الإناثارات في الذكاء الإصطناعي والتكنولوجيات الرائدة
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المدير التنفيذي لمركز تميز الدراسات المتقدمة والمستقبلية
مدينة الأبحاث العلمية والتطبيقات التكنولوجية – جمهورية مصر العربية

ندوة حول:
الذكاء الإصطناعي والإستشراف التكنولوجي العربي في ضوء الثورة الصناعية الرابعة
بيروت – الجمهورية اللبنانية 1 - 2 / 7 / 2019
الأجندة

1. المؤشر الحكومي لجاهزية تطبيقات الذكاء الاصطناعي
2. الرؤية المستقبلية لحجم الأعمال لتطبيقات الذكاء الاصطناعي
3. تطوير أدوات الاستثمار ونمو الشركات البائدة
4. قصص نجاح من الواقع العالمي والعربي
5. الخلاصة والتوصيات
<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Singapore</td>
<td>9.186</td>
</tr>
<tr>
<td>2</td>
<td>United Kingdom</td>
<td>9.069</td>
</tr>
<tr>
<td>3</td>
<td>Germany</td>
<td>8.810</td>
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<td>4</td>
<td>United States of America</td>
<td>8.804</td>
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<td>Finland</td>
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<td>Sweden</td>
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<td>6</td>
<td>Canada</td>
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<td>Qatar</td>
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<td>54</td>
<td>Tunisia</td>
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<td>59</td>
<td>Oman</td>
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<td>74</td>
<td>Jordan</td>
<td>4.927</td>
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<td>78</td>
<td>Saudi Arabia</td>
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<td>79</td>
<td>Kuwait</td>
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<td>80</td>
<td>Morocco</td>
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<td>100</td>
<td>Bahrain</td>
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<td>111</td>
<td>Egypt</td>
<td>3.492</td>
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<td>112</td>
<td>Lebanon</td>
<td>3.487</td>
</tr>
</tbody>
</table>

https://www.oxfordinsights.com/ai-readiness2019
• Artificial intelligence (AI) technologies are forecast to add US$15 trillion to the global economy by 2030.

• According to the findings of the Index and as might be expected, the governments of countries in the Global North are better placed to take advantage of these gains than those in the Global South.

• There is a risk, therefore, that countries in the Global South could be left behind by the so-called fourth industrial revolution. Not only will they not reap the potential benefits of AI, but there is also the danger that unequal implementation widens global inequalities.
AI has the power to transform the way that governments around the world deliver public services. In turn, this could greatly improve citizens’ experiences of government.

Governments are already implementing AI in their operations and service delivery, to improve efficiency, save time and money, and deliver better quality public services.

The overall score is comprised of 11 input metrics, grouped under four high-level clusters: governance; infrastructure and data; skills and education; and government and public services. The data is derived from a variety of resources in databases such as the number of registered AI startups on Crunchbase, to indices such as the UN eGovernment Development Index.
# Government Artificial Intelligence Readiness Index 2019

## Governance
- Data protection/privacy laws—yes/no
- National AI strategy—yes/no/pending

## Infrastructure and Data
- Data availability
- Government procurement of advanced technology products
- Data/AI capability (in government)

## Skills and Education
- **Technology skills**
- **Private sector innovation capability**
- **Number of AI startups**

## Government and Public Services
- Digital public services
- Effectiveness of government
- Importance of IT to government’s vision of the future
<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>SOURCE</th>
<th>WHAT SOURCE SHOWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>National AI strategy – yes/no/pending</td>
<td>Desk research, consulting: Gartner paper, Medium article, Nesta article</td>
<td>Existence (or otherwise) of a comprehensive national AI strategy which shows a concerted policy effort by a national government to make the most of AI, and mitigate the associated challenges</td>
</tr>
<tr>
<td>Technology skills</td>
<td>Sub-indicator in WEF Global Competitiveness Report 2018</td>
<td>Score out of seven for perceptions of the extent of digital skills among the active population from the WEF Executive Opinion Survey. This measure is included as a proxy of AI skills in the general population, which is important both as an indication of skills in the public sector, and the available pool of local talent</td>
</tr>
<tr>
<td>INDICATOR</td>
<td>SOURCE</td>
<td>WHAT SOURCE SHOWS</td>
</tr>
<tr>
<td>---------------------------------</td>
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</tr>
<tr>
<td>Private sector innovation</td>
<td>Pillar in WEF Global</td>
<td>Combined measure of: diversity of workforce, state of cluster development, international co-inventions, multi-stakeholder collaboration, scientific publications, patent applications, R&amp;D expenditures, research institutions prominence, buyer sophistication, and trademark applications. This is a measure of private sector innovation capability, which is a proxy for how ready the private sector is to develop the AI tools needed by government.</td>
</tr>
<tr>
<td>innovation capability</td>
<td>Competitiveness Report 2018</td>
<td></td>
</tr>
<tr>
<td>Number of AI startups</td>
<td>Crunchbase</td>
<td>Number of AI startups per country as registered on Crunchbase, as a proxy for the size of a country’s AI sector. Similarly to the previous indicator, this is included to measure how ready the private sector is to develop AI tools and solutions for government.</td>
</tr>
</tbody>
</table>
Artificial Intelligent Strategy in Japan 2017

(1-1) Artificial Intelligence (AI) Development Phases

Phase 1 [Approx. 2020]
Utilization and application of data-driven AI developed in various domains
Utilization of AI and data will increase together with new seeds of growth in related service industries.

Phase 2 [Approx. 2025~2030]
Public use of AI and data developed across various domains
Public use of AI and data is developed and new industries, such as service industries, will expand.

Phase 3
Ecosystem is built by connecting multiplying domains
An ecosystem is established as various multiplying domains are connected and merged.

* The duration of each phase is not indicated because the current situation and future development differs depending on the field.

AI technology
Data

Artificial intelligence as a service (AlaaS)

Phase 3
Complex application services

Phase 2
Multiservice services
Services

Phase 1
Factory
Hospital
Call center
Agriculture
Truck, Drone

Note: The concept of AlaaS is borderless and developed across fields.
AI and machine learning have the potential to create an additional $2.6T in value by 2020 in Marketing and Sales, and up to $2T in manufacturing and supply chain planning.

Gartner predicts the business value created by AI will reach $3.9T in 2022.

A. The race for leadership

Global distribution of AI startups

Top countries and cities by number of startups

**Top countries**

1. United States 1,393
2. China 288
3. Israel 362
4. United Kingdom 245
5. Canada 131
6. Japan 733
7. France 109
8. Germany 88
9. India 82
10. Sweden 66
11. Finland 46
12. South Korea 42
13. Spain 39
14. Singapore 35
15. Switzerland 28
16. Australia 27
17. Brazil 26
18. Netherland 26
19. Italy 22
20. Russia 19

**Top regional hubs**

Cities extended urban areas

1. San Francisco 596
2. London 389
3. Tel-Aviv 220
4. New York 180
5. Beijing 150
6. Boston 102
7. Tokyo 99
8. Shanghai 77
9. Los Angeles 73
10. Paris 73
11. Shenzhen 66
12. Berlin 56
13. Toronto 47
14. Seoul 42
15. Austin 36
16. Washington 36
17. Seattle 35
18. Singapore 33
19. Bangalore 32
20. Helsinki 32

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1. Regional hubs comprise a core city plus nearest and urban area and wider agglomeration e.g. San Francisco plus Bay Area, London plus Greater London, Cambridge et al. Berlin plus Teltow-Lichterfelde, Shanghai plus Yangpu Shanghai and Suzhou, etc.
2. Ranking excluding 150 startups for which information on city was not available — Among them 120 are located in small
Global Investment Mechanisms in Artificial Intelligence

- Corporate Venture Capital
- Angel Investors
- Private Equity
- Accelerators
There has been a lot of activity lately in this category as well with many new VC funds and angel groups being launched. Algebra Ventures, the largest Egyptian fund ($50 million) that was announced made few investments last year and has been active this year as well, investing in La Reina & POSRocket. Algebra’s average ticket-size is $500K or more, larger than most of the VCs currently active in Egypt.

https://www.menabytes.com/egypt-tech-startup-ecosystem-guide/
تصدرت ثلاث شركات مصرية قائمة أهم 12 شركة ناشئة أفريقية يجب متابعتها في عام 2019 المقدمة بواسطة بوابة ديسرابت أفريقيا.

وهي منصة دردشة تسمح للمستخدمين بالتحدث من خلالها إلى مساعد بشرى يستطيع القيام بأى شيء مجاناً وتقوم باستخدام تقنية "Human in loop" لدفع عجلة التعلم الآلي وبناء الذكاء الاصطناعي. حصلت الشركة على تمويل أولى بقيمة 2 مليون دولار بنهاية عام 2017، وساعدها ذلك في النمو والتوسع في عام 2018.

 كما جاء بالمركز الثاني شركة شيزلونج [Shezlong] وهي منصة للعلاج النفسي عن طريق الإنترنت، يستطيع المريض النفسي من خلالها التحدث مع الطبيب المختص عن طريق الفيديو على الجهاز أو الويب. كانت انطلاقة شيزلونج الحقيقية في 2018 لأنها حصلت على استثمارات قدرها 350.000 دولار وتم اختيارها للمشاركة في قمة مستثمرين أفريقيا.

The United Nations International Children's Emergency Fund (UNICEF) is looking to fund early-stage startups that have an open source prototype and use data science, machine learning, artificial intelligence (AI) or similar technology to apply to its innovation fund program. Companies that are registered in UNICEF's programme countries can apply here before February 28.

Companies that use Data science and AI to understand the digital world, such as using Natural Language Processing (NLP) or similar techniques to analyze large amounts of text, or are encouraged to apply.

This innovation fund will provide up to $100,000 equity-free seed funding, technical assistance from the UNICEF in product and technology development, and mentors to help startup teams develop their business model among other services.

Companies that can apply for this program aren’t restricted to a specific description. UNICEF is interested in companies that apply data-science in new, groundbreaking, ways that are scalable, globally applicable, and can be
خريطة تفاعلية لحظية توضح عدد وأنشطة الشركات المصرية البائدة وجهات التمويل والدعم العلمي والإبتكارى

https://egyptinnovate.com/en/innovation/map
AUC Venture Lab

Category: Accelerators / Incubators
Governorate: Cairo
City: Cairo

About Entity: AUC V-Lab is an incubator based at AUC New Cairo. It enables startups to capitalize on AUC's world-class facilities and knowledge base, connecting innovative startups with AUC's alumni network and fostering a thriving ecosystem of innovation, education, and business.

Video: https://www.youtube.com/watch?v=MKv0d5Gx88g
Website: http://www.aucegypt.edu/Business/eip/Pages/Venture%20Lab.aspx

Industry / Domain: ICT
Interests: Innovation, Commercialization
Technology of Interest: Mobile Development (Android/iOS, BlackBerry, Windows, J2ME)
شكراً لحضراتكم