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Enabling technology to serve the purpose of development in the Arab region

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#### Context...

- ICTs have a tremendous potential to enhance lives of people in general and, particularly, those in developing countries...
- Technology-mediated applications have become part of our daily life... In cars, phones, aircrafts, banks, schools, etc.. And in supporting typical societal activities such as learning (e-learning), health (e-health) and government (e-government)...
- In contrast with the exciting and promising opportunity ICTs offer to development in the Arab region development, in general, are still lagging and have not yet embarked in the digital era... Digital Divide...
- Hundreds/Thousands of "nice" reports on ICTs have been written by international consulting firms/experts... Dozens of national strategies and plans have been adopted (and executed)...
- Nearly anything that could have been said/recommended, had already been said/recommended...



#### Context...

- Few/No progress has been made! Aside the "happy few", the majority of Arab countries is still lagging...
- Omnipotence of paper-based Data and Work-Flows...
- Very Poor Localization level:
  - □ Data/Contents...
  - Applications...
  - □ Platforms/Tools...
- Low performance in the vital social sectors including Schools, hospitals, real estate, social cares, public services and papers, etc.. Low number of e-Government services...
- Lack of ICT skills at all levels, including Projects Mngt...
- Most ICT indicators show very low scores: E-Government Development Index, Online Service Index, Human Capital Index, GEMS, e-Participation Index...



# The 1,000,000\$ Question!

So, what is wrong exactly, and why are we still so far?



### The 1,000,000\$ Answer!

- Awareness → What is it + What does it do + how does it do what it does
   ? Understanding that the paper-based way of doing governance and business is weak, vulnerable and perished...
- Willingness → What is on it for oneself? Understanding that we are compromising the viability of our countries, including sovereignty and regalian affairs... Towards Digital Nations...
- Readiness → Have the necessary attitude and skills to set and execute a global technology model related to the knowledge, production, dissemination and usage of ICT... With the Citizen wellbeing + Nation/Country viability in the heart of the Model... Driven by the highest authority in the country, using a formal impact assessment process



## The 1,000,000\$ Answer!

- **Prerequisite**: addressing the Awareness + Willingness + Readiness issues... A clear Vision... A Roadmap and Architecture...
- Education, Training and Sensitization...
- Capacity building...
- Involvement...
- Communication...
- Appropriation...
- Ownership...
- Datafication and related Data issues...
- Localized/contextualized Applications...



#### Data related issues...

- The digitalisation process...
- Format & Structures...
- Semantic and ontologies...
- Norms/Standards...
- Exchange and Cross-fertilization...
- Massification & Proliferation (Social Media)...
- Bigdata...
- Bloc-Chains...



## Software Applications related issues...

- Soft. Eng. processes and models...
- Relevance and prioritization...
- Reliability and effectiveness...
- Safety & Security...
- Usability...
- Maintenance and maintainability...
- Openness...
- Efficiency...
- SAS vs SAP?
- Etc.



#### Is AI what we need?

- What does AI mean at all ???...
- Strong AI vs Weak AI...
- Strong AI is subject to an ongoing global debate with wider aspects related to the whole human/humanity future...
- Strong AI is not about supporting people in doing things but rather about simply replacing people in what they do...
- Strong AI is not of any value in the development context...
- Weak AI, on the other hand, is applicable, practicable and interesting, for/in specific tasks/domain...
- Does weak AI really fit within the development context?



#### Is AI what we need?

- □ Black-Box Architecture → Ownership & Appropriation & Capacity building...
- □ Domain/Task specific → Change of focus + solving the wrong problems...
- □ Lack the "explainability" feature → Empowering autocratic and authoritarian governance systems + acting against the interest of citizens...
- adaptability is limited by the necessity of a continuing human interaction/implication in "reprogramming" → Dependency...
- □ Data driven  $\rightarrow$  ??? ...
- $\Box$  Expensive and exclusively B2B setting  $\rightarrow$  Affordability...
- □ Technology stack is very limited → Open technology...
- □ Newness / Controversial → Acceptance and readiness...





Grazie



## e-Services e-Baladiya e-Gouvernement



□ http://etech.aui.ma/

Gracias

شكرأ

**Thanks** 

Brigado

Ευχαριστώ





