low) - 22% (high)
- Explanatory videos: 0% (low) - 18% (high)
To summarise...

- Substantial innovations momentum in public sector due to digitalisation and societal changes
- Convergence in targets and approaches but still large gaps between countries
- Public sector is confronted with multi-target efforts and demands
- Most countries have Performance Management and Performance Management organisation in place
  - Performance Management is institutionalised centrally, i.e. at the central government level, although still strong deviations (40%)
  - target setting is done in a decentralised way as this task is complex, comes with motivational aspects, etc. but may need coordination
  - the automatization of the Performance Management workflow stretches across the whole spectrum, i.e. from 0 - 100%
  - that reporting and visualisation might have not yet fully exploited the potential offered by digital technologies.
- More on the Performance Management in the workshop
And now....

…the floor is open for your questions!

Thank you very much!