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وزارة النقل والاتصالات وتقنية المعلومات
Sultanate of Oman
Ministry of Transport, Communications and
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ايسيسكو
ICESCO

جامعة التقنية
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University of Technology
and Applied Sciences

IWAIC REGIONAL WORKSHOP
ASIA & MIDDLE EAST
REGIONS

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Concept note

GENERAL
CONTEXT

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Artificial intelligence is the Future, this future is already unfolding in front of us, and thus it has become essential to harness a forward-looking, proactive, and comprehensive way of approaching this intelligence in order to better shape our futures.

The Islamic world region is expected to only reap 2% of the total global benefits of Artificial Intelligence in 2030[1]. Indeed, the Region is facing a hurdle: either embracing this technological disruption or standing on the sidelines.

Beyond 2030[1], it is estimated that the reach of technological development is driven at breakneck speed in the Islamic world, as states have begun to embrace the global shift towards advanced technologies. The annual growth in the contribution of AI will range from 20-34% per year in the region[2].

In the ever-evolving landscape of technology, the Islamic World stands at the precipice of a groundbreaking era with the advent of Artificial Intelligence (AI). With profound potential to shape the futures, AI has emerged as transformative forces, transcending conventional boundaries of human experience and interaction.

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[1] PricewaterhouseCoopers, "The Potential Impact of Artificial Intelligence in the Middle East - PwC Middle East," PwC, 2018, https://www.pwc.com/m1/en/publications/potential-impact-artificial-intelligence-middle-east.html.

[2] "Artifical Intelligence Problem Profile and Career Review," EA NYUAD, 2015, https://www.eanyuad.org/artificial-intelligence#:~:text=The20%Middle20% East20%as20%a,fastest20%growth20%in20%the20%UAE.

a. Added Value of the Islamic World Artificial Intelligence Charter

Artificial Intelligence, serving as a catalyst for the digital revolution, has emerged as a focal point of discourse across diverse arenas such as governments, international organizations, universities, and civil society.

AI has consistently been an integral component of the action plans and executive programs of the Islamic World Educational, Scientific, and Cultural Organization (ICESCO) in its 54 member states.

As such, per the resolution passed by the 43rd Executive Council of ICESCO, held in December 2022 at the Kingdom of Morocco, the General Directorate of the organization has been entrusted unanimously by its member states with the task of formulating the Islamic World Artificial Intelligence Charter (IWAIC).

This significant charter represents a cornerstone among the various AI initiatives undertaken by ICESCO. Notably, it has been incorporated as a fundamental program of the ICESCO Chair on Ethics of Artificial Intelligence, which was established in 2024 at the University of Technology and Applied Sciences in the Sultanate of Oman.

The Islamic World Artificial Intelligence Charter strives reinforces ICESCO's commitment to this subject and represents a significant milestone in the history of AI development in the Islamic world region.

Its value lies in its structured framework, addressing the impacts of AI on various aspects of our region. It enables the Islamic world to capitalize on potential benefits while proactively anticipating risks.

The fundamental aim of this Charter is to shape a future where AI technologies catalyze societal progress, economic growth and intellectual advancement, in harmony with the moral conscience and humanitarian aspirations of the Islamic world.

Emphasizing the significance of ethical AI development in the Islamic World arises from a profound understanding of the ethical principles that underpin its cultural fabric. In Islamic teachings, the sanctity of life, justice, and compassion towards fellow beings are central tenets that extend beyond human-to-human relations. Therefore, it is essential to extend these principles to the development and deployment of AI technologies, which have the potential to significantly impact human lives and interactions.

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3 According to the decision on Agenda Item 1.3 of the 43rd executive council of ICESCO regarding the general perception of the draft Islamic World Artificial Intelligence and Metaverse Charter.ICESCO has been entrusted with the preparation of the Charter have been mandated to undertake the work on the Charter.

Charter becomes an indispensable instrument for confronting these evolving paradigms. The Charter's added value lies in its provision of a structured framework for addressing the far-reaching impacts of AI within the Islamic World.
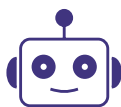
By offering this framework, the Charter equips the Islamic world with the capability to harness the potential benefits while preemptively addressing potential   pitfalls.

The organization, since its mandate by the Executive Council, has undertaken the task of elaborating this charter. It engaged an external expert to conduct an **exploratory preliminary** study, in collaboration with ICESCO's experts, highlighting the advantages and risks of artificial intelligence technologies. The study delineates the future directions of these technologies in the Islamic world countries, elucidating their significance and their relationship with other international and regional reference documents. Additionally, it includes an analytical examination of these documents, probing into the various ethical principles inherent in them, as well as those specific to the member states of the organization.

The initial exploration of the Charter has brought to light the following salient observations:

The draft of the Artificial Intelligence and Metaverse Charter falls within the framework of **continuity and integration** with other international and regional reference documents, similar to UNESCO›s recommendations on the ethics of artificial intelligence. The objective is to maximize the benefits and minimize the risks, ensuring that technology serves humanity.

The Artificial Intelligence Charter stands **not as an investigation into technology and innovation**, nor is it an attempt to infringe on academic, industrial, or commercial liberties. Rather, it serves as a testament to the organization's cognizance of the multifaceted advantages inherent in artificial intelligence systems, permeating diverse spheres such as education, science, culture, and their interrelated domains.

The ICESCO initiative stands out from other initiatives in the field of AI ethics in the following ways:

For ICESCO, the goal is to build a local universal, meaning to develop principles that take into account the cultural, social, and moral context (specificities) of the Islamic world but resonate with all of humanity. By defining an Islamic path to address the challenges of AI, it is possible to engage in dialogue with other cultures and offer reflections that can contribute to those of non-Muslim countries.

In contrast to documents from other organizations that go beyond their areas of expertise, the ICESCO charter will cover all four competence sectors of ICESCO: education, sciences and technology, Human and social sciences and culture. These sectors are linked by a common object, knowledge, and this object allows for a rigorous and coherent definition of the scope of the ICESCO AI ethics charter: under what conditions is it ethical to use AI and VR technologies to produce, transmit, and share knowledge?

Finally, the ICESCO initiative will distinguish between the public and private uses of AI and VR technologies and will propose guidelines for applying principles based on the space of use and the type of user.

Islamic nations have early on recognized the significance of Artificial Intelligence (AI) and Virtual Reality Technologies (VRT) in scientific and economic advancement. They have also perceived the imperative need to establish ethical principles to accompany the ongoing social transformation and guide technology. Consequently, several nations have embarked on the path of ethical contemplation concerning AI:

Malaysia, under the purview of the Ministry of Science, Technology & Innovation (MOSTI), introduced the "Malaysia National Artificial Intelligence Roadmap for 2021-2025" in the year 2021.

Oman, overseen by the Ministry of Transport, Communications, and Information Technology, launched "the Executive Program for Artificial Intelligence and Advanced Technologies" in October 2022.

Saudi Arabia, Through the Saudi Data and AI Authority, unveiled the "AI Ethics Principles (version 1)" in August 2022.

Jordan, Introduced "The National Artificial Intelligence Code of Ethics" in September 2022.

The United Arab Emirates, issued "Ethics: Artificial Intelligence Ethics Principles & Guidelines" in December 2022.

Qatar, guided by the Ministry of Communications and Information Technology, outlined "the National Artificial Intelligence Strategy for Qatar" in January 2023.

Egypt, under the aegis of the National Council for AI, promulgated "the Egyptian Charter for Responsible AI (version 1)" in April 2023.

Jordan, through the Ministry of Digital Economy and Entrepreneurship, unveiled "Jordan's Artificial Intelligence Strategy and Implementation Plan" in 2023.

These documents do not all share the same nature; some are declarations of AI ethics, while others are national strategies. It is imperative to prioritize the former and bracket the latter, which may contain some guiding ethical principles but are primarily industrial and economic development plans. The following table presents the ethical values and principles from the declarations of Malaysia, Saudi Arabia, Jordan, the United Arab Emirates (UAE), and Egypt. Other member states of ICESCO are currently in the process of developing their AI ethics framework, such as Pakistan, Indonesia, Kazakhstan, and Qatar, whose national strategy presentation explicitly recommends the adoption of an ethical framework.

The declarations from Malaysia, Saudi Arabia, Jordan, and the UAE have made significant advancements. In contrast to many charters, the selected ethical principles are embedded within a governance framework that enables their practical application. This often-missing strategy should be embraced by ICESCO to ensure that the charter can tangibly assist organizations in developing AI systems aligned with ethical principles.

IWAIC marks a seminal moment in the narrative of AI development in the Islamic world

Central to this initiative is **Fostering the culture of anticipation and foresight, as well as the establishment of a comprehensive regional accord taking into consideration the specificities of the region pertaining to the ethical underpinnings of Artificial Intelligence**. Through this collective agreement, member states in the Islamic World are poised to anchor their AI undertakings within a dynamic and evolving framework of shared values, encompassing tenets of responsible design, transparency, accountability, and the elimination of discriminatory practices. In consonance with these principles, a paramount concern rests on **Ensuring that AI systems are cultivated and deployed with unwavering ethical and responsible intentions**[4].

Beyond its manifest objectives, this Charter transcends its functional role to embody a **harmonious fusion of Islamic principles and technological aspirations**. In its pursuit of guidance, cooperation, challenge mitigation, and ethical alignment, the Charter beckons the Islamic world towards an era of conscientious AI innovation and responsible technological progression, as it embodies a visionary call to shape the futures of AI technologies in harmony with the timeless principles of Islamic ethics.

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4 These objectives converge to delineate a comprehensive roadmap for ICESCO's member states in their expedition towards ethical AI integration. This journey encompasses ethical frameworks, mutual understanding, foresight, responsibility, privacy, benefits, and comprehensibility, collectively culminating in the propagation of AI as a conduit for sustainable advancement across the Islamic World.

b. Strategic Lines and Applied Dimensions of the IWAIC:

As we delve into the applied dimensions of the IWAIC, it becomes apparent that its strategic influence is far-reaching. This charter emerges as a guiding beacon in diverse domains, and this narrative will illuminate its pivotal role in shaping the trajectory of education, human sciences, culture, environment, sustainable development, work and training, and populations and demography. Each section delves into the specific nuances and imperatives outlined in the IWAIC, elucidating how it positions itself as a comprehensive framework fostering ethical AI development rooted in Islamic values. Within this expansive scope :

Education: The charter underlines a paramount need to formulate AI curricula and training programs attuned to the specific requirements of students. It not only advocates for tailoring educational approaches to the needs of individuals but also places significant emphasis on nurturing critical thinking and problem-solving skills.

Human Sciences: Recognizing AI's potential for fostering social and economic development, the Islamic World AI Charter accentuates the imperative to ensure that such advancements are all-encompassing and just. It calls for the development of AI applications firmly grounded in Islamic ethical principles, with a dual commitment to human welfare and well-being, underscoring the importance of inclusivity in technological progress.

Culture: In the context of AI development, the charter underscores the vital significance of preserving and promoting cultural diversity. It goes beyond a mere acknowledgment, stressing the necessity to imbue AI technologies with cultural sensitivity. A pivotal aspect is ensuring that these technologies do not inadvertently contribute to the erosion of cultural values or the homogenization of diverse cultural practices.

Environment and Sustainable Development: The Islamic World AI Charter positions AI as a potential catalyst for sustainable development and environmental conservation. It not only emphasizes the potential in these realms but actively advocates for the development of AI applications that prioritize resource efficiency, environmental conservation, and the overarching goal of sustainable development.

Work and Training: Recognizing AI's transformative influence on the nature of work and employment, the charter advocates for the necessity of ensuring these developments are characterized by inclusivity and equity. It places a premium on human welfare and well-being, urging that the evolution of work under the influence of AI aligns with ethical considerations.

Populations and Demography: In the intricate domain of demographic analysis and planning, the Islamic World AI Charter anticipates the potential for AI to play a significant role. It places this recognition within the framework of Islamic ethical principles, underscoring the importance of aligning these developments with the promotion of human welfare and well-being.

c. IWAIC's first Regional Workshop Asia-the Middle East:

Building on the overarching vision of the Islamic World Artificial Intelligence Charter (IWAIC), the inaugural regional workshop for the Asia and Middle East regions, held in **Muscat, Sultanate of Oman**, marks a pivotal milestone in the ongoing IWAIC consultation process. This workshop, following the calibration session conducted at ICESCO's headquarters, is strategically positioned to propel the initiative forward.

At its core, this preliminary phase of the workshop is fundamentally participatory in nature. It embraces an ethos of active engagement and collaboration, recognizing the collective expertise and diverse perspectives present among the participants. The aim is to move beyond mere dialogue and to foster tangible contributions from all stakeholders involved.

This preliminary phase builds upon best international and regional practices. By leveraging lessons learned and successful methodologies, the regional workshop aims to refine its approach and contribute to the development of a robust framework for AI ethics and governance in the Asia the Middle East region.

In shaping the discourse on AI ethics, the workshop aims to forge a forward-looking collaboration. By actively involving participants in shaping the narrative and contributing to the development of ethical guidelines, the workshop seeks to create a sense of ownership and collective responsibility among all stakeholders.

This regional workshop is not merely an isolated event but a stepping stone for future initiatives within the IWAIC framework. It lays the groundwork for sustained collaboration, iterative improvements, and the continuous refinement of ethical standards in AI development within the Asian and middle Eastern region.

The decision to organize a regional workshop emanates from a profound commitment to construct a nuanced, culturally sensitive approach to AI ethics. The intricacies of the Islamic world, with its diverse tapestry of cultures, necessitate an inclusive dialogue that transcends geographical boundaries. The workshop provides a platform for stakeholders from the Asian and Middle Eastern region to collectively deliberate and define an Islamic ethical framework for AI that both respects cultural nuances and resonates universally.

This workshop would provide a space for the exchange of ideas tailored to the Asian and middle Eastern regions' cultural and societal values, showcasing its progress in the field of AI and actively contribute to shaping ethical guidelines that resonate with their unique identity.

Moreover, the regional workshop aims to bridge the gap between theoretical discussions and practical implementation. By bringing together stakeholders from academia, industry, and governmental bodies, the workshop seeks to develop actionable strategies for leveraging AI to promote sustainable development.

This includes a focus on ethical AI applications in key sectors such as education, sciences and technology, Human and Social Sciences and culture, aligning seamlessly with ICESCO's priorities and objectives. This initiative reflects the commitment of the organization to ethical and culturally sensitive technological advancements.

Objectives

The primary objectives of the inaugural Regional Workshop of the Islamic World Artificial Intelligence Charter are manifold, reflecting a commitment to fostering comprehensive advancements in the field of artificial intelligence within the Islamic world. The workshop aspires to serve as a pivotal forum for critical discussions, strategic collaboration, and knowledge dissemination among esteemed AI experts from the region. Key objectives include:

Establish a Comprehensive Regional Accord:
Facilitate the creation of a comprehensive regional accord that serves as a shared ethical framework for AI endeavors within the Islamic World.

Regulation and Ethical Frameworks:
Deliberate upon and formulate recommendations for robust regulatory frameworks governing artificial intelligence within the Islamic world, emphasizing ethical considerations and responsible AI practices.
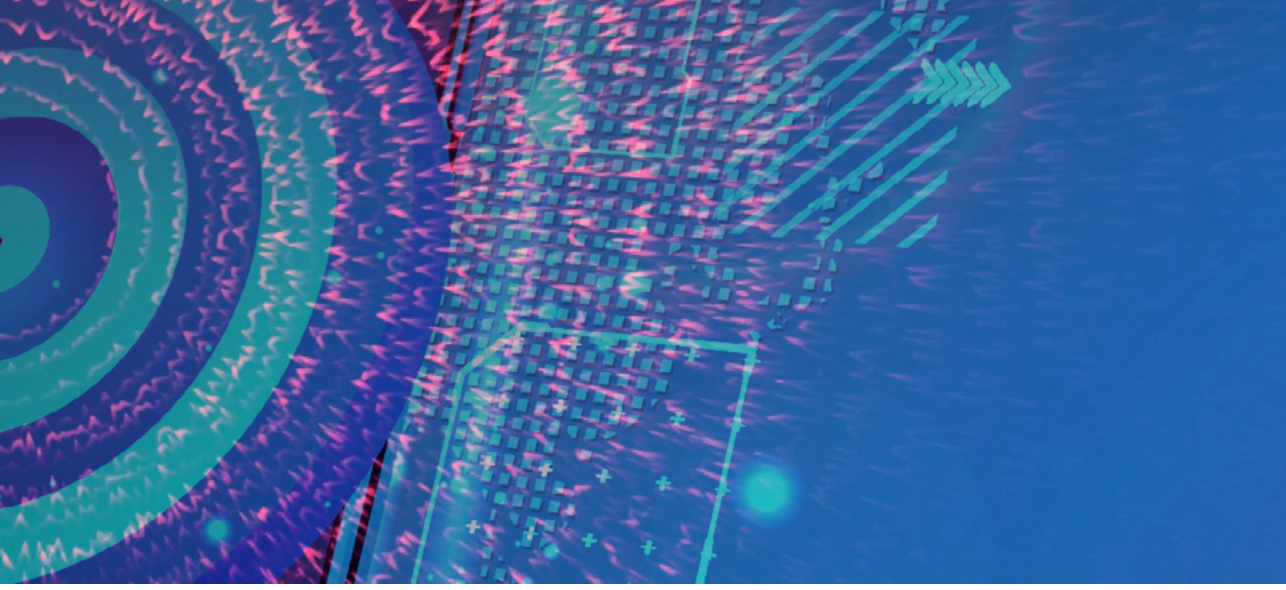
Regional Collaboration:
Foster a spirit of collaboration among AI experts in the region to facilitate the exchange of knowledge, expertise, and best practices, thereby promoting the collective development of the Islamic world in the realm of artificial intelligence.

Capacity Building:
Provide a platform for the enhancement of AI capabilities across the region through workshops, presentations, and interactive sessions, contributing to the professional development of participants and the wider AI community.

Knowledge Sharing:

Encourage the dissemination of cutting-edge research, innovative methodologies, and successful case studies, thereby contributing to a shared pool of knowledge that can propel advancements in AI technologies.

International Integration:

Facilitate a dialogue between regional AI experts and an esteemed panel of international experts, promoting the integration of global best practices and ethical standards in the development and deployment of artificial intelligence.

Foster the Culture of Anticipation and Foresight:

Encourage member states in the Islamic World to cultivate the culture of anticipation and foresight, fostering a proactive approach to the ethical considerations surrounding AI development.

Expected Outcomes

The anticipated outcomes of the workshop are designed to leave a lasting impact on the landscape of artificial intelligence within the Islamic world. Key expected outcomes include:

1 **Implementation of Ethical Principles:**
Facilitating the development of comprehensive ethical frameworks and tools for the responsible development and deployment of artificial intelligence (AI). These frameworks encompass principles such as fairness, transparency, accountability, and privacy protection in AI systems.

2 **Creation of Public-Private Synergy:**
The formation of partnerships between public and private entities to harness the collective expertise, resources, and capabilities for advancing AI initiatives. These partnerships foster collaboration on AI research, innovation, and implementation, driving synergistic outcomes for societal benefit.

3 **Drafting of Ethical Guidelines:**
Formulation of ethical guidelines and recommendations for the responsible development and deployment of AI technologies within the Islamic world, contributing to a harmonized approach to AI ethics.

4 **Collaborative Initiatives**
Initiation of collaborative projects and partnerships among AI experts from the region, fostering ongoing cooperation in research, development, and implementation of AI technologies.

5 **Capacity Enhancement:**
Improved capacity and skillsets among workshop participants, leading to a heightened proficiency in handling AI technologies and addressing ethical considerations in their applications.

6 **Policy Recommendations:**
Compilation of policy recommendations and regulatory frameworks to guide governments and institutions in the region toward effective and responsible AI governance.

Participants

The workshop is designed to embrace diversity, inviting a varied group of participants, including **representatives from renowned organizations, IT/IA experts, novel technology stakeholders, Civil Society and Ph.D. Students From ICESCO's member states in the region.**

This inclusive approach ensures a rich and comprehensive discussion on the ethical dimensions of AI within the Islamic world.

Deliverables of the Islamic World AI Charter

These Deliverables collectively represent a significant contribution to advancing the discourse, awareness, and capabilities in artificial intelligence across the Asia and Middle East regions, thereby facilitating informed decision-making, knowledge exchange, and collaborative innovation towards realizing the full potential of AI for societal, economic, and technological advancement.

1. **Inventory of the AI Ecosystem in the Islamic World:** This deliverable involves conducting a thorough analysis and documentation of the artificial intelligence (AI) landscape within the Islamic world. It includes identifying and categorizing AI-related initiatives, projects, research endeavors, institutions, and key stakeholders across various domains within Islamic nations. The aim is to provide a detailed overview of the current state of AI development, adoption, challenges, and opportunities within these regions. This inventory will serve as a foundational resource for policymakers, researchers, industry professionals, and other stakeholders

2. **State of AI in the Asia & Middle East Regions:** This deliverable entails assessing and analyzing the status of artificial intelligence (AI) within the Asia and Middle East regions. It involves examining AI adoption trends, technological advancements, regulatory frameworks, investment landscapes, and socio-economic implications across diverse sectors and geographies within these regions. The report aims to offer insights into the prevailing AI dynamics, emerging trends, and potential avenues for collaboration, innovation, and growth, informing strategic decision-making, policy formulation, and capacity-building initiatives.

3. **Glossary in Partnership with SDAIA:** This deliverable involves developing and publishing an authoritative AI glossary in collaboration with the Saudi Data and Artificial Intelligence Authority (SDAIA). The glossary aims to provide a comprehensive compendium of AI-related terminology, concepts, definitions, and acronyms, tailored to the linguistic and cultural context of the Asia and Middle East regions. Drawing upon expert insights and industry best practices, the glossary serves as a valuable reference tool for enhancing communication, fostering interdisciplinary collaboration, and promoting a shared understanding of AI concepts and principles among keholders.

4. **Establishment of a Network of Experts:** The establishment of a network of experts aims to create a platform for professionals with diverse expertise in AI-related fields to collaborate and share knowledge. The network will consist of individuals from academia, industry, government, and research institutions across the Asia and Middle East regions. This network will provide opportunities for professionals to stay updated on the latest developments in AI research, technologies, and applications, facilitate interdisciplinary collaborations and partnerships to tackle complex AI-related challenges and fosters a sense of community and collective learning among experts in the field.

5. **Formation of a Sub-Regional Committee on AI:** This Committee aims to foster coordinated efforts and strategic planning in addressing AI-related challenges and opportunities within specific geographic sub-regions. The committee will comprise representatives from government agencies, academia, industry, and relevant stakeholders within the sub-region.

Workshop Proceedings

The comprehensive proceedings of the workshop, marked by the inclusion of insights from the regional panel of best practices, will unfold through a series of structured sessions, focusing on ethical analysis and the establishment of guiding principles for the ethical development of AI.

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