Automating the Future of Work

The Rise of Digital Workers

An IDC InfoBrief | May 2019

Executive Summary

Automating the Future of Work

IDC defines the **Future of Work (FOW)** as a fundamental change to the concept of work that transforms worker behaviors and skills, as well as organizational culture. It supports a dynamic work environment not bounded by time of day or physical space, empowers teams and a diverse workforce and fosters human-machine collaboration. As digital disruption continues, a majority of organizations are embracing artificial intelligence (AI) and robotic process automation (RPA) technologies to drive new efficiencies, outcomes and achieve the vision for automating the FOW.

The future **Workforce** will increasingly be a mix of humans and bots working together. The application of intelligent technologies is reshaping the way tasks are performed, as well as how workflows are executed and by whom. These technologies augment and automate work while creating new opportunities for value creation within the organization. In particular, the RPA market is going through an accelerated cycle of growth with adoption skyrocketing across sectors and functions. IDC forecasts the worldwide RPA software market will grow at a 49.3% compound annual growth rate (CAGR) for 2017-2022 to reach US$3.7 billion, which is much faster than the overall cognitive and AI technologies markets that will represent a 37.3% CAGR during the same forecast period.

In this InfoBrief, we discuss the broad impact of digitalization and how organizations are utilizing RPA technologies for driving business outcomes. We also share use cases and examples from different sectors, as well as key factors that organizations need to consider when selecting a partner for RPA deployments. Since RPA is the latest buzzword, there is a lot of noise around this topic and we aim to filter the noise and provide key insights, as well as offer essential guidance for successful RPA strategies.

The digital imperative and shifts in technology spending

INNOVATION ACCELERATORS

Cloud

3rd PLATFORM

EXPERIMENTATION 2007*
MULTIPLIED INNOVATION 2015*
AUTONOMY 2022*

Mobility

Mobility

Social

Next Gen Security

Robotics

Blockchain

AI

Big Data

Augmented & Virtual Reality

3D Printing

Internet of Things

65%+

Asia Pacific GDP

will be digitalized with growth in every industry, driven by digitally enhanced offerings, operations and relationship — driving **US$2.3 trillion in IT-related spending from 2019-2022**.
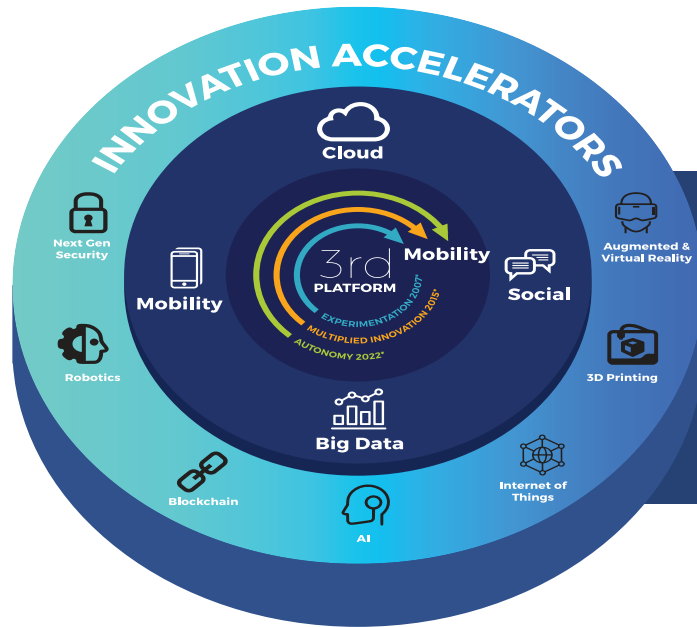
By 2021, 3rd Platform technologies and innovation accelerators such as Internet of Things (IoT), AI, augmented/virtual reality (AR/VR), 3D printing, and robots and drones will account for about 89% of total IT spending in Asia Pacific.

Asia Pacific represents the largest market for innovation accelerators, forecast to reach more than

US$500 billion by 2020.

Sources: IDC FutureScape: Worldwide IT Industry 2019 Predictions – APEJ Implications and IDC Worldwide Black Book - 3rd Platform Edition, April 2018

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As digital disruption continues, artificial intelligence technologies are seen as the key disrupter

The top 3 technologies that Asia Pacific enterprise decision makers believe will have the most disruptive impact in the next 4-7 years are:

1 AI

2 Cloud

3 5G
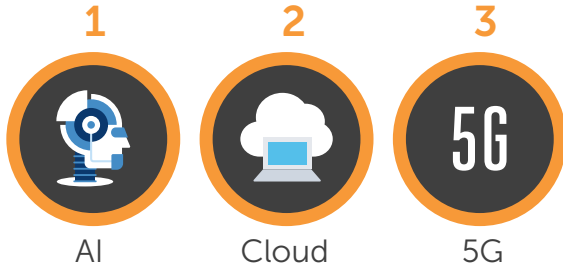
The global spending on cognitive and AI systems is forecast to reach US$78 billion in 2022, which is more than three times the US$24 billion forecast for 2018 and with 37% CAGR for the 2017-2022 forecast period. **RPA is one of the fastest growing segments**.

>12% or only about 60 of the Fortune 500 companies that were included in 1995 were still on the list 62 years later, in 2017.

88% of the companies from 1955 versus 2017 have either gone bankrupt, merged with (or were acquired by) another firm, or they still exist but have fallen from the top Fortune 500 companies (ranked by total revenues).

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The workforce of the future will increasingly be a mix of humans and intelligent technologies

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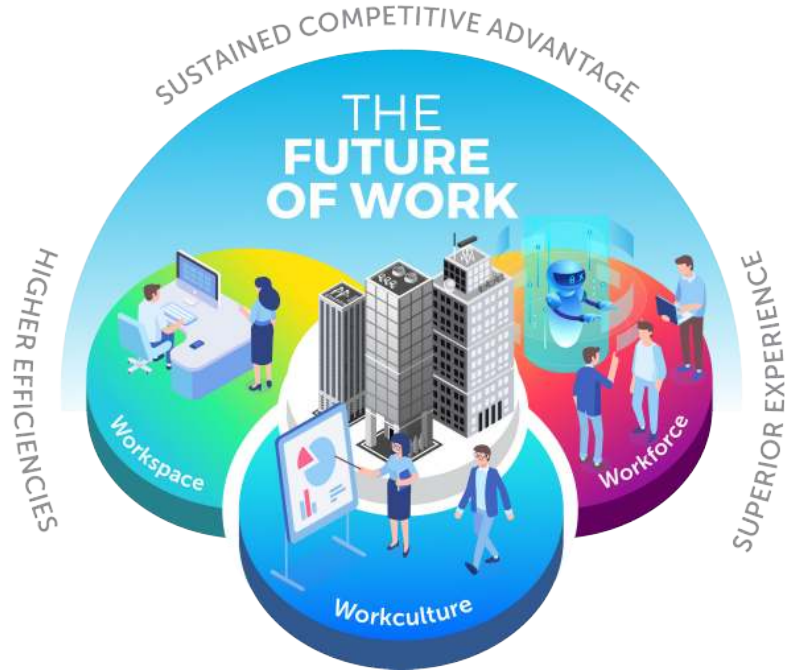
The future **Workforce** refers to the application of intelligent technologies to reshape the way work tasks are performed and by whom (including machines). These technologies augment and automate work while creating new opportunities for value creation within the organization. About **21% of organization leaders** in Asia Pacific strongly agree that AI and cognitive systems can drive their top-line growth in the next 2-3 years.

The future **Workculture** refers to the distinctive beliefs and values of an organization, talent management practices and how effectively they achieve and retain a highly engaged and motivated workforce that is aligned to corporate strategies and **goals**. About **38% of organization leaders** are already making efforts to make their workculture friendlier, collaborative, and fun (coffee shops, pool tables, and so on).

As intelligent automation technologies gain traction, RPA deployments are accelerating across markets

The worldwide RPA software market will grow at 49% CAGR for 2017-2022 to US$3.7 billion, much faster than the overall cognitive and AI technologies markets that will represent a CAGR of 37%.

RPA is a fast-growing class of software designed to automate or augment manual repetitive tasks. While those tasks may be individually executed by a knowledge worker outside the context of a business process, the concentration of effort over the past few years has focused on improving the level of automation of a custom business process or processes encapsulated in enterprise applications.

RPA is enabled by software tools that are programmed to automate processes that were formerly performed by a human following a predetermined set of rules. When exceptions arise while using RPA, both humans and machines address them. RPA can use a combination of cognitive technologies to completely automate a task to enable processes to operate more dynamically.

27% of organizations plan to deploy RPA or other intelligent automation technologies.

RPA Use Cases and Adoption across Functions:

Financial
Quote to Case, Procure to Pay

Human Resources (HR)
Employee Data Management, Payroll Processing
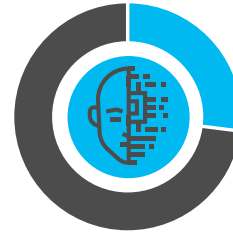
Operations
Data Management, Legal Processing

Supply Chain
Invoicing, Contract Analysis and Processing

Tech and Customer Support:
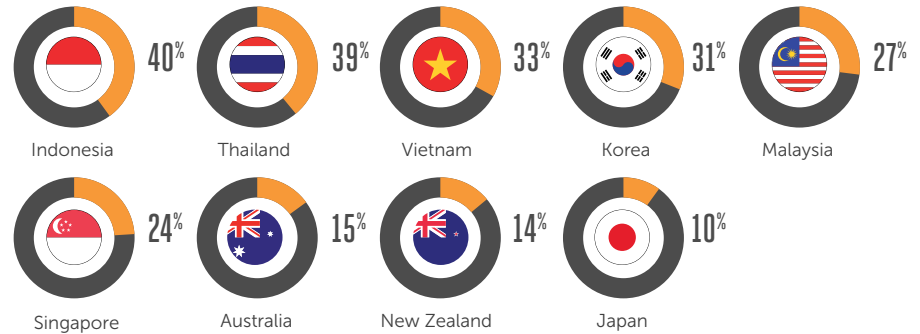Level-1 Support, Data Querying, Knowledge Management

Sales and Marketing
CRM Updates, Reports

Breakout by Countries

Indonesia 40%
Thailand 39%
Vietnam 33%
Korea 31%
Malaysia 27%

Singapore 24%
Australia 15%
New Zealand 14%
Japan 10%

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The rise of digital workers across functions and sectors

PREDICTION IDC **PREDICTION**

By 2024, **50% of structured repeatable tasks** will be automated and 20% of workers in knowledge-intensive tasks will have AI-infused software or other digitally connected technology as a "**co-worker**."

Penetration of RPA Technologies by Industry*

- 25% BFSI
- 27% Government
- 37% Telecom
- 26% Healthcare and Life Sciences
- 25% Manufacturing
- 14% Retail
- 24% Energy and Utilities
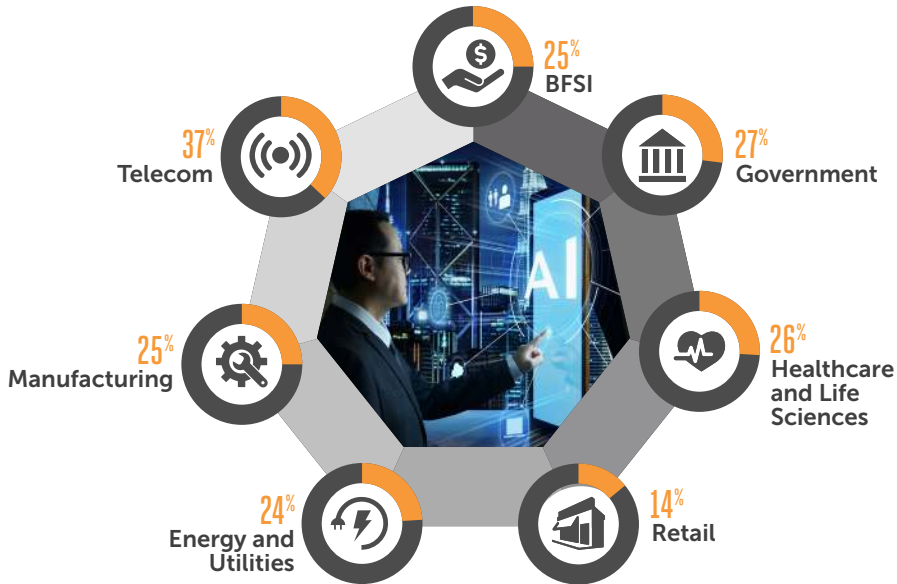
*Note: Data reflects the percentage of the total number of organizations surveyed that are implementing RPA in each sector.

Case examples:

- **ANZ Bank** was struggling to manage inconsistency of volumes in its operational processes. It **implemented RPA initially in its standard process transactions** and slowly to the entire process. Within six months, ANZ bank achieved **40% in cost savings** and a considerable **reduction in the end-to-end delivery time** for its customers.
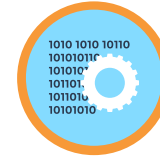
- **Core Digital Media** (Los Angeles-based online marketing company) **implemented RPA to automate its data extraction process** from 50 different online publishers. By using RPA, Core Digital saved almost **300 man-hours/month** which translates to savings of **approximately US$150,000 per year**.

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The growing human-machine collaboration and embracing automation as future of IT

25% of IT development and operation processes will be automated, resulting in a 15% gain in IT productivity and requiring IT to redefine skills and manage **digital workers** in 2019.

Automation in end-user computing and applications

Automation in IT development to testing and security

Automation in infrastructure management and at the edge

Automation in IT support and operations

Case example:

- A global bank deployed machine learning (ML) based automation — an intelligent RPA to automate its HR data management and compliance process, which was time consuming and highly error prone. The **cognitive RPA** helped the bank completely **eliminate errors, cost savings of US$1 million** and was able to **save 70% time** as compared with its old manual process.

However, there is growing need to manage automation and bots

As RPA technologies improve further and become mainstream, organizations are deploying hundreds or even thousands of bots to perform both routine and sophisticated tasks that require cognitive and ML technologies. In many cases, tasks are completely automated and bots can even deliver insights around process improvements, cycle time reduction, check for anomalies and provide better forecasting or risk analysis capabilities for early warning signs.

However, deploying RPA is not without its challenges as it requires process redesign, change management, reskilling and redeploying efforts. In addition, organizations are grappling with having to manage different bots or AI platforms and concerns around privacy, security and compliance.

Key questions to consider, predominantly with the dawn of intelligent automation technologies:

- How will organizations manage the digital worker, the need for collaboration between different platforms, and build versus buy?

- What should be the data governance strategy for bots?

- How to create an enterprise-wide governance mechanism and change management strategy to ensure smooth scale up of automation?

- How can organizations predict what type of bots they need in the future and for what work type, as well as scale accordingly?

- How will the success of bots be measured? Will they do performance appraisals for bots as humans?

- What should be the organizations' strategy to reskill and redeploy their workforce to efficiently collaborate with bots?

- Is your future workforce strategy aligned with your automation goals and future skills' requirements?

- Will organizations provide cultural and organizational trainings to bots while onboarding?

Essential guidance for automating the future of work

Focus on scaling up RPA and an enterprise-wide strategy for cohesive coexistence of human and AI

AI solutions will be pivotal in transforming business processes, enterprise applications and even field services in many cases with the use of technologies, such as image recognition and video analytics. However, enterprises should consider the following crucial aspects as they plan their future workforce, such as the human and RPA strategies:

Think strategic

Evaluate how RPA can impact your operations. Enterprises should have a clear vision of the expected benefits and complexities associated with implementing RPA. Complexities could range from language issues to change management. They should first identify specific business processes that can deliver better outcomes and be scaled up and across functions.

Go beyond return on investment

Define key performance indicators (KPIs) to measure the performance of RPA systems and bots. Enterprises should focus on creating new capabilities and products with RPA and cognitive technologies. It can be possible only if KPIs for bots are defined and their performance is measured. The traditional IT KPIs need to be revamped with business and behavioral metrics.

Select the right partner

Assess carefully the strengths, weaknesses and scope of services provided by various RPA vendors. Align your business goals and objectives with your vendor selection criteria. Vendors should help enterprises not only deploy RPA effectively, but also provide technical training, support and guidance as required and even multi-geo and language capabilities.

Monitor and shutdown options

Enterprises should meticulously evaluate RPA deployments for potential risks while scaling up across geos or functions. A careful and controlled assessment should be done — like doing a risk analysis weighing in on different scenarios and outputs, before scaling up bots. There also needs to be safeguards to monitor bots actions for anomalies and shutdown options.

Prioritize security and privacy

Ensure security and privacy in all parts of the data chain. Security will be critical for an efficient and effective RPA, while privacy needs to be respected for ensuring acceptance.

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Global leader in RPA and the pioneers for Digital Workforce

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2,800+ Customer Entities	**15+** Years of Innovation	**700+** Partners	**1,000,000+** Bots Deployed	**90+** Countries	**96,000+** A-People Community

PROFESSIONAL SERVICES
- Industry expertise
- RPA program management
- Technical consulting

AUTOMATION ANYWHERE UNIVERSITY
- 175,000+ AAU students
- Global RPA certification
- Instructor-led training
- E-learning

CUSTOMER SUPPORT
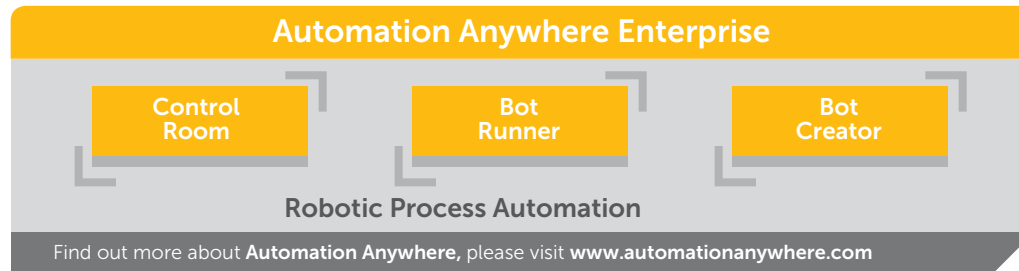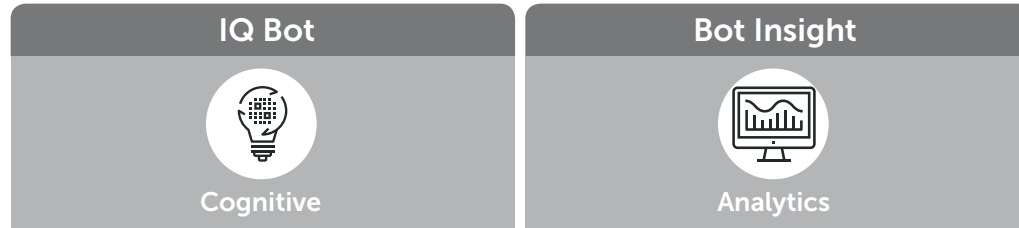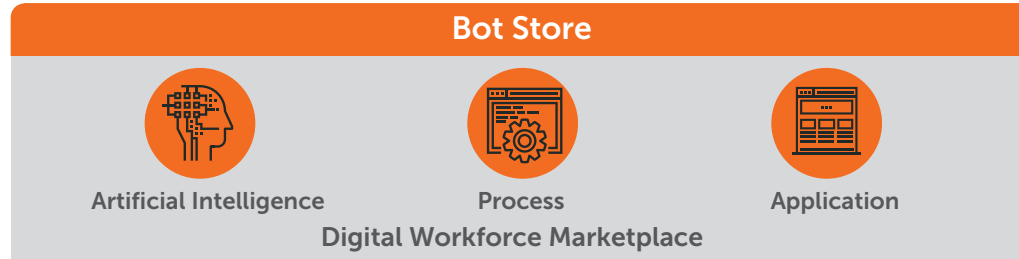- 24x7x365 help availability
- Escalation management

A-PEOPLE-CUSTOMER COMMUNITY
- Forums
- Online help and assistance
- Industry references
- Documentation and resources

PARTNER ECO SYSTEM
- 700+ global partners
- Leading advisory & SIs
- Leading BPOs

Bot Store

Artificial Intelligence

Process

Application

Digital Workforce Marketplace

IQ Bot

Cognitive

Bot Insight

Analytics

Automation Anywhere Enterprise

Control Room

Bot Runner

Bot Creator

Robotic Process Automation

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