



Recommendation 1:

**Artificial Intelligence
& bots**

**Access to
public sector
information**

Using '*artificial intelligence and bots*' to meet the business need '*Access to public sector information*'

Status quo:

In general it can be observed that artificial intelligence is one of the top emerging technologies in which a lot of research and development is happening right now.

However, the state of the art of artificial intelligence already permits to have several applications which could help to satisfy the need to access public sector information.

There are currently many administrations, like Enfield Council, the Department of Homeland Security, North Carolina's Innovation Center, the Australian Tax Office or the government of Singapore which use artificial intelligence in the form of chatbots to interact with their citizens.

Recommended actions:

Technical challenges:

- Natural communications between artificial intelligence systems and humans
- Advancement in natural language processing (e.g. regarding local language)
- Learn and reason of artificial intelligence systems, as they encounter new tasks and situations
- 'cold user' experience; lack of personality of artificial intelligence systems

Non-technical challenges:

- *Personnel*: need for well-educated and trained personnel
- *Personnel strategy*: Prepare a long-term plan regarding the future of the current personnel (new tasks and possible displacements)
- *Chatbot infrastructure*: infrastructure provider or one's own IT infrastructure
- *Promotion and dealing with public acceptance issues*
- *Cyber security issues*: e.g. regarding hacker and scammers
- *Regulations and laws*: e.g. in the area of ethics, liability, intellectual property, security, privacy, dignity and autonomy.

Access to public sector information:

The data provided by public sector is particularly significant for enterprises both because of the quantity and quality, and centrality of the data it collects. However, there are certain barriers to opening up of data which include loss of control over the information, low information quality and privacy concerns for the public sector. Thus, it is least surprising that there still exists a reluctance in the public sector to collect and release relevant data. In view of these issues, few of the informants expressed the need to "Free access to cadastral and enterprises data" and that "Private companies depend on the public sector will to open those data."

Artificial Intelligence and bots:

Technology field that draws upon computer science, mathematics, psychology, linguistics, philosophy, neuroscience and artificial psychology. Artificial Intelligence (AI) is intelligence exhibited by machines. In computer science, an "intelligent" machine is ideally a flexible rational agent that perceives its environment and takes actions that maximize its chance of success at some goal. Colloquially, the term "artificial intelligence" is applied when a machine mimics cognitive functions such as "learning" and problem solving.

* Wikipedia Artificial intelligence. https://en.wikipedia.org/wiki/Artificial_intelligence. Accessed 14 June 2017.