“The Next Wave”

CSO Xchange
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Frank Yako
CIO, Director of Strategic Initiatives
ASMGi
Just in case you forgot what Gary looked like....
....he says hello!
Function as a Service (FaaS)

FaaS is a category of cloud computing services that provides a platform allowing customers to develop, run, and manage application functionalities without the complexity of building and maintaining the infrastructure typically associated with developing and launching an app.

Edge Computing

Edge Computing is a method of optimizing cloud computing systems by performing data processing at the edge of the network, near the source of the data. This reduces the communications bandwidth needed between sensors and the central datacenter by performing analytics and knowledge generation at or near the source of the data.
Another “Compute” Architecture….Oh Know!

Fighting Compute Unit Creation Time
From the Software Developer Perspective

- Physical Servers (Months)
- Virtual Machines (Minutes)
- Containers (Seconds)
- Function-as-a-Service (Milliseconds)

Introduction at re:Invent 2014

Source: https://blogs.cisco.com/cloud/function-as-a-service-101-what-is-it
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<th>IaaS</th>
<th>CaaS</th>
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Source: https://www.alibabacloud.com/forum/read-499
What is Driving this Approach?

Performance and Available Options

Proliferation of Devices and Edge Computing

Source: https://blogs.cisco.com/cloud/function-as-a-service-301-new-frontiers
Edge Computing Model

Source: https://openautomationsoftware.com/blog/iiot-edge-computing-vs-cloud-computing/
All of the Pieces

The 4-Stage IoT Solutions Architecture

Source: https://codeburst.io/edge-computing-iot-a-partnership-that-will-rule-the-connected-world-in-2018-70737afade84
Another Definition

- Digital Transformation
  - Digital Transformation is application of digital capabilities to processes, products, and assets to improve efficiency, enhance customer value, manage risk, and uncover new monetization opportunities.

- Digital Capabilities
  - Digital Capabilities are: electronic, scientific, data-driven, quantified, instrumented, measured, mathematic, calculated and/or automated.

Source: https://www.cio.com/article/3199030/analytics/what-is-digital-transformation.html
Digital Transformation - Manufacturing

Digital Transformation - Insurance

GRC and the “Next Wave”

- Not If, but When
  - If not already underway, these changes are inevitable for every industry / vertical
- Business Driving
  - Customers and Competition will not subside
- Proactive or Reactive
  - Don’t wait for an incident or regulations to dictate timing and priority
Additional References

- Function as a Service (FaaS)

- Edge Computing
  - https://edgylabs.com/edge-computing-att-5g-internet-of-everything

- Cybersecurity Policy for the Internet of Things
  - https://mscorpmedia.azureedge.net/mscorpmedia/2017/05/IoT_WhitePaper_5_15_17.pdf

- Digital Transformation

- Digital Transformation and GDPR
  - https://blog.code42.com/gdpr-strategy-accelerates-digital-transformation/

- Digital Transformation and Cybersecurity
  - https://www.i-scoop.eu/cyber-security-cyber-risks-dx/
Thank You