WSIS Forum 2023

Future of e-government assessment in the era of AI: Opportunities and Challenges

Thursday, 16 March 2023, 09:15 to 10:15 CET,

Room E, 3rd Floor, ITU HQ, Geneva, Switzerland

Background on WSIS

The annual World Summit on the Information Society (WSIS) Forum is a global multistakeholder platform facilitating the implementation of the WSIS Action Lines for advancing sustainable development, organized by ITU, UNESCO, UNDP and UNCTAD, in close collaboration with all WSIS Action Line cofacilitators and other UN organizations. It provides an opportunity for information exchange, knowledge creation and sharing of best practices, while identifying emerging trends and fostering partnerships, considering the evolving Information and Knowledge Societies.

The United Nations Department of Economic and Social Affairs (UNDESA) through the Division for Public Institutions and Digital Government (DPIDG) serves as a facilitator for the implementation of and follow-up to the action lines:

- C1 The role of public governance authorities and all stakeholders in the promotion of ICTs for development
- C7 ICT Applications: E-government
- C11 International and regional cooperation

United Nations E-Government Survey

The United Nations E-Government Survey, a biennial publication of the United Nations Department of Economic and Social Affairs (UN DESA), was conceived and continues to be recognized as a valuable measurement and development tool, serving as both a monitoring mechanism and a guiding framework for public sector digitalization. The twelfth edition of the Survey that was launched in September 2023 offers further evidence of the ongoing shift from the traditional technocratic e-government approach of the early 2000s to a digital development agenda that is policy oriented, data-centric and politically driven, and it further illustrates how e-government has expanded and evolved from siloed approaches in a handful of high-income countries to whole-of-government and whole-of-society approaches in virtually all countries around the globe. In a very real sense, digitalization is redefining and transforming the way Governments operate.

The Survey is the only global report that assesses the e-government development status of all United Nations Member States. The methodological framework for the collection and assessment of the Survey's data on e-government development is based on a holistic view of e-government that incorporates three important dimensions that allow people to benefit from online services and information: the adequacy of telecommunication infrastructure, the ability of human resources to promote and use ICTs, and the

availability of online services and content.

The same way that the features assessed by the United Nations E-Government Survey are updated every new edition, the assessment methodologies that the Survey utilizes also is updated. Innovative digital tools and artificial Intelligence (AI) technologies - already available on the market- could automate some of the features that the Survey checks. The use of so called chatbots such as ChatGPT¹ could assist and support the work of the assessors and in some cases replace it. Al could be used in several ways in assessing e-government development:

- 1. Data analysis: Al algorithms can analyze large amounts of data from e-government systems and services to identify trends, measure effectiveness, and detect areas for improvement.
- 2. User experience: Al can be used to monitor and analyze user interactions with e-government systems, such as website traffic and online service usage patterns, to assess the user experience and identify areas for improvement.
- 3. Sentiment analysis: Al can be used to analyze public opinions and feedback on e-government services, such as social media posts and online reviews, to understand public perceptions of the services and identify areas for improvement.
- 4. Predictive modeling: Al can be used to develop predictive models that analyze historical data to identify future trends and potential challenges in e-government development, allowing organizations to proactively address potential issues.
- 5. Performance evaluation: Al can be used to evaluate the performance of e-government systems, such as website speed and uptime, to ensure that they are operating at optimal levels and meeting user needs.

Al can automate part of the assessment of e-government services, help us to understand the effectiveness of e-government portals, and identify areas for further improvement. The same way private sector utilizes larges amount of data to understand customer patterns, government officials can use Al to analyze website traffic and people's interactions with public services and official enabling them to focus on other activities. However, it is not realistic to expect Al or other new technologies to eliminate human judgement in e-government assessment. In the future, both international organizations and government officials, will still rely on human expertise to assess the impact of e-government services. While machines will be helpful in analyzing large amounts of data, we will still need assessors mimicking the behaviors of an average citizen to assess the e-government portals.

Purpose

The session will reflect on global and regional perspectives on digital/e-government development and suggest new tools and models to improvements to survey methodology to better measure digital government and how we can further utilize the Survey and e-government to accelerate the 2030 Agenda.

In particular, the UN DESA facilitation session will provide a platform for government officials, e-government experts, international organizations, private sector and academia to share their perspectives on:

¹ ChatGPT is a chatbot launched by OpenAI in November 2022.

- How can UN DESA utilize AI and new technologies to assess e-government portals?
- How can UN DESA advance the UN E-Government Survey methodology to improve data collection and assessment of e-government development at national level in line with mega trends such as AI, blockchain and big data?
- What will be the key trends in e-government technologies, how public officials will interact with people, how will people conduct business with governments in the coming years?
- What kind of online public services are waiting for us in the future?

Expected results

The facilitation session is expected to achieve the following outputs:

- Summary of the identified key trends in global and regional developments in e-government and digital transformation
- Discuss future of e-government and identify a new set of assessment indicators that will make UN
 E-Government Survey more aligned with future trends
- Recommendations on innovative ways to capture such emerging global trends in e-government development through enhancing the 2022 Survey methodology
- Identify possible AI based tools and platforms to assess e-government portals

Structure of the meeting

The meeting will include list of presentations from all stakeholders followed by a Q&A session. Further consultations will continue through the online channels that UN DESA is conducting to further improve the Survey methodology.

Recommended readings

To aid the meeting's deliberations, participants are encouraged to read and review, prior to the meeting, the <u>United Nations E-Government Survey 2022</u>, and particularly its <u>Annexes</u> where its methodology is described in detail.

Participants will also benefit by reading the reports of the expert group meetings on the Survey Methodology which are available here.