

IOD Jersey

Innovation Series
(There is nothing Artificial about Intelligence)

Robotics breakfast event – 14th January 2020

David Brown

The power
of

RPA

Thank you to JT for their kind sponsorship of this series

IOD Technical Sub Committee

IOD Technical Sub Committee, one of 6 new sub committees

Supported by Ian Webb, Lloyd Adams

Formed to provide support for IOD members

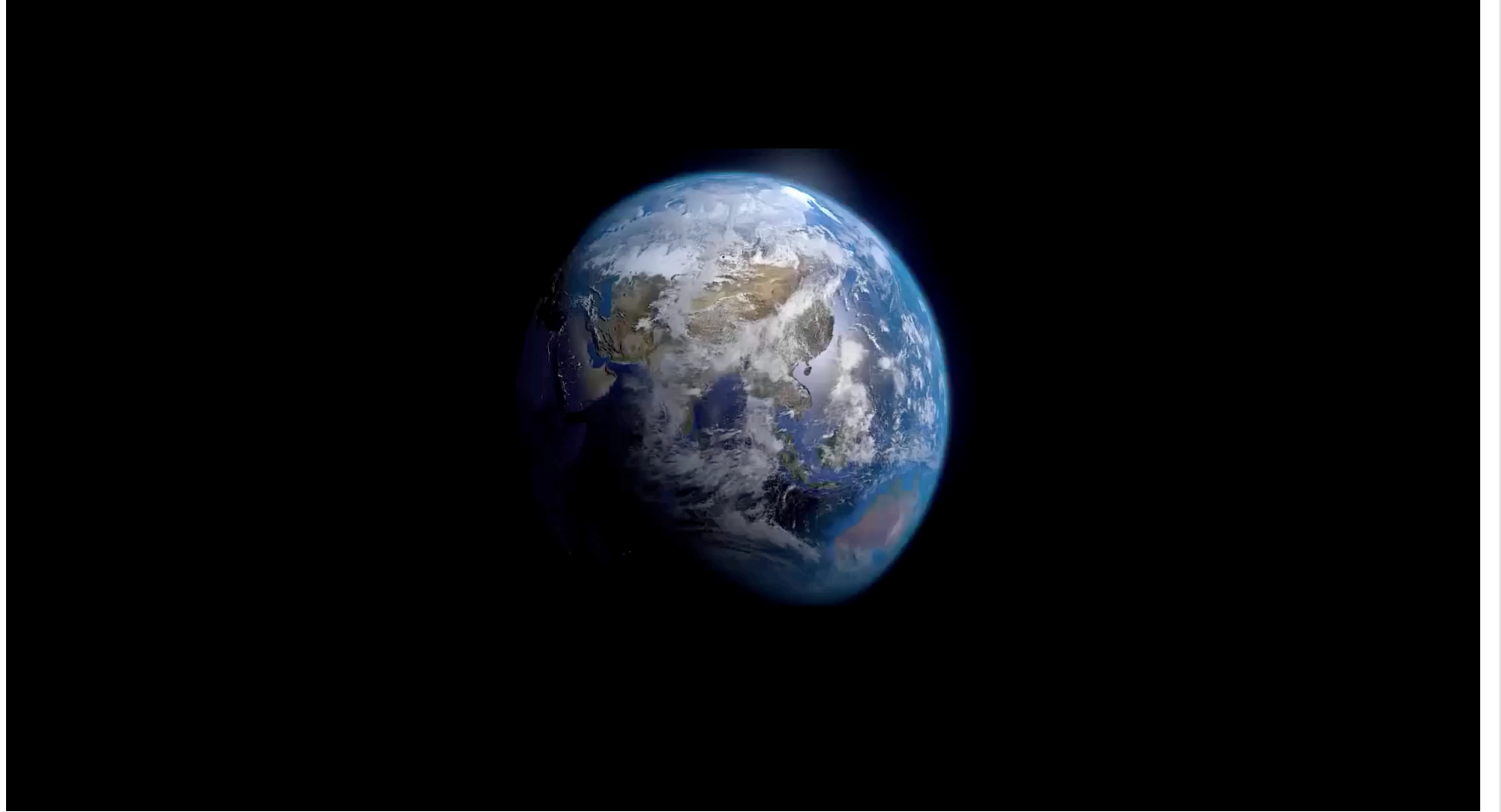
Compliments and works closely with other bodies (Digital Jersey, Jersey Finance, Chamber..)

This is the first presentation in the 'Innovation Series'

A talk based on real examples of deployment over many years

To discuss the interaction between Humans and Robots

The power of Q



The power of Q

- Where it all began
- What is RPA
- What is Q
- Some definitions
- Statistics
- Applications
- RPA - Q in more detail
- Benefits, savings, ROI

The power of Q

Where it all began

Started with user acceptance testing

Offshore deposit book take on – 3,000 clients, Static data, Accounting and Transactions

3 robots keying green screen system and entering the data

3,000 clients, 30 fields each, average of 10 characters per field, 900,000 keystrokes.

Dynamic error handling, 100% accuracy, auditability, efficiency ...14 hours (No breaks, meals, pauses, toilets, lights

'Robert' was born Now called 'Q'

That was 1986

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So what is RPA

RPA , Robotic Process Automation is a software-based technology that utilises software robots to emulate human execution of a business process.



4 or 6 eyes process ... how many 'eyes' does a robot have

“ ... built on human values ... NOT the exploitation of them”

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Typical Deployment

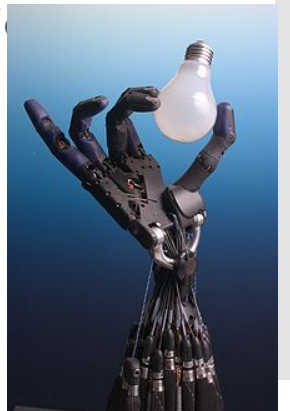
- Machine Learning platform that mimics exactly what you would do as a user
- Runs on a standard company PC
- Uses standard user authentication
- Doesn't pause and has a far greater accuracy and speed than any human
- Is agnostic, it can run on UiPath, MicroFocus, BluePrism, Automater Anywhere.
- Build in 34 years of experience

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Robotics vs AI vs ML

- **Robotics:** RPA is a software robot that mimics human actions, whereas AI is the simulation of human intelligence by machines.
- **Artificial Intelligence:** The word Artificial Intelligence comprises of two words “Artificial” and “Intelligence”. Artificial refers to something which is made by human or non natural thing and Intelligence means ability to understand or think.
- **Machine Learning:** is the learning in which machine can learn by its own without being explicitly programmed. It is an application of AI that provide system the ability to automatically learn and improve from experience.
- These three different approaches will work together as a team or individually depending on the business needs.
- Most of the deploys I have achieved over the years rely on Human knowledge defining rules based processes and governance.



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AI – in the news last week - screening

- Artificial intelligence is more accurate than doctors in diagnosing breast cancer from mammograms, a study in the journal Nature suggests
- An international team, including researchers from [Google Health](#) and [Imperial College London](#), designed and trained a computer model on X-ray images from nearly 29,000 women.
- The algorithm [outperformed six radiologists](#) in reading mammograms. AI was still as good as two doctors working together.
- Unlike humans, AI is tireless. Experts say it could improve detection.
- Compared to one radiologist, there was a reduction of 1.2% in false positives, when a mammogram is incorrectly diagnosed as abnormal.
- There was also a reduction of 2.7% in false negatives, where a cancer is missed
- **Will AI take over from humans?** No. It took humans to design and train the artificial intelligence model

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Getting a little bit more technicalbut not too much



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Q

Started life as a software testing tool

Will automate mundane but important processes, e.g. invoicing

Can enhance compliance, reduce risk

Will complete online regulatory forms for 1000s of entities

Will do what you code it to do .. Including legacy

Can watch another's heart beat, cute really





ADOPTION

- Companies struggle with adoption
- Many say they will be adopting, many hope to, few do
- Statistics show a low rate of deploys
- But an ever increasing level of interest
- Staff and Customers are seeking (expect) instant gratification

Some statistics

- 47% of digitally mature organizations say they have a defined AI strategy
- 63% of businesses say pressure to reduce costs will require them to use AI
- 54% of executives say AI solutions implemented in their businesses have already increased productivity
- 83% of businesses say AI is a strategic priority for their businesses today
- 31% of marketing, creative, and IT professionals worldwide plan to invest in AI technology in the next 12 months
- 61% of business professionals point to machine learning and AI as their company's most significant data initiative for next year

Where AI Adoption Stands and Where It's Stalled

2018

Will deploy in
next 12 months



Have already
deployed



2019

Only 5% out of
23% deployed



Base: All Answering, 2,882 respondents
Source: Gartner 2019 CIO Survey
Base: All Answering, 1,063 respondents
Source: Gartner 2020 CIO Survey

Top 3 challenges to AI/ML adoption

Sum of 1 to 3 rank

Enterprise maturity



Fear of unknown



Finding a starting point



Vendor strategy



gartner.com/SmarterWithGartner

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Use Cases – Some typical examples

- Repetitive / time critical reports (Invoices, Accounting prep)
- Document and information collation , Multiple sources
- Payment support – don't rely on paper Policies and Procedures
- Application upgrade and release testing – Annual, upgrade, Daily ?
- Mass data cleansing – enriching, add geo referencing etc
- Migrations/Acquisitions – Ability to test run numerous times
- On Demand – Every member of staff has a personal assistant
- Client service – 24/7/365, Statutory documents, Reports

Typical deployment example – production of regular output to clients

No of Documents	1500	Admin	Manager	Director
ACTIVITIES				
Pre Summary		5	1	1
Create Document(s)		10		
Draft email		5	10	10
Send and File			5	5
TIME SAVED				
Time Saved per doc		20	16	16
Mins saved per Qtr		30000	24000	24000
Hours saved per Qtr		500	400	400
Days saved per Qtr		69	55	55
Rate per hour		£75	£150	£200
Poss savings per Qtr		£37,500	£60,000	£80,000
Poss savings p/a	£710,000	£150,000	£240,000	£320,000

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***Demo showing Q auto creating NAV –
new Prospect entries***

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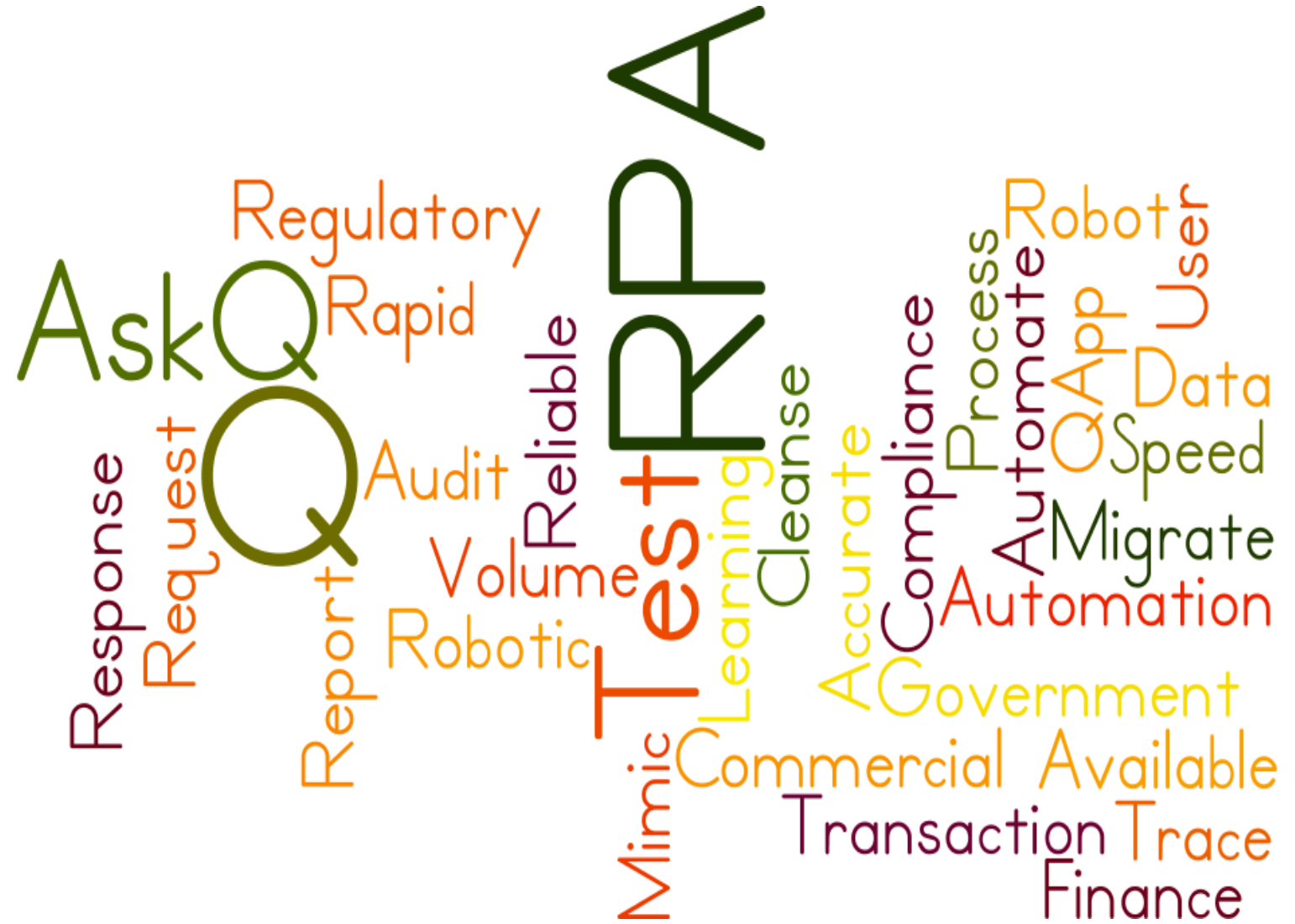
Automation supporting humans



What you just saw.....

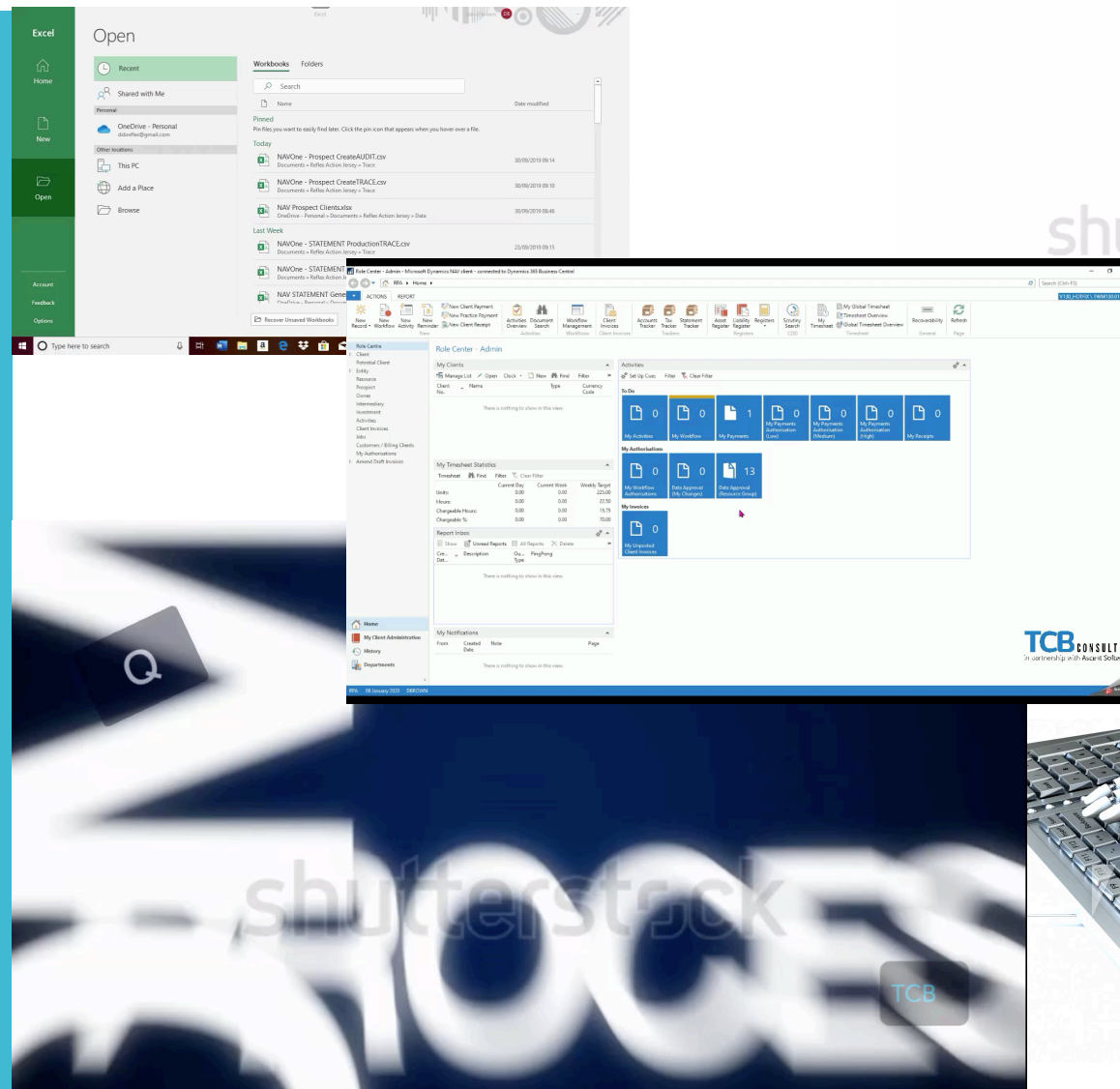
Automation created keying fields of multiple combination events ... in 39 seconds

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There's a lot of interest and 'noise' out there

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But Automation is here and benefits are building each day ..

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What next

- So where do you start ?
- Testing, Cleansing, Migration, Self service ... Client service ?
- AI/RPA has a positive past history and a very exciting future ...
- Leave you with one thought We touched on testing ...
- Remember .. Not all testing is Black and white ...
- ... some is yellow !



Thank you



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