WE ARE IN AN UNPRECEDENTED PERIOD OF TECHNOLOGY INNOVATION

1. Mainframe
2. Client-Server and PCs
3. Web 1.0 eCommerce
4. Web 2.0, Cloud, Mobile
5. Big Data, Analytics, Visualization
6. IoT and Smart Machines
7. Artificial Intelligence
8. Quantum Computing
EXACERBATED BY GLOBAL CHALLENGES

POPULATION GROWTH, LIVING STANDARDS AND SCARCITY OF RESOURCES

URBAN DENSITY
By 2050, 66% of the world’s population will live in urban areas. By 2045, the world’s urban population will surpass 9 billion.

AGING POPULATION
By 2050, the number of people above the age of 60 is expected to hit double from 981 million now, to 2 billion, while 1/3 of the population requiring full-time medical aid.

HEALTHCARE
By 2030, chronic diseases will account for over 37 million deaths a year in developing countries which is a 64% increase.

MOBILITY
By 2050, there will be over 2.5 billion cars roaming the earth, while mostly being concentrated in urban areas.

RESOURCE SUSTAINABILITY
By 2050, energy demand will increase by 80% due to the increase in emerging economies.

CITIZEN EXPECTATIONS
In a pulse of 5,000 citizens surveyed across 10 countries, 81% of citizens want governments to provide more digital services.
WHAT IS ARTIFICIAL INTELLIGENCE?

“SYSTEMS THAT CAN SENSE, COMPREHEND, ACT & LEARN”

SENSE
Perceive the world by acquiring and processing images, sounds and speech.

COMPREHEND
Analyze and understand the information collected by adding meaning and insights.

ACT
Take action in the physical world based on comprehension and understanding.

LEARN
Improve performance (quality, consistency, and accuracy) based on real world experiences.

AI has the potential to double the annual economic growth rates by 2035 for developed economies. In the same time frame AI can boost labor productivity by 40 percent.
SMART MACHINES THAT EXTEND HUMAN CAPABILITIES BY SENSING, COMPREHENDING, ACTING AND LEARNING – ALLOWING PEOPLE TO ACHIEVE MUCH MORE.

TECHNOLOGIES ENCOMPASSED BY ARTIFICIAL INTELLIGENCE

VIRTUAL AGENTS
- Human machine interface
- Establishes first tier of contact with customers
- Responds to queries and questions with non-verbal cues
- Replaces online customer service representation

ROBOTIC PROCESS AUTOMATION
- Human action mimicry
- Imitates routine, time consuming tasks
- Viable for high volume processes
- Requires rule based decisions without judgements
- Digital triggers and inputs

NATURAL LANGUAGE PROCESSING
- Speech / text comprehension
- Enables understanding between human & machine
- Comprehends nuance of language
- Extracts mean and expresses messages in natural language

IMAGE RECOGNITION
- Ocular analysis / understanding
- Identification and detection of objects or features from digital images
- Requires large learning data set

MACHINE LEARNING
- Big data pattern recognition
- Analyzes large data sets
- Aligns with subjective, malleable processes & expectations
- Predictive & prescriptive
- Interprets text, speech, visual, and digital inputs

DID YOU KNOW?
By 2020, Chatbots will be responsible for over $8B cost savings annually
Juniper research
IMAGINE THE NEW POSSIBLE

SUPPLY CHAIN
Predict price and promotion outcomes at a new level of granularity.

CASH FLOW
Optimizing receivables and payables with a virtual agent.

DRIVE CUSTOMER ACQUISITION AND GROWTH
Determine a customers’ lifetime value before the first sale.

BEST USE OF SKILLS
Free people from repetitive tasks so they can be re-deployed to higher value work.

What’s your new possible?
MORE AND MORE CLIENTS ARE MOVING AWAY FROM POC AND TRIALS TO FULL-SCALE TRANSFORMATIONAL APPROACH WHEN IMPLEMENTING AI.

Demand is evolving, moving away from chatbots to transformation based services.
Leverage voice, IOT and AI to help the older generation live at home independently for longer

The developed solution is piloted by 30 older adults for 9 months with extremely positive feedbacks and more than 40% of the users actively engaged daily.
Automating lease contract abstraction and generation with Natural Language Processing

The developed solution achieved extraction accuracy over 72% and reduced the average end-to-end lease administration time by 25-30%.
Processing aerial images to detect outdated portions of the cadastral plan and identify cases of fiscal non-compliance.

Video
SPANISH RECYCLING AGENCY

Waste Recycling Solution using RPA, Natural Language voice and vision recognition

Accenture developed a robotics waste recycling solution using NLP, Voice and visual recognition to help the citizens deposit their recyclables in a better and efferent way.
A robotic telephony agent

Handling 10,000 monthly calls for bank account servicing transactions in Arabic and in English.

80% of the calls being automated.

Your available balance is currently 4520 SAR and your available cash balance is 450 SAR,
AUSTRALIAN TELECOM WHOLESALER

Increase the speed of the network roll out and decrease the cost of network design

The developed solution leverages satellites pictures and achieved 40% workload reduction for engineers.
Deep Learning to Automate Car Damage Assessment

A project that used deep learning techniques to automatically assess the level of sustained vehicle damage. The damage classifier showed an accuracy level (~90%), leading to a faster and better claims processing system.
LARGE EUROPEAN TELCO PROVIDER

Leverage advanced analytics and machine learning to reduce operating cost through a combination of energy, network and asset optimisation.

The developed solution achieve 10-15% saving over 300,000 sites, translating into $255m operating cost saving over 3 years.
THE FUTURE IS NOW