

Submission of Case Studies

Introduction

ESCWA

Driven by the spread and adoption of emerging technologies and the outbreak of COVID-19 pandemic, all countries including Arab countries, have accelerated the implementation of their digital transformation agendas. Studies show that emerging technologies¹ and other technologies, like geospatial technologies, offer great potential to improve inclusiveness and effectiveness, promote trust in public institutions, and enhance government responsiveness to citizen needs.

To explore the efficient deployment of emerging technologies and their role in building responsive, inclusive, trustworthy, and effective public institutions, ESCWA launched the project entitled "Expediting the use of technology and innovation for enhanced operations in Arab public institutions" (ENACT) in 2023. The focus falls on providing Arab countries with recommendations to accelerate the implementation of adopted strategies and plans related to the use of emerging technologies and innovation in public sector services and back-office operations. The project will focus on practical measures and promote exchange of best practices and success stories.

ENACT supports the achievement of SDG 16 which calls for peace, justice and strong institutions, especially targets focused on developing effective, accountable and transparent institutions (16.6); ensuring responsive, inclusive and representative decision-making, and (16.7), and ensuring public access to information (16.10).

Building on efforts to collect and share examples and to provide demonstrative cases to enhance project activities, ESCWA would like to receive case studies from Arab countries. All national and local authorities are invited to complete this form and submit initiatives that demonstrate innovation and the use of emerging technologies in enhancing the operations and services of public sector institutions.

The initiatives submitted will be published online via the Arab Open & Innovative Government Portal², launched in 2020, where it will serve as real-life examples of initiatives that are being developed and implemented by Arab countries to promote digital technologies, openness and innovation in public sector and open government. Submissions will also be used in the planned report on "Policies and best practices to harness the use of technology and innovation for building better Arab Public Institutions".

To submit a case study please complete this form, in either English or Arabic and email it to idlebi@un.org and escwa-tdd@un.org, by 30 June 2023 for inclusion in the ESCWA reports. Case studies for the portal³ can be submitted until 30 November 2023, using the same contact information.

¹ Emerging technologies includes new digital technologies such as Artificial Intelligence, Internet of Things, Big Data, Open Data, Blockchain, 5G, Robotics and Immersive technologies such as Metaverse.

² The portal can be accessed at https://opengov.unescwa.org.

³ Published case studies are available from https://opengov.unescwa.org/case-studies



Expediting the use of technology and innovation for enhanced operations in Arab Public Institutions

Case Studies Form

Tips

- Any Arab public institution can submit many case studies as they want to.
- Each case study must be an innovative or good practice related to responsiveness, inclusiveness, trust or effectiveness.
- It is suggested that authorities responsible for national ICT initiatives, liaise with other public institutes in the country to collect relevant cases and submit them to ESCWA.

Fields marked with an * are mandatory.

Arts and culture

Emergency & Disaster

Education

management

Environment

Finance

| | , | | |
|---|----------------------|---|--|
| 1. Title of initiative* and Arabic): | * (English | U.AE Next Generation (Powered by AI) الجيل الجديد من النافذة الرقمية الموحدة – مدعومة بآليات الذكاء الاصطناعي | |
| 2. Initiative URL (If any): | https://U.A | | |
| 3. Country*: | United Arab Emirates | | |
| 4. Your organization* (English and Arabic): | | Telecommunications and Digital Government Regulatory Authortiy (TDRA) – هيئة تنظيم الاتصالات والحكومة الرقمية | |
| 5. Organization URL any): | , , | 'tdra.gov.ae | |
| 6. Primary sector(s) | that the init | iative addresses*: (Please select all that apply) | |
| ☐ Agriculture | | ☐ Mineral resources & energy | |

□ Public administration

Technology

Tourism

Public works & infrastructure

Social and economic development



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| | Health Justice and Law Enforcement Labour & Employment | | Trade & industry Transport Other (please specify): | Click or tap here to enter text. |
|--------|--|-------------|---|----------------------------------|
| 7. Ma | nin aim of the initiative*: (Plea | ise . | select no more tha | n 3) |
| | Public sector innovation Digital government Access to Information Open government Open data Participation, collaboration & Protection of people, systems | | | a |
| 8. Ted | chnology focus of the initiative | e*: | (Please select all th | nat apply) |
| | Connectivity (high speed into Cloud computing Cybersecurity technologies Data centres Artificial intelligence Big data Open Data Immersive technologies (extendixed Reality (MR)) Blockchain Geospatial technologies (GIS Internet of Things Other, please Click or tap specify: | end , Gl | ed reality technolo | ogies such as VR, AR & |

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| 9. 9 | Sus | tainable D | evelopme | nt Goals | of the in | itiative*: (Pled | ase select all that apply) |
|------|---------------------------------|---|--|---|---|--|--|
| | | Agenda 20 SDG1: End SDG2: End SDG3: End SDG4: Inc education SDG5: Act SDG6: Cle Sanitation SDG7: Mo energy SDG8: Pro growth | d poverty d hunger sure healt lusive and nieve gend an Water odern and | d quality der equali and affordabl | | SDG10: Redu SDG11: Inclu SDG12: Resp Production SDG13: Clima SDG14: Life E SDG15: Life of SDG16: Peace societies | onsible Consumption & ate Action Below Water |
| | | escription o | of the initi | iative and | d its purp | ose: (Please a | answer all the following |
| a. | Br | ief descrip | tion*: (10 | 00 words) | | | |
| | ser app lau Ger gap | vices. As the woroach, embodinched in June 2 nched in June 2 nerative Al. U-A | orld's first gov ying the comr 2023, harness Ask provides c ens and admir | vernment dor mitment to di ses the power comprehensiv nistration. U./ | main with a sigital governation of AI and inverse knowledge AE also prior | single letter, "U," it ance and engageme troduces "U-Ask," a e about governmen itizes accessibility t | ublic access to information and signifies a citizen-centric ent. The next-generation U.AE, an advanced chatbot driven by it services in the UAE, bridging the hrough an AI-enabled widget, |
| b. | lm | plementa | tion timel | ine*: (Be | ginning a | ınd ending yed | ar(s) of the initiative) |
| | | ar of unch: | _ | n 25 th May 20 | | | t phase was launched for the ere final sprint delivery will be by |
| | ls or | it ngoing? | Yes: ⊠ | No: | | If No, please ndicate year: | Click or tap here to enter text. |



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Fields marked with an * are mandatory.

ESCWA

c. **Contributor(s)/Partner(s):** (List all entities that participated in developing and/or implementing the initiative. Please select the type of organization using the pull-down menu and name the role each entity played,)

| Contributor/Partner Name | Type of Organization | Role played (25 words) |
|----------------------------|----------------------|----------------------------------|
| TDRA | Government | Product Owner |
| All government entities | Government | Service providers |
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d. Purpose of the initiative*: (100 words)

The next generation of U.AE embodies the principles of inclusive design, leveraging the same powerful experience as ChatGPT to deliver personalized information and services for the public. With national digital identity UAEPass providing seamless access to over 3,000 services, users can effortlessly navigate the platform. By harnessing cutting-edge technology, U.AE Next Generation ensures that every citizen can access and benefit from the wealth of information and services provided. Through tailored interactions and user-centric design, U.AE Next Generation aims to enhance customer satisfaction and empower individuals to fully engage with the UAE government's offerings.

e. Functions and/or Features offered by the initiative*: (100 words)

U-Ask: Powered by generative AI (ChatGPT), U-Ask delivers accurate and up-to-date information on diverse government information and services.

Although users can access all public information anonymously, but they can also enjoy streamlined access to 3000 transactional government services from all entities through the national digital identity UAEPass. U.AE Next Generation incorporates Al-driven accessibility features, ensuring an inclusive and user-friendly experience for all individuals.

Personalized and tailored user experiences based on individual profiles and interactions, delivering personalized services and engagement.

Direct and indirect participation through leveraging app-dynamics, the platform provides ability to study users interactions/digital footprints, enabling continuous user-centric design/development decision-making.



Principles supported through the initiative*: (Select all that applies to the initiative)

⊠ Responsiveness:

Ability and willingness of government to, timely and effectively, address the needs, concerns, and feedback of citizens.

Extent to which all people in the society are represented, engaged, and included in decision-making processes and access to public services.

⊠ Trust:

f.

Belief of citizens that public institutions will act in their best interest and fulfill their responsibilities and obligations with integrity, transparency, and accountability.

⊠ Effectiveness:

Commitment of government to develop effective policies and programs, and measure and evaluate its performance to meet goals and targets and delivering quality public services.

⊠ Transparency:

Openness, accountability and accessibility of government information, decision-making process and operations.

Outcomes, impacts & change in experiences as a result of the initiative*:

g. (200 words)

U.AE Next generation witnessed over 150 design/technical improvements implemented based on user interaction/digital footprint analysis through leveraging App-dynamics.

In addition, with more than 200 content gaps were addressed based on user feedback from the U-Ask conversational agent, ensuring updated and responsive information.

U.AE witnessed 2 million visits in May-June 2023, marking an 11% rise compared to the same period in 2022.

The platform achieved a 6% decrease in bounce rate, indicating improved user engagement and navigation compared to 2022.

U.AE Next generation achieved 100% accessibility/searchability for all portal pages, compared to 79% in 2022, ensuring inclusive access to information and services.

U.AE experienced a surge in public participation, receiving over 1500 suggestions/feedback during May-June, indicating increased engagement and satisfaction.

Enhanced Efficiency where U.AE Next-Generation has significantly reduced response time for user inquiries.



The advanced features have fostered a greater sense of transparency in government services. Users have access to comprehensive and up-to-date information, empowering them with knowledge and enabling informed decision-making.

The user-centric approach of U.AE Next-Generation, coupled with personalized assistance and streamlined access to services, has resulted in higher user satisfaction, 89% public happiness towards U.AE Next Generation.

Challenges faced during the planning and implementation of the initiative*:

h. (200 words)

Ensuring ethical usage of emerging technologies was a top concern. To address this, a regulatory sandbox was established, engaging the public and stakeholders to test the solution against AI ethics policies. Developing a chatbot that adheres to strict data protection standards was a primary challenge. Balancing the ability to handle large volumes of information while remaining compliant with data protection regulations required careful consideration.

Integrating new components and features into the existing IT infrastructure was a complex process. Ensuring seamless compatibility with existing systems while maintaining optimal performance required technical expertise and dedicated resources.

U.AE is an extensive portal that is content heavy, consisting of over 10,000 pages in both Arabic and English, which posed a challenge in seamlessly integrating new features. Efforts were made to ensure that the new functionalities complemented the existing portal structure.

The adoption of a new approach for structuring content and portal sections required training the internal teams. Overcoming the challenge of diverse skill-sets to ensure a smooth transition to the new system was a challenge. Encouraging user acceptance of the next-generation to make sure the public are aware of the newly added enhancements. Strategies such as user-awareness campaigns were implemented to promote widespread adoption.



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Lessons learned from the initiative's development and implementation: (200

i. words)

Rolling out U.AE Next Generation was certainly a learning curve for our team. Here are the valuable insights we gained:

- 1. Engaging the public and stakeholders early on in the process proved crucial, specially in Al-Powered features such as U-ASK chatbot. Involving them in regulatory sandboxes and policy discussions ensured ethical usage and garnered support for the platform.
- 2. Managing a content-heavy portal necessitated a strategic approach. Ensuring that new features seamlessly complemented the existing structure required careful consideration.
- 3. One of the major lessons was the importance of a user-centric and inclusive design. Understanding the specific needs, preferences, and behaviors of our users was critical to take informed decisions towards the newly added features.
- 4. Indirect participation through learning from the user interactions via platforms such as APP-Dynamics was a catalyst towards more personalized and use-centric services provisioning.
- 5. The value of rigorous testing and iterative improvements cannot be overstated. Through continual testing and refinement, we were able to identify gaps, and resolve issues on the spot which significantly enhanced U.AE Next generation end product.

These lessons have been instrumental in shaping our approach to AI integration and will undoubtedly guide our future advancements in this exciting field.

j. **Useful links:** (title and URL)

https://u.ae https://ask.u.ae

11. Contact person(s)*: (Please provide at least one contact person for the initiative. This information will not be published and it will only be used to follow-up on the submission, if needed)

| Name*: | Ragia Abdel Wahab |
|---------------|---|
| Functional | Senior Business Analyst |
| title: | |
| Organization: | Telecommunication and Digital Government Regulatroy Authority |
| Email*: | ragia.abdelwahab@tdra.gov.ae |
| Phone/Mobile | +971 4 777 4174 / +971556088215 |
| : | |
| Name: | Click or tap here to enter text. |



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| Functional | Click or tap here to enter text. |
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Thank you