

Lo stato dell'arte delle tecnologie basate sul machine learning e l'Intelligenza Artificiale

Luisella Giani
EMEA Business Innovation Director

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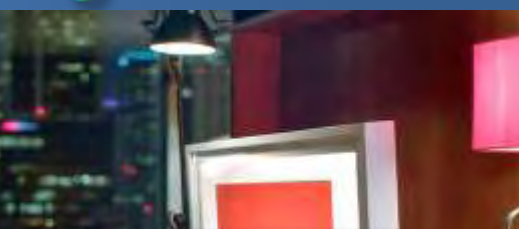
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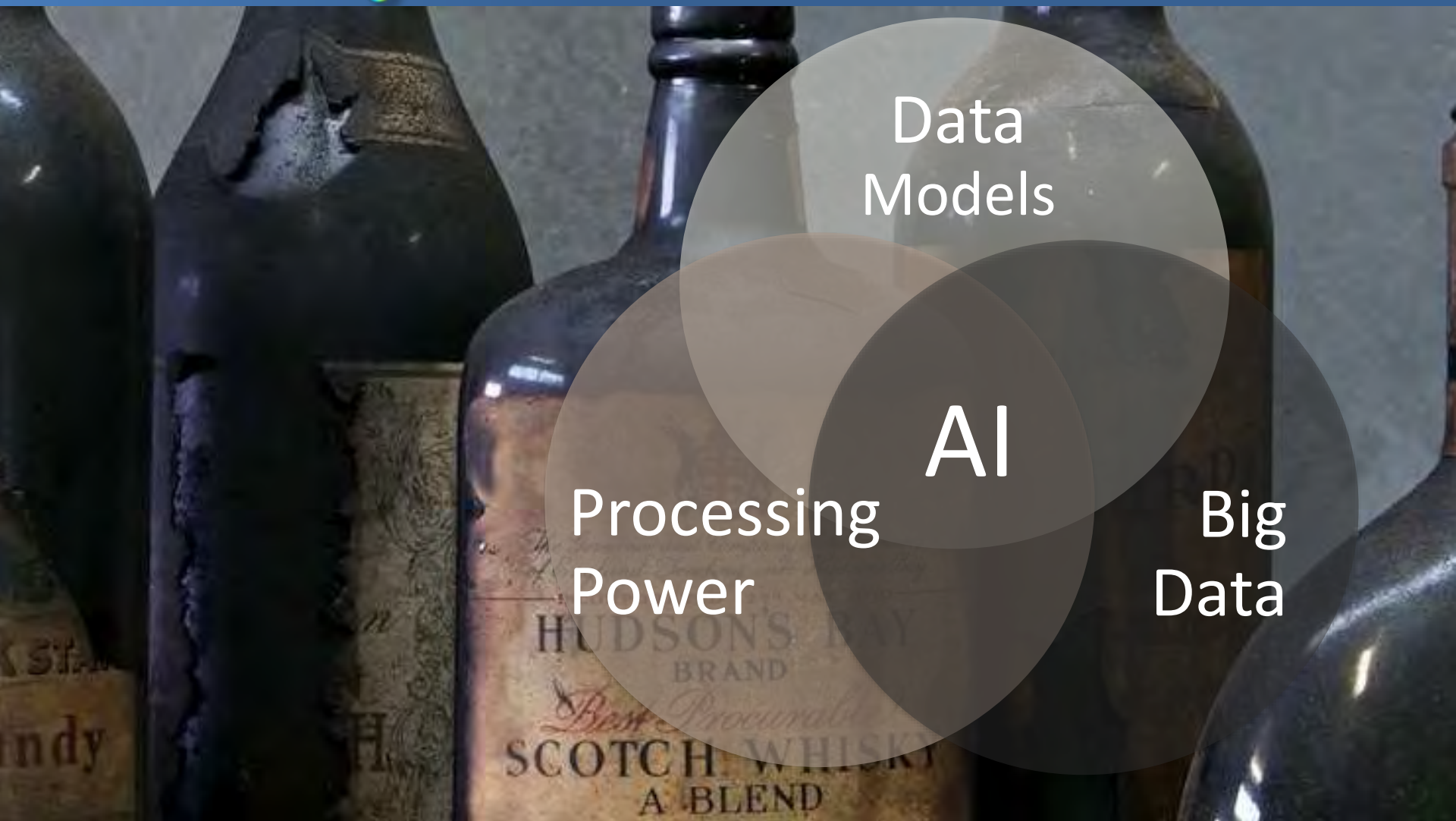
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A black and white photograph of John McCarthy, a pioneer in artificial intelligence. He is seated at a desk, wearing a suit and glasses, and is playing a game of chess. In the background, a large IBM 7000 computer system is visible, featuring numerous tape drives and a control panel with many buttons and switches. The text "...as soon as it works, no one calls it A.I. anymore" is overlaid on the image in a white, italicized font.

*...as soon as it works, no one calls it
A.I. anymore*

John McCarthy, coined the term Artificial Intelligence in 1956

Old wines in new bottles



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Is there a dog in the picture?

Machine Learning is machine's ability to keep improving its performance without humans having to explain exactly how to accomplish all the tasks it's given.

Harvard Business Review
Jul-2017

| | |
|--------------------------|------|
| 2012 | 2017 |
| <i>Image recognition</i> | |
| 28% error rate | 7% ? |

| | |
|---------------------------|------|
| 2012 | 2017 |
| <i>Speech recognition</i> | |
| 26% error rate | 4% ? |



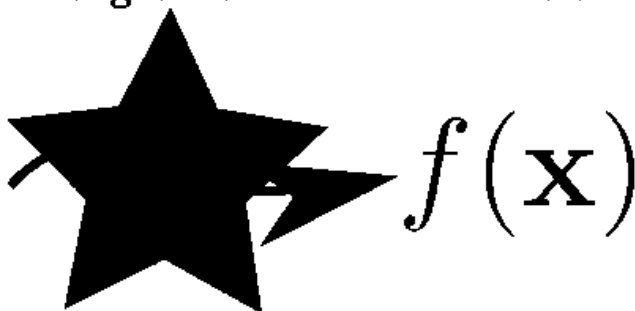
What makes machines intelligent?

Data

Algorithm

Model

```
1001000110100000010100011011010110
10010011101110000001110010100100
100001101011110101011100001101001
111110100001011100101011100001011
1100111101111110010000110110110
01000011010011011000010000100010000
01010110011001110110011010001011
00100010101100110000100001001110
0110100111110010111010101011100
10001000010110001010101011000101
0100100001001010111011100001010000
0101100001001110101010101110110001
011011110101110001010001010010000
01101001101101101000100010111001101
0001010000011001100011001000100110
100101010100010011100101010111101
```



DATA IS THE NEW OIL ...
making machines intelligent.
Intelligent DATA is the new FUEL.

Oracle's AI Strategy AI For Everyone

Ready-To-Go

Adaptive Intelligent Apps

Suite of packaged, AI-powered Apps to solve specific business needs

Ready-To-Build

AI platform

model, train, deploy, manage
bespoke AI powered solutions

Ready-To-Work

Cloud Service Applications

giving autonomous scalability &
high performance in The Cloud

What's your superpower



ORACLE DATA CLOUD

Data on what consumers do, buy, where they go **7BILLION GLOBAL CONSUMER PROFILES**, 400M business profiles \$3 trillion in consumer transactions, 40,000 segments of data from more than 1,500 sources and over 15 million website.

Largest Variety and Volume
Captures Highest Velocity Data
Changes

Learns and Adapts in Milliseconds

How AI/ML

can optimize the citizen experience?

Why people do like chatbot/voicebot?

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Chatbot better than humans?



**Chatbots are
good listeners**

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Voice seen as an escalation.

60%

of issues that end up as a call didn't start that way.

81%

Web and mobile self-service interactions overtake all other channels.

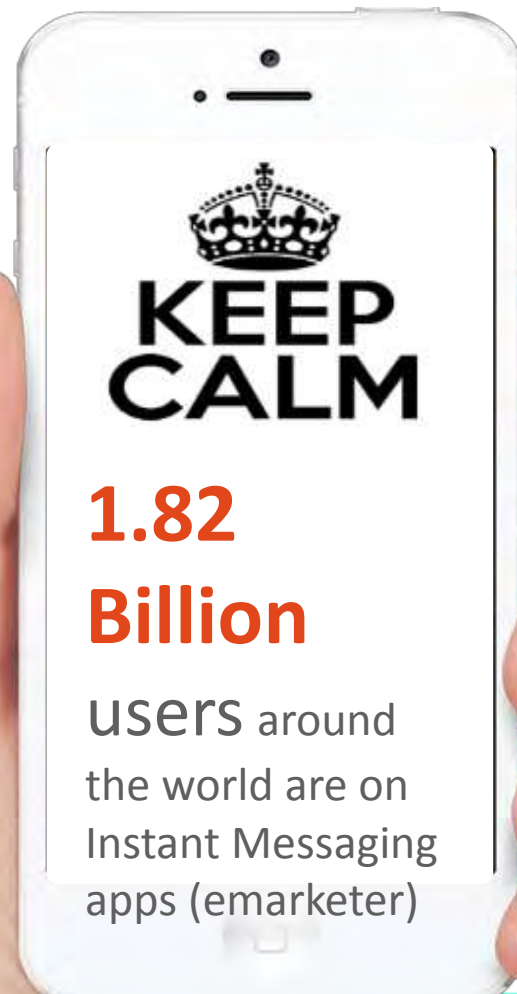
56%

Other self-service channels on the rise. Online forum/community, YouTube videos.

46%

1st choice is not the phone. Voice increasingly evolve to be an escalation.

Instant gratification: real-time solution
Convenience and connection
Conversational and personal engagement



**1.82
Billion**

users around the world are on Instant Messaging apps (emarketer)

Student Guidance Bot (Built in 2 weeks)

- Day 1: 2500 users chatted to the bot. Increase in Engagement with far more people than we would have if we were not using the bot.
- 47% less calls than last year, have had 197 live chats
- Average wait time on the phone only 1.5 minutes, compared to up to 40 minutes last year

40 min down to 1 min 30 sec
Average call wait time



Today we have had **47% less calls than last year ... Our call % handled is sitting at 93%, ...are actually able to decrease our email backlog as we have staff to spare!** Our student service manager (who provide extra support during this day) said this is the smoothest he's ever seen results day run.

Catherine Cherry, Director of Student Recruitment and Admission Services



Make the right usage of humans



High complex issues

video chat and co-browsing



Medium complexity

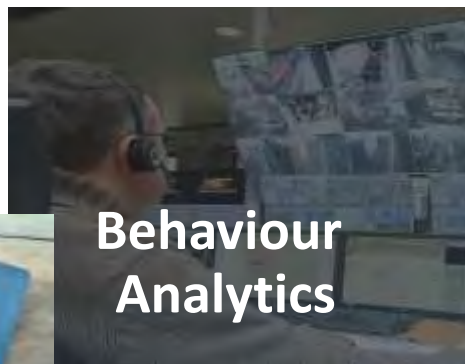
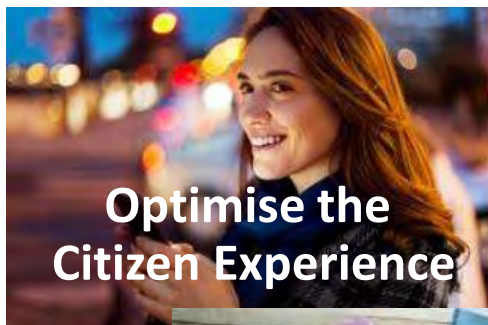


Standard issues

web self service, virtual assistant, chatbot

Virtual Assistant or Chatbot plus clear governance for escalation to human agent, Oracle Policy Automation, Oracle Knowledge Automation

AI to suggest Next best action



Hyperpersonalised

Automated

Predictive

Prescriptive

Next Best Action: AI as Decision making support



Marketing and Digital

Coordinated Open-Time Content
Optimized Marketing Orchestrations



Commerce

Next Best Offers and
Recommendations
Intuitive Search Experiences
Connected Audiences



Sales

Best Sales Actions
Smart Call Points



Service

Automated Answers



Supply Chain

Best Value Freight Options
Inventory and Supply Chain Optimization



Human Capital Management

Best Fit Candidate Lists

The Digital crime room



Progress Updates
& Notifications



Secure
Communication



Digital Crime Room



Invite
Witnesses



Upload
Evidence



Capture
Information

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Intelligent Dispatch



Automated Scheduling

Build optimized scheduled based on real-time data

Self-learning

Learns historical patterns of each individual for future scheduling

Predictive

Predicts with 98% accuracy, when each activity will start and finish

THE CUMEX FILES

A CROSS-BORDER INVESTIGATION

How Europe's taxpayers have been swindled of €55 billion

#CumExFiles

CORRECTIV panorama THOMSON REUTERS Le Monde la Repubblica DIE ZEIT ZEIT ONLINE El Confidencial
REPUBLIK DR POLITIKEN addendum News FOLLOW THE MONEY yle NDRInfo Vrtj svt NYHETER IT

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Big Data based Early Warning System for Credit Defaults

- Third largest bank by assets in the United Arab Emirates
- Identification of possible threats in a very early stage by providing an efficient credit monitoring system
- Deployed Oracle Advanced Analytics for Hadoop , BDD on Oracle BDA
- Provided an end to end solution with Loxon's Early Warning System operational application

\$5.5M

Saving in risk costs

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Data lab to find savings and cost reduction in healthcare budget



- United Kingdom's National Health Service
- Identify billing and identity fraud
- Optimize treatment by reducing use of less effective medical procedures
- Deployed Oracle Advanced Analytics, and Oracle Business Intelligence on Oracle Exadata and Oracle Exalytics

\$561M
confirmed savings
identified

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Smart Applications International Improves Access to Healthcare

- Medical insurance automation application platform. 3,000 insured companies; accessed by over 3,000 healthcare facilities; reach to over 1 million insured individuals
- Biometric Smart solution: The insured can biometrically identify themselves easily, and access their coverage, balance, and benefits. The hospital can provide appropriate treatment based on the unique biometric information and coverage rules on the card.
- Oracle Cloud Solutions to ensure the data stored on the biometric identification cards is accurate and accessible by all interested parties, at all times

70% Increase in processing and verifying claims

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Boise State makes student successfull using data

Improved Student Success

Early Warning Indicators of possible problems

Collecting/Analysing Diverse Data
(Student info, course info, teaching logs etc.)

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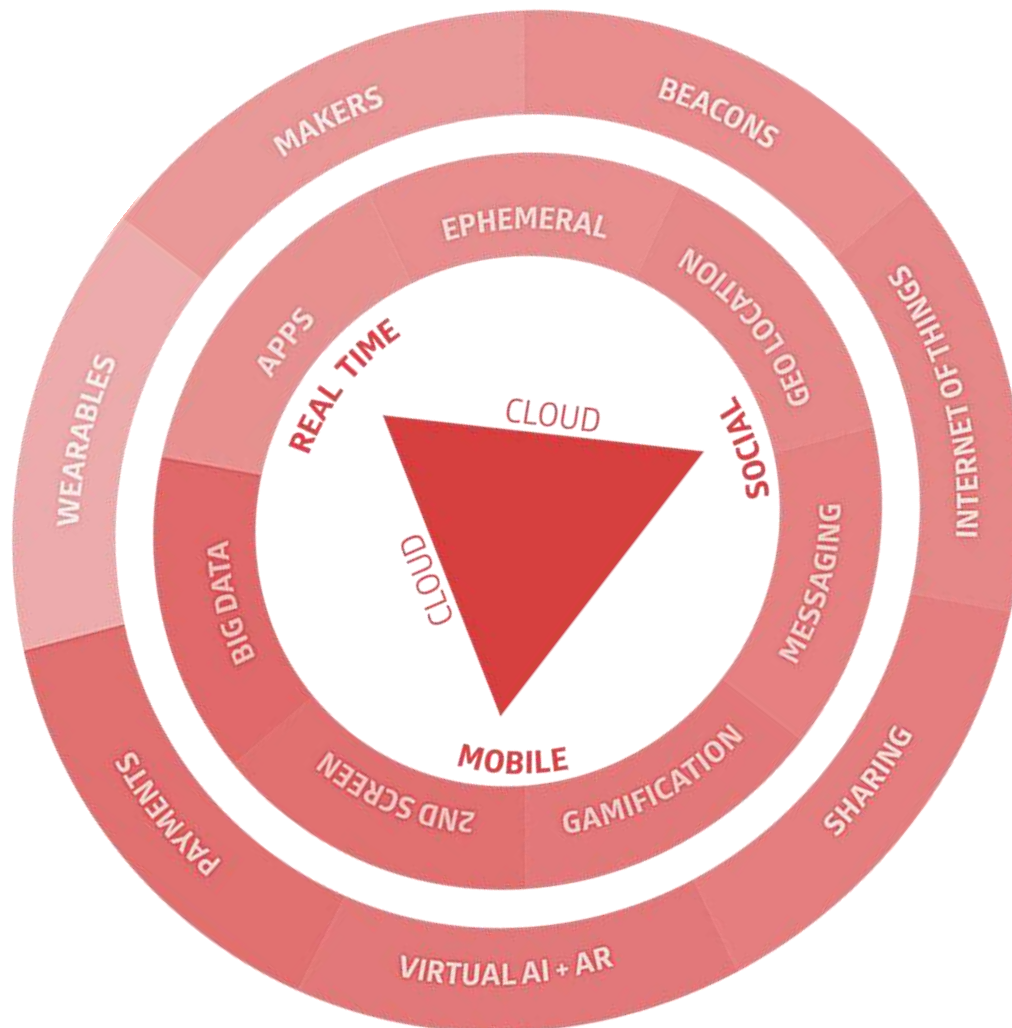


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DISRUPTIVE TECHNOLOGIES ALIGNING



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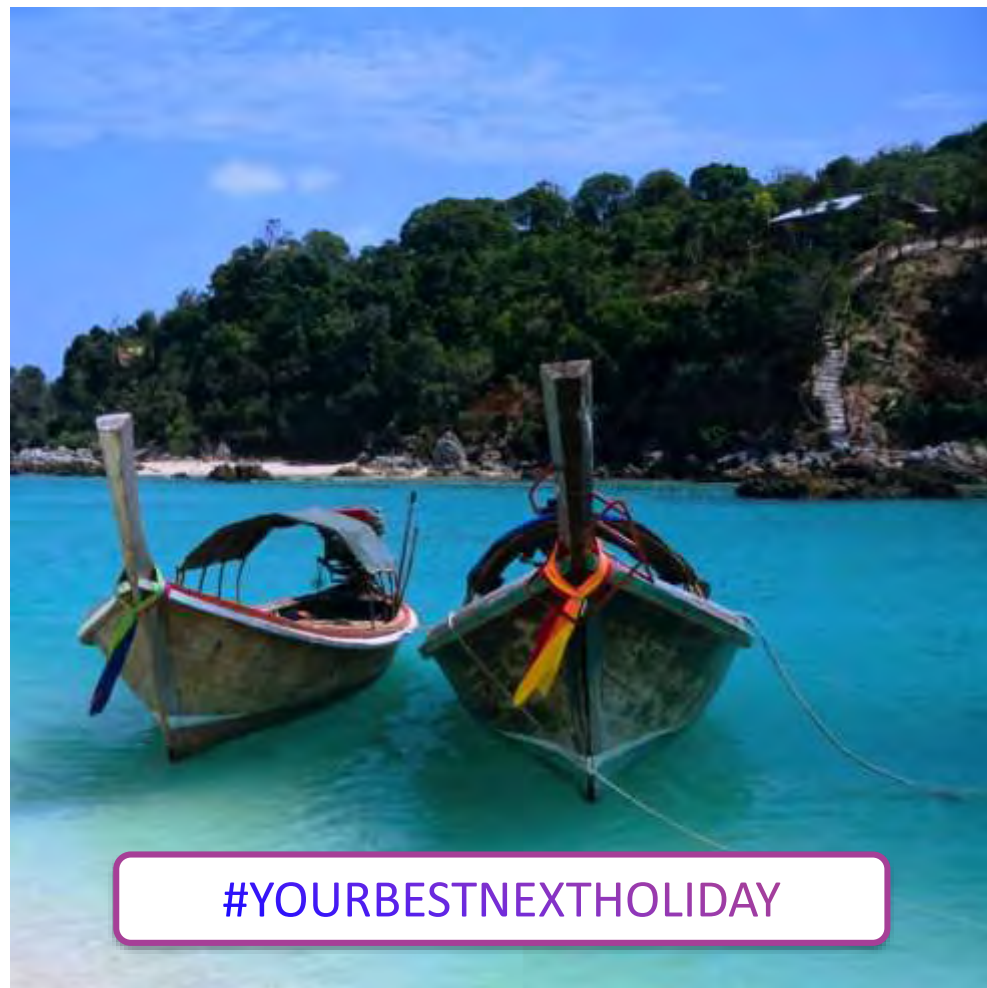


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**We will start to
"outsource" more
our decisions,
choices and tasks
to AI.**



#YOURBESTNEXTHOLIDAY

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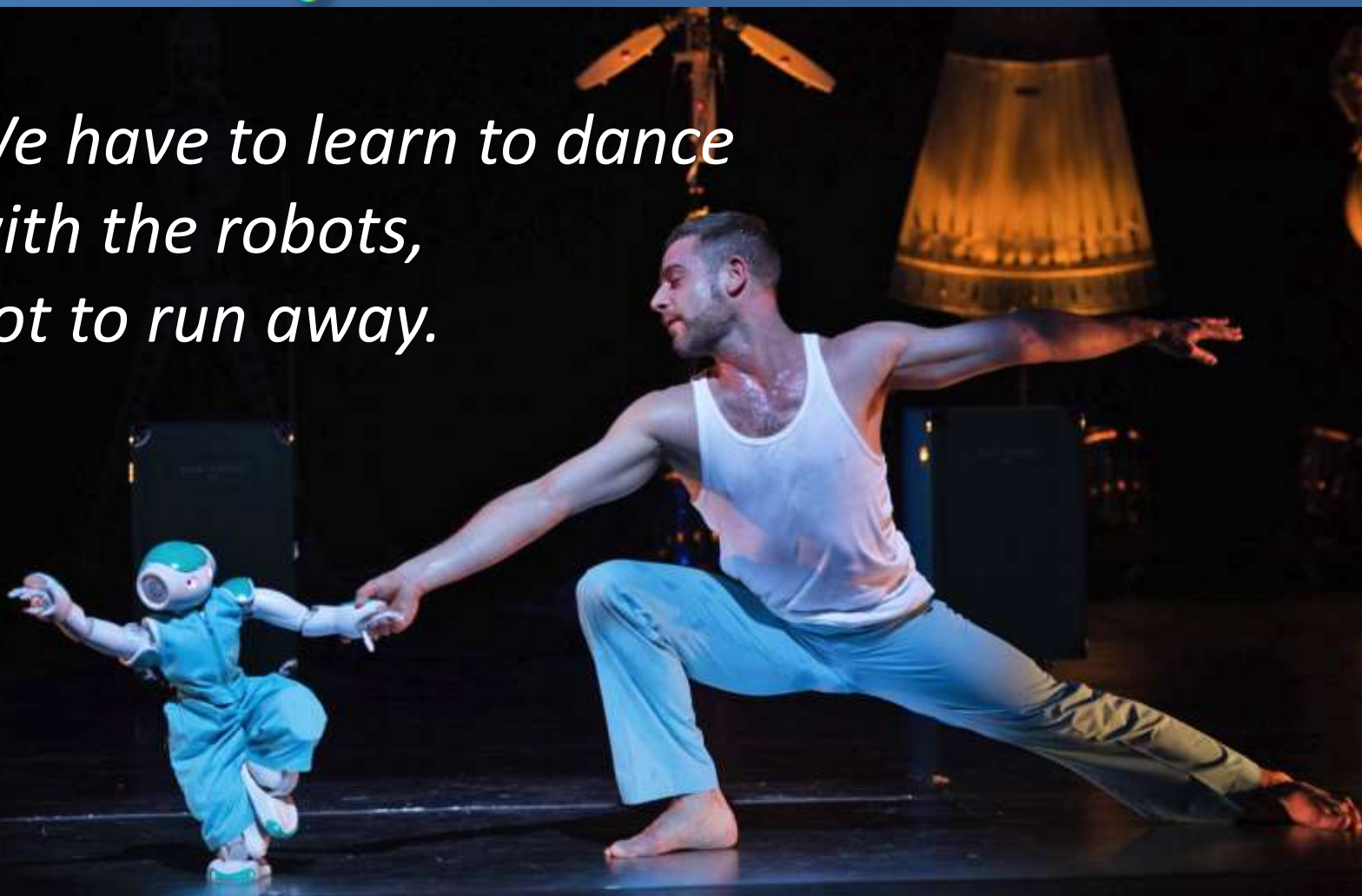
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*We have to learn to dance
with the robots,
not to run away.*



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