United Nations
Educational, Scientific and
Cultural Organization

International Conference on Artificial Intelligence and Education

Beijing
People's Republic of China
16 – 18 May 2019

The use of AI to empower teachers and teaching in Arabic region

Prof. Mohamed Jemni
Director of ICT, ALECSO

Education 2030

ALECSO

→ stands for The **A**rab League **E**ducational **C**ultural and **S**cientific **O**rganization.

→ is the Arab world equivalent of UNESCO organization.

→ is a governmental organization working under the umbrella of the Arab League and it has the membership of 22 Arab countries.

→ is headquartered in Tunis, Tunisia.

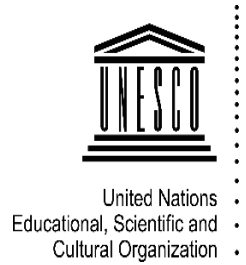
ALECSO

→ is composed of 4 departments : Education, Culture, Science and ICT.

→ has the role of conducting and coordinating Pan-Arab projects related to Educational, Cultural, Scientific and ICT fields and it is premised on the values of tolerance, moderation, respect of others and cultural diversity.

المنظمة العربية للتربية والثقافة والعلوم
ALECSO

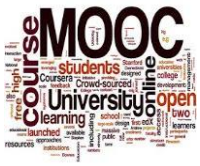
Multi-Stakeholders & Global Partnership

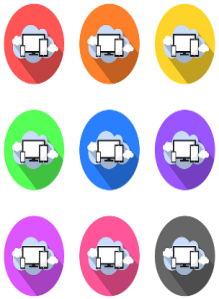


ALECSO Flagship ICT Projects

Open Educational Resources

OER
OPEN EDUCATIONAL RESOURCES





UNESCO ICT CFT
United Nations Educational, Scientific and Cultural Organization

Many definitions for Artificial Intelligence

AI can be defined* as a system's ability to interpret external data correctly, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation.

AI uses external information obtained through IoT or other big data sources as an input for identifying underlying rules and patterns by relying on approaches from machine learning, which, broadly speaking, describes methods that help computers learn without being explicitly programmed.

* Andreas Kaplan and Michael Haenlein 2019

Artificial Intelligence vs Automation

Before beginning to explain the impact of AI on the field of education, there is a need to distinguish between two basic terms:

Automation is a system that depends on the rules defined by the programming. The machine follows the predetermined logical sequences. AI is the teaching of the machine to deduce itself, and it recognizes what to do and what not to do.

Rather than seeing AI as a threat, it will help streamline basic teaching functions and help school principals address key challenges facing the school, such as raising teachers' efficiency and anticipating the requirements of different learners.

Artificial intelligence can help to ask questions based on the weaknesses of the student, and it will also be possible to study the behaviour of the learners and to help them ...

* Thomas Arnett 2016

AI will provide tools that enable teachers to perform their mission more effectively and effortlessly because it will provide all the information the teacher will need to assess his performance and student performance and improve them quickly and effectively*.

* www.wise-qatar.org

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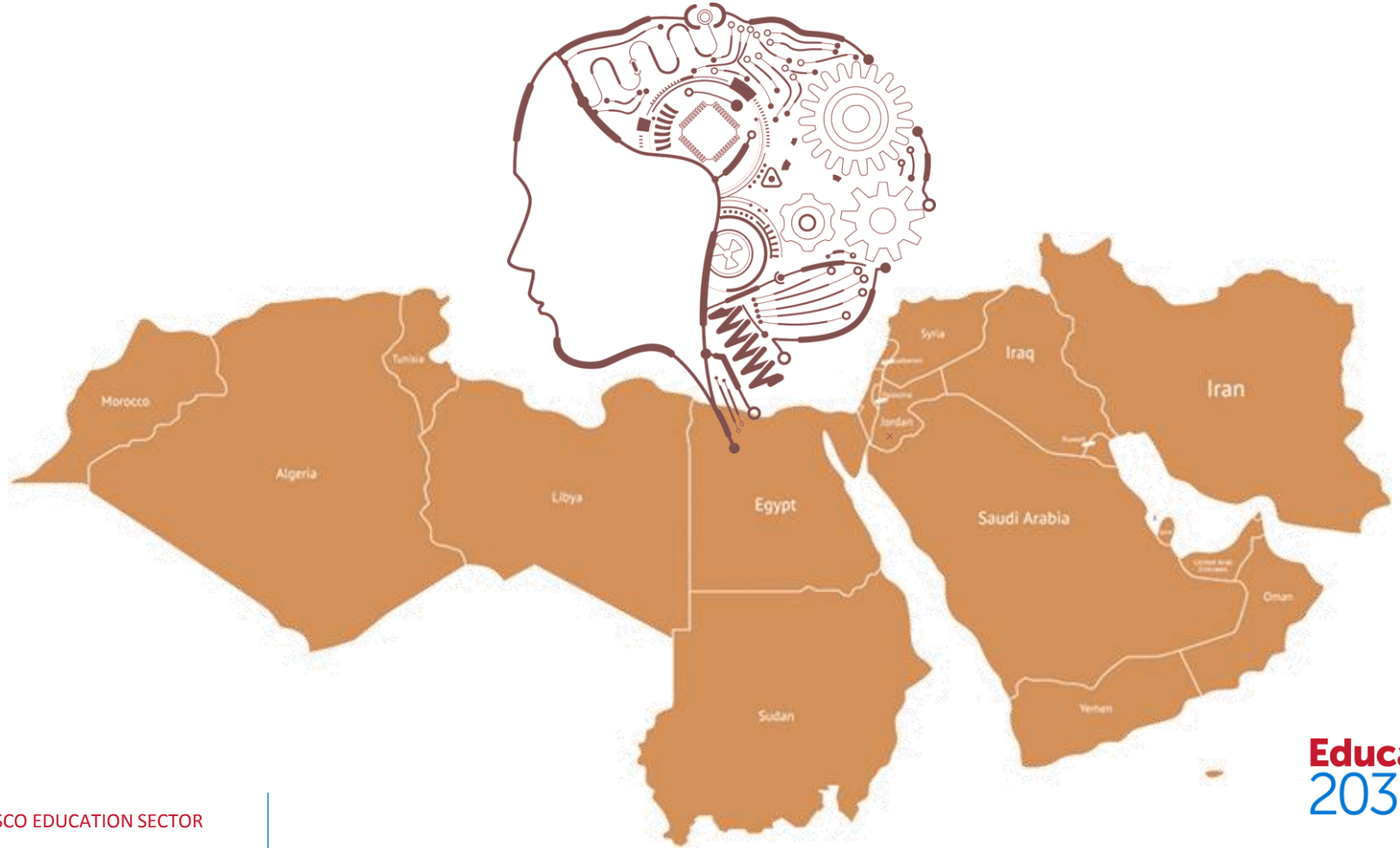
Artificial intelligence in the Arab region



UNESCO EDUCATION SECTOR

Education 2030

The potential impact of Artificial Intelligence in the Middle East

US$135.2billion
In absolute terms, the largest gains are expected to accrue to Saudi Arabia economy in 2030.

US$320 billion
Potential impact of AI for the Middle East.

20-34%
Expected annual growth in the contribution of AI per year across the region.

14%
In relative terms the UAE is expected to see the largest impact of close to 14% of 2030 GDP.

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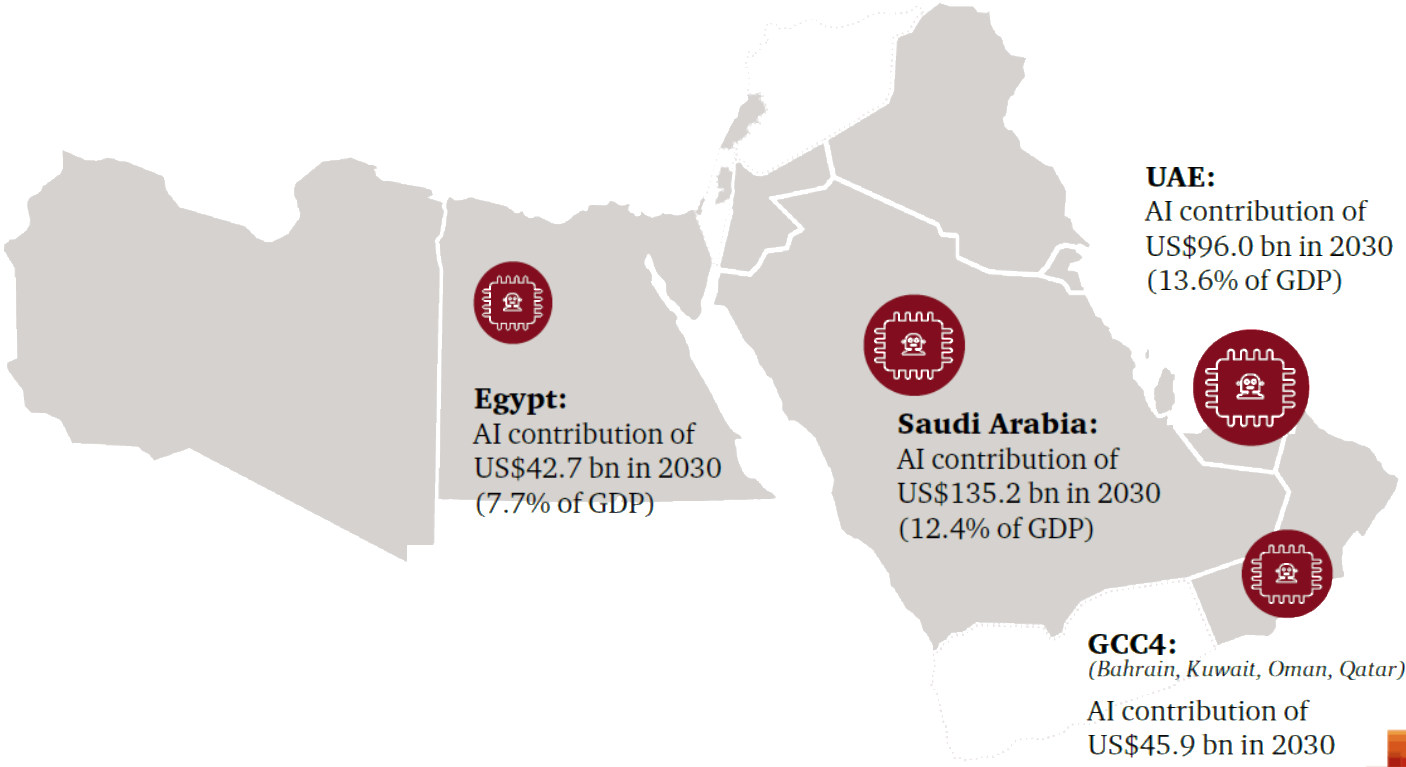
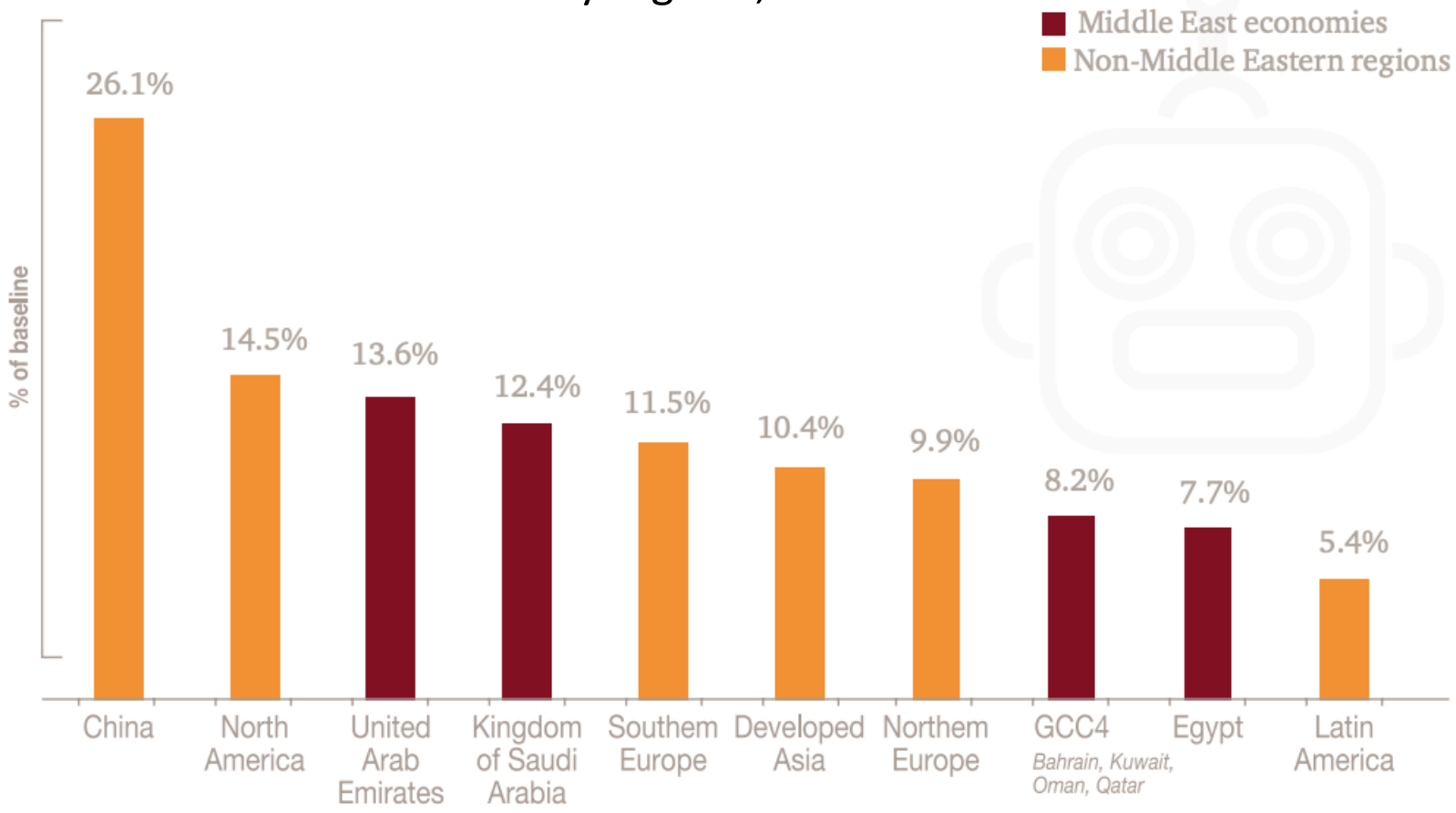
Which regions will gain the most from AI?



The potential impact of Artificial Intelligence in the Middle East

Contribution of AI to GDP by regions, 2030



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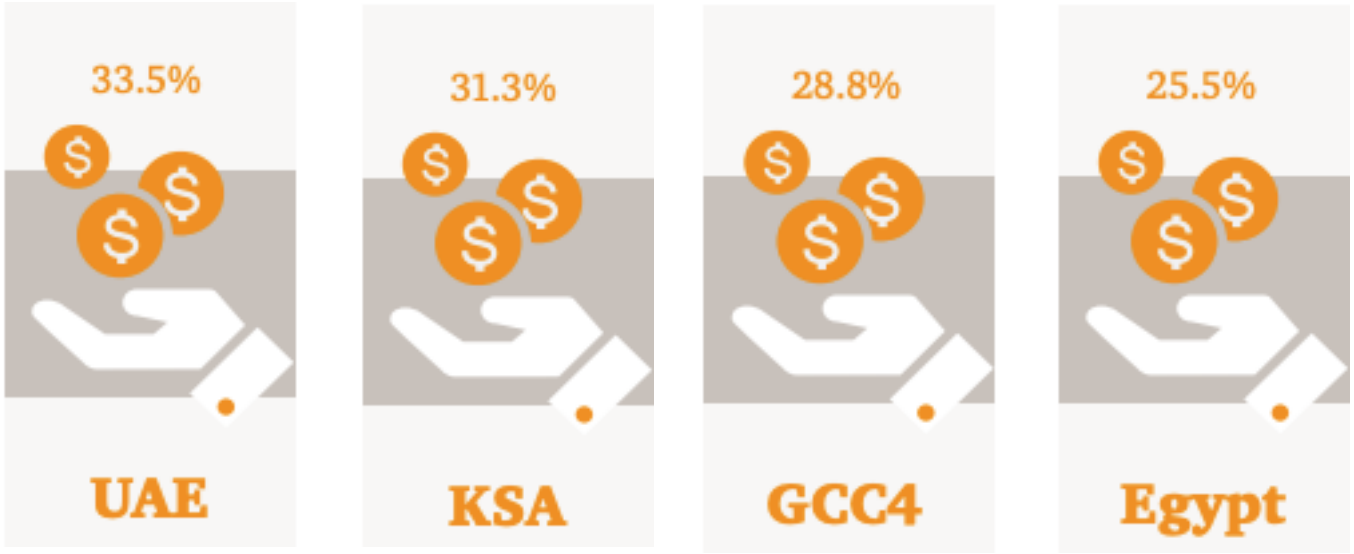
The potential impact of Artificial Intelligence in the Middle East

The average annual growth in the contribution of AI by region between 2018-2030



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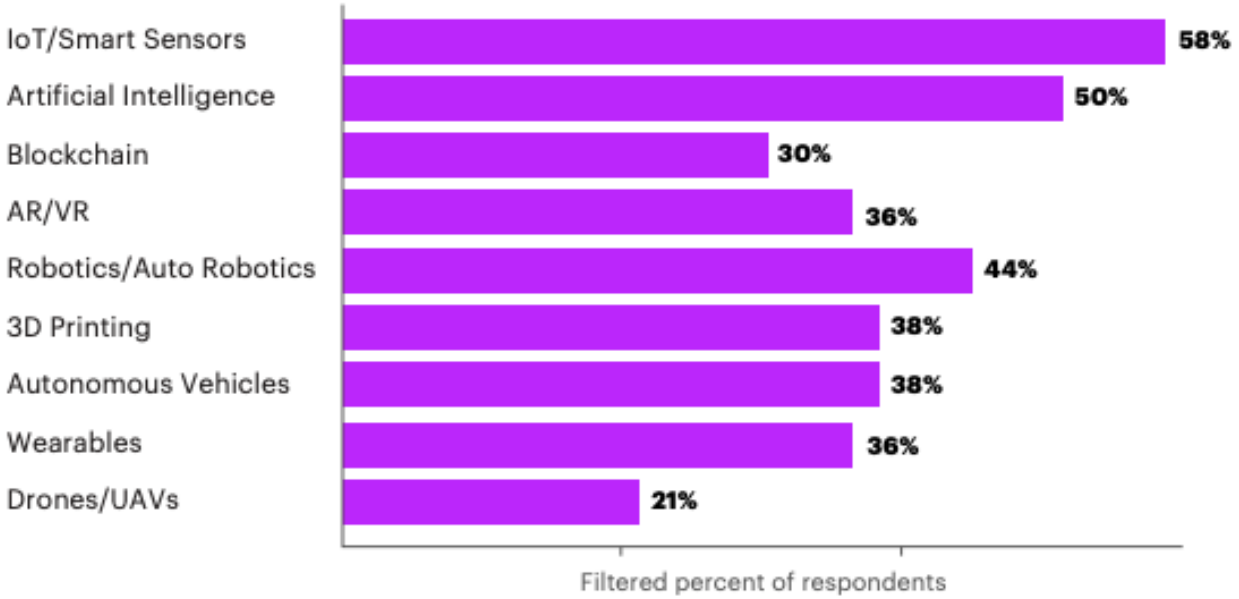
The potential impact of Artificial Intelligence in the Middle East

Percentage of UAE executives planning to invest
in new and emerging technologies over the next year



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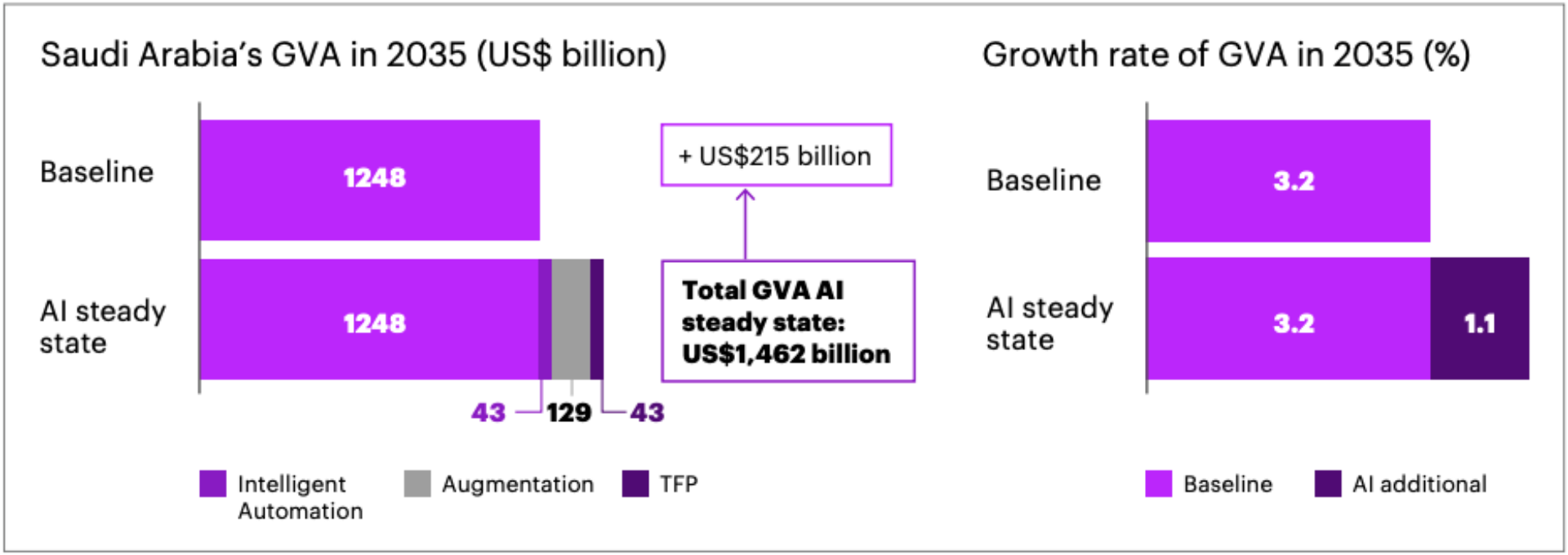
The potential impact of Artificial Intelligence in the Middle East

Growth scenarios for Saudi Arabia



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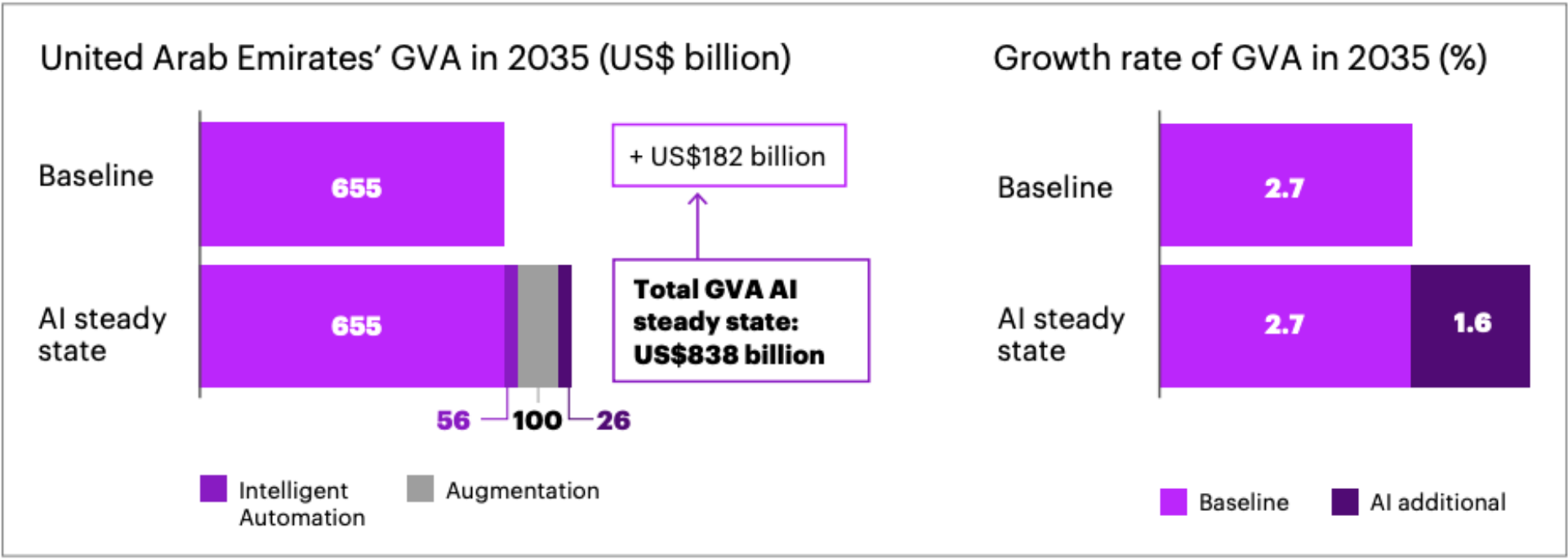
The potential impact of Artificial Intelligence in the Middle East

Growth scenarios for United Arab Emirates



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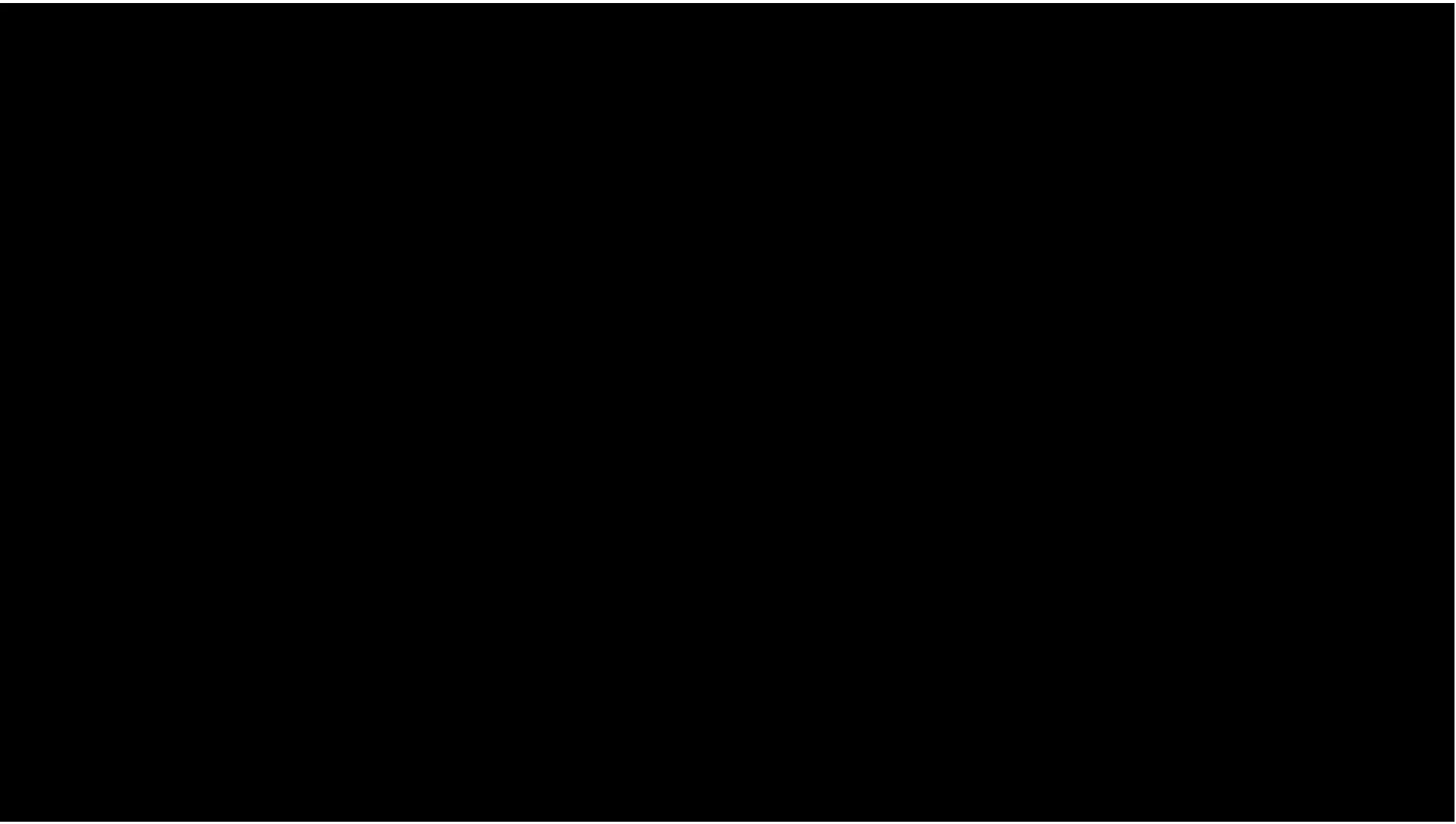
Sofia| First Robot as a Citizen of Saudi Arabia

Inception Institute of Artificial Intelligence (UAE)



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The potential impact of Artificial Intelligence in the Middle East

	Absolute contribution in 2030 (US$ billions)	Contribution of AI to Middle East GDP by industry
Construction and Manufacturing	$99	12.4%
Energy, Utilities & Resources	$78	6.3%
Public sector, including health and education	**$59**	**18.6%**
Financial, Professional, Administrative Services	$38	13.6%
Retail, Wholesale Trade, Consumer Goods, Accomodation and Food Services	$23	19%
Transport and Logistics	$12	15.2%
Technology, Media, Telecommunications	$10	14%

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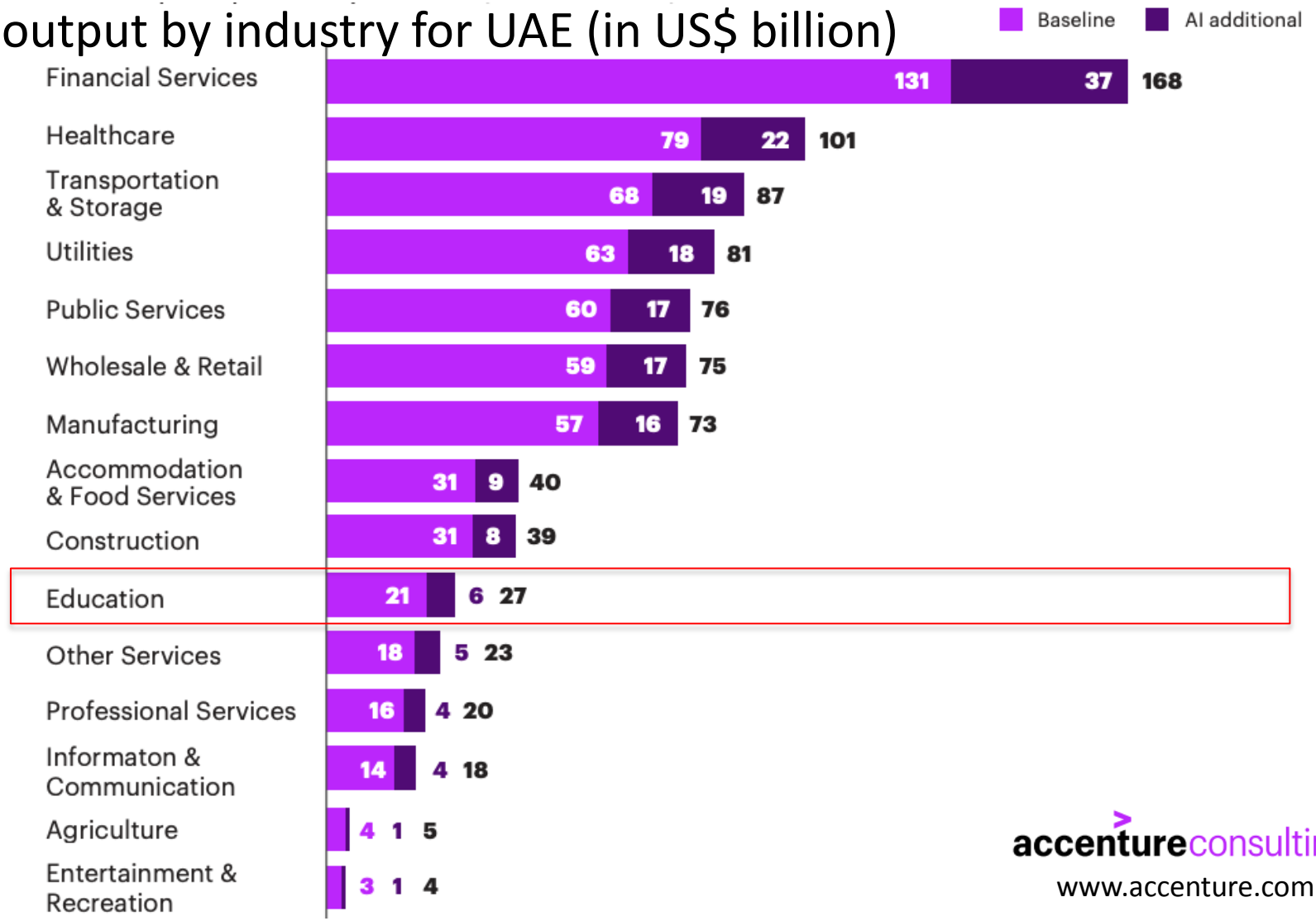
The potential impact of Artificial Intelligence in the Middle East

GVA output by industry for UAE (in US$ billion)



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Abu Dhabi startup is using AI to transform how kids learn

No books, no whiteboards, no markers or pens.

- That is the new reality for many classrooms across Abu Dhabi, where a company (Alef Education) is using artificial intelligence to create a new learning experience.
- Alef Education has managed to get its digital education platform into dozens of schools in Abu Dhabi, as well as Al Ain, another city in the emirate.
- Alef has worked closely with the government of the United Arab Emirates to bring the platform to 25,000 students at 57 public schools.
- It is also used in two private schools in Abu Dhabi.
- The startup has made its first move into the United States, where its technology is used in two private schools in New York.

CNN BUSINESS

Abu Dhabi startup is using AI to transform how kids learn

Thank you

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