Efficient Strategies for the Adoption of Emerging Technologies

Prepare for the Future of Technology

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The Importance of Emerging Technology

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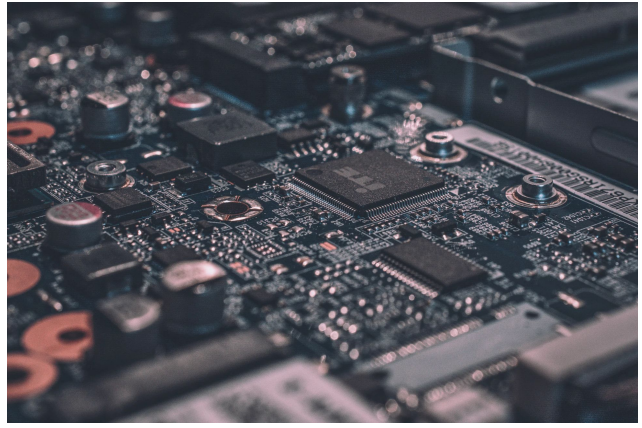
- **Economic Growth:** Novel solutions, processesses and products scale the economy and create new business opportunities.
- **Competitive advantage:** In order to compete today you have to join the technological
- **Sustainable Corporate Culture:** As an innovative and contemporary company you'll attract the talent you're looking for and experience less turnover.

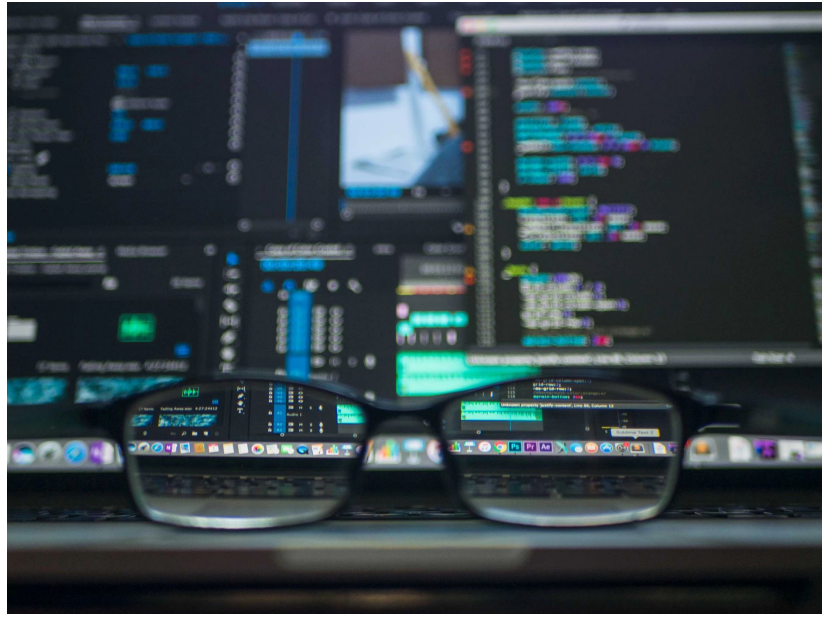


Emerging Technology in the Middle East

A Case Study of AI: How can it empower your business?

Examples of AI today

- Data Analytics
- Machine Learning
- Deep Learning
- Chatbots
- Recommender Systems
- Robotics
- Cyber security & Fraud Detection

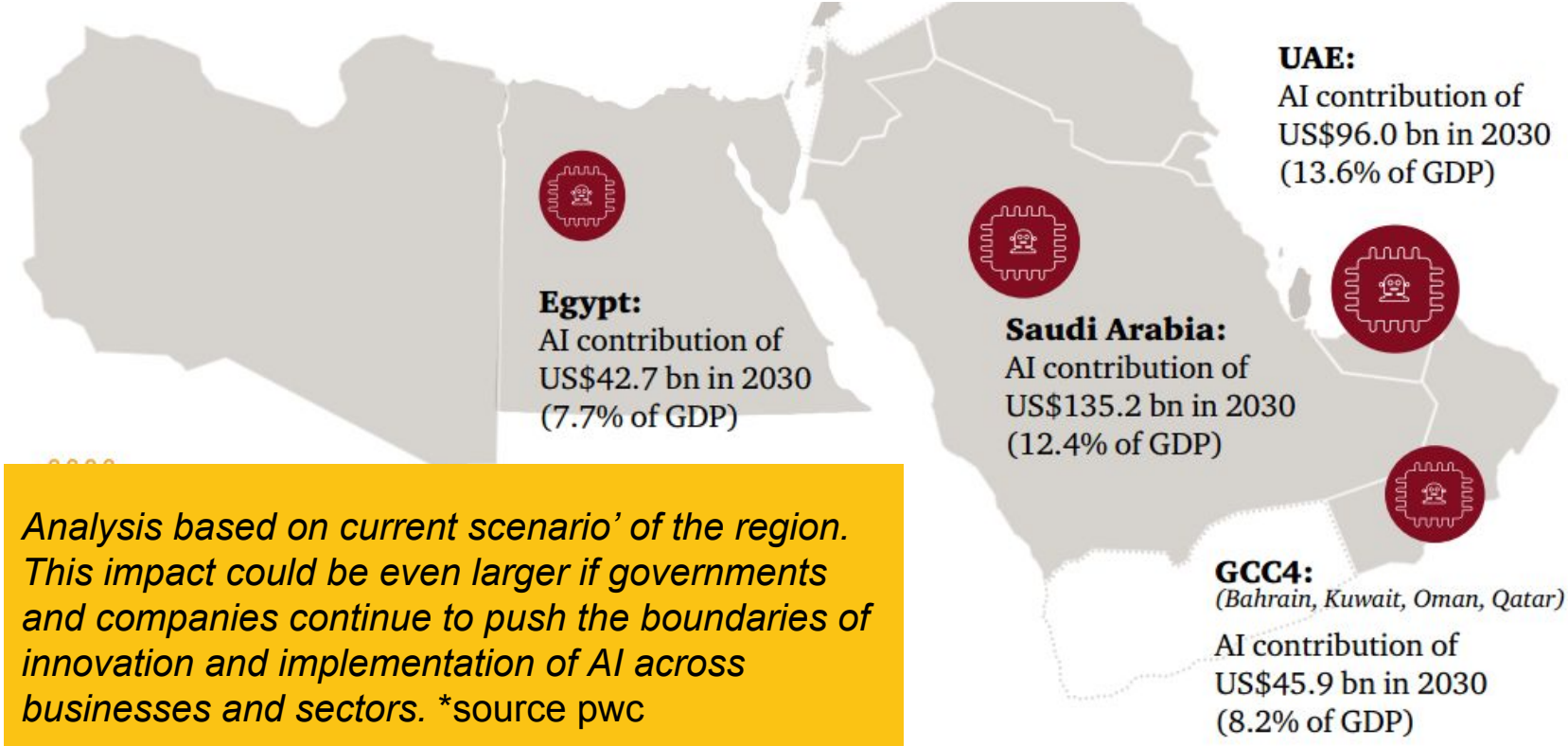


Future Importance of AI

AI is going to be a big game changer in the global economy, and much of the value potential is up for grabs.

PWC estimates that AI will contribute **$15.7 trillion** to the global economy in 2030 (more than China and India's economy combined). $6.6 trillion is likely to come from increased productivity and $9.1 trillion is likely to come from benefits to consumers.

AI's estimated contribution to economies in the Middle East



Analysis based on current scenario' of the region. This impact could be even larger if governments and companies continue to push the boundaries of innovation and implementation of AI across businesses and sectors. *source pwc

Contemporary AI benefits

Refining customer insights

Enhancing office automation and workflow

Improving service delivery

Forecasting market project and sales

Monitoring cyber security and IT security

Detecting fraud

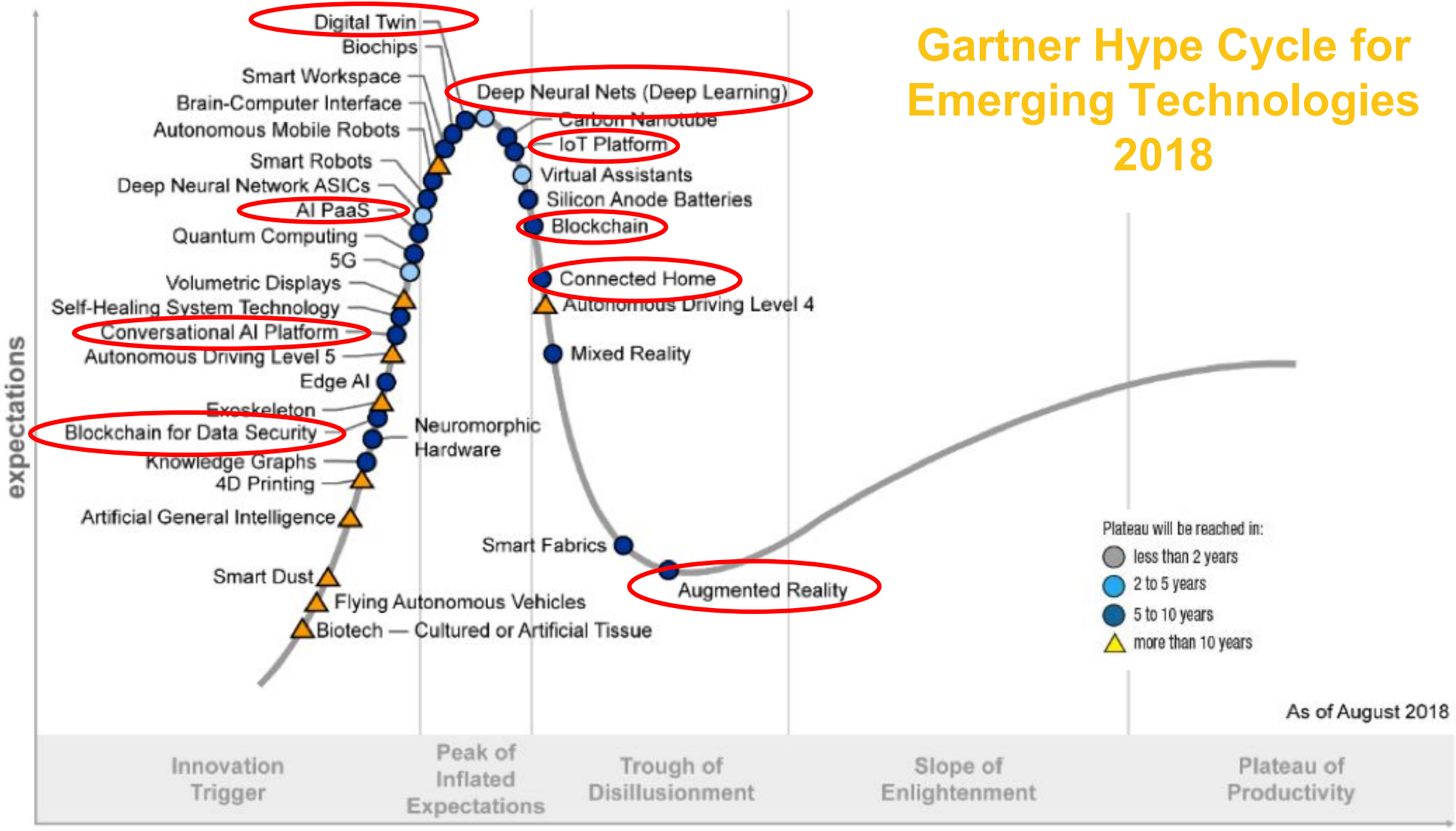
Developing smart city applications and space research

What is stopping AI (in the Middle East)?

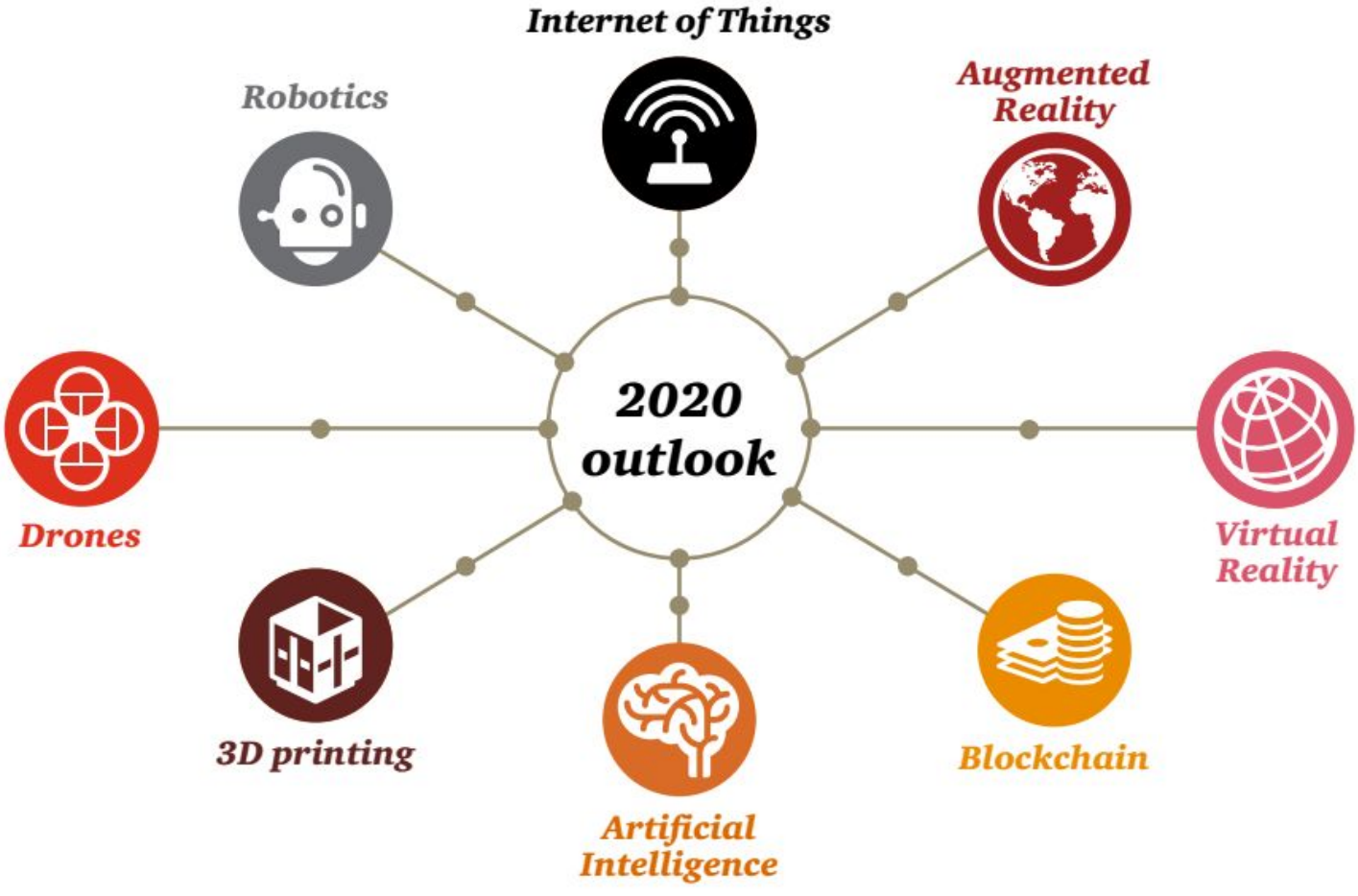
- **Interoperability with current systems:** Difficult to replace current infrastructure, systems, software, hardware.
- **Identifying right partners and talent:** Difficult to choose platform / software and recruit talent.
- **Data Infrastructure:** Companies need to setup data strategy, record data etc.
- **Security:** Increasing complexity, untested solutions.

How to identify Emerging Technology opportunities?

Gartner Hype Cycle for Emerging Technologies 2018



Essential Eight Emerging Technologies



Source: PwC Governance Insights Center

How to master / create value from emerging technologies?

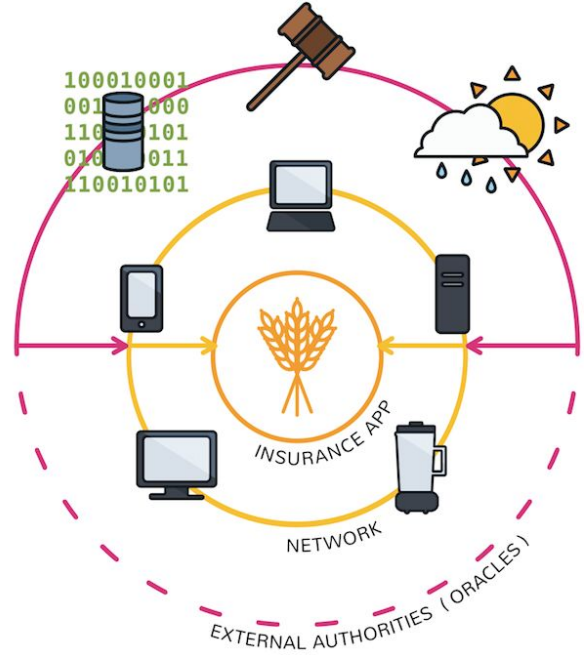
Our Approach to Innovation Success

- **Innovations start with people:**

  Develop Growth Mindset & Innovation Behaviors to drive organizational and soceital change. Fosters agility and adoption rate.

- **Adopt Emerging Technology Efficiently:**

  Data Algorithms, AI, Blockchain, Cryptocurrencies, Enterprise & Industrial IOT, Cybersecurity, Smart Cities..



Timing of Emerging Technology

How to know when to invest in new technology?

- **Look for working implementations in related fields:** The adaptation of technology to novel fields is innovation in itself
- **Partner with prime research institutions:** Many companies today underestimate the importance of strong bonds with the research community
- **Assess current skills in the company**, do you need to acquire external talent?
- **Comprehensive risk-reward analysis**
- **Analyze current infrastructure** and how easy it can be replaced
- **Are legal frameworks and policies in place?**

Recommended Emerging Technology Strategies

Software Strategy

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- **General rule:** Avoid buying proprietary software or tools
- **Open source software is state-of-the-art today.** It's true for AI, Machine Learning, Blockchain, Big Data software.
- Enterprise-ready versions of free software exists

  The talent you hire will know the most common open source libraries, tools, and software suites
- **Only pay for for computational resources, specific services and easier implementation:** Cloud computing / model API's / hosting and database costs / CRM systems

Big Data Strategy

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- **General rule:** Always collect all data!
- Every big data strategy starts with defining what data you can collect and record
- **Data storage is cheap today, e.g. data lakes, S3**
- Essential skills on a team: Data Engineers, Software Engineers and Data Scientists.

  Run computations in the cloud. Amazon, Google, Microsoft

AI Strategy

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- **General rule:** Leverage power of others (don't try to be Google!)
- Most AI models, research, and software are free to use today.

  Look for implementations that are similar to yours.
- **Mature AI fields:**
  - Computer Vision
  - Natural Language Processing (Conversational AI)
  - Prediction / Classification Models
  - Recommendation Systems
  - Optimization Algorithms for Supply Chains

Blockchain Strategy

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- **General rule:** Can be used to build trust, transparency, cut out middlemen, and drive efficiency.
- **Not relevant for all industries, still very early, expensive to hire developers.**

- **Industries where Blockchains work today:**
  - Fintech (STO, digital money, instant settlement)
  - Compliance and auditable records
  - Limit paper trail, immutabilty

Creating a data strategy

How to record and organize data resources

A Successful Data Strategy

Tools and tactics

- **Record platform data:** Website, app etc. Record and analyze all interactions
- **Buy data repositories:** There are several companies today that specializes in curating valuable data sets.
- **Sophisticated CRM systems for customers:** Let an AI agent tell you how to optimize your sale and marketing campaigns
- **Implement AI system for support:** Both automate support process and detect pattern among feedback and inquiries
- **A/B test new solutions:** Analyze how different versions of your survey is used by users.

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Thanks!

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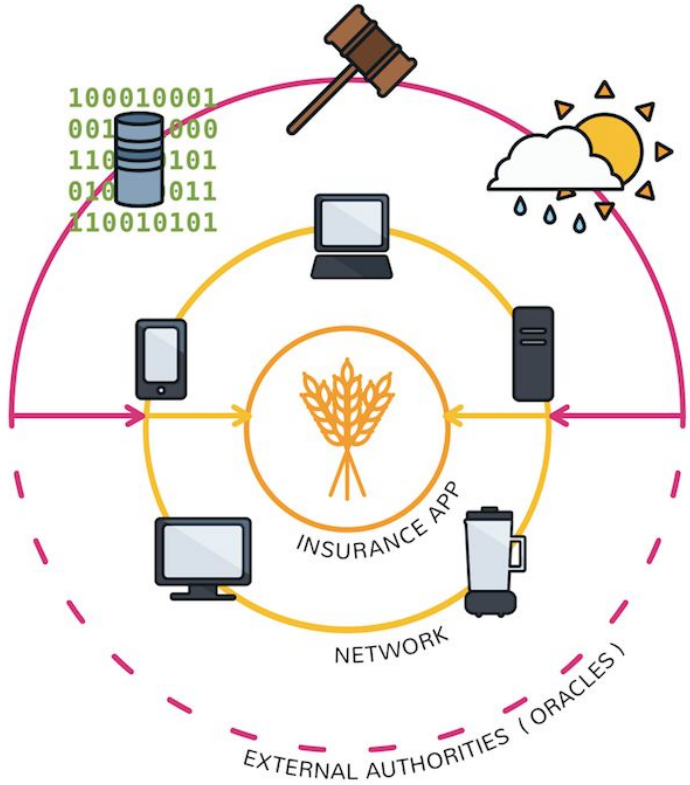
END

Infrastructure: Software

- **Growth Mindset Development using our unique approach**
- **Data Algorithms, AI**
- **Blockchain, Cryptocurrencies**
- **Enterprise & Industrial IOT**
- **Cybersecurity**
- **Smart Cities and Mobility**



First:
QUESTIONS TIME!

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Blockchain Hype & History

Up-to-date with Emerging Technologies

- **Exponential View newsletter by Azeem Azafar**
- **The Economist (Esp Technology section)**
- **Andreesen Horowitz Innovation Podcast**
- **Innovation Reports: McKinsey, Deloitte, BCG..**

Alexander **Fred-Ojala**

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