The future workforce: Turbocharged by humans and bots
The automation revolution has triggered a ripple in a world where businesses are still human-led. The true nature of the impact of automation, however, remains to be seen. Growth of robots/bots and their presumed effect on jobs has been grabbing headlines. The conundrum that we humans are dealing with is ironic, while some of us are elated with the news of robots/bots doing more, some of us are worried about job security. While any organization, investing in automation, needs to focus on many parameters, the most important one is not neglecting the human workforce and the possible influence it could have on setting the right direction for the robotic workforce.

Before we start questioning the reality of job losses and mass hysteria, let us look at some facts:

- Everest group’s BPSDA state of the market report claims that only 22% of the BPO customers have any services delivery automation (SDA) deployment.
- 69% of such SDA deployments have lower than 10 bots being deployed, and only 3% have more than 100+ bots.
- Artificial intelligence (AI) involvement is further lower, where only 15% of the total SDA deployments have any AI component. Even then, the most common use cases are chat bots, analytics and unstructured document reading – specific use cases intended for specific industry segments.
- Studies have also shown that optimization of emerging technologies have taken between 8 to 28 years across multiple economic sectors.

It is clear that we are still in the nascent stages of adopting Robotic Process Automation (RPA) and AI. The important question therefore is not if automation will take away jobs, but rather how businesses will evolve to embrace the combination of human and robotic workforce. Automation will only lead to augmentation of human efforts.

Let us take a closer look at the differentiation between the kind of work that robots and humans will perform over the next few years. Working side-by-side with robots will require human adjustment, change management, and design thinking. The work environment will deliver the requisite change in these ways:

**Robots First, Humans Next**
Robots will rule over tasks such as extraction of data, monotonous movement of data, conversion of data to digital formats, and repetitive tasks until a point where a decision needs to be taken.

**Humans First, Robots Next**
Humans will dominate when it comes to experience, knowledge-driven roles where the initial bit is more about setting the context, dealing with the customer, gathering knowledge/information and then handing it over to a robot for processing the same.

**Human and Robots Side-by-Side**
Humans and robots will work together on tasks where humans will need support from robots in parallel technology/on-field jobs. Dependence on human element, which was causing delay, will shift to robots, and humans will continue to deliver engagement/experience.

**Automation: What it means for humans**

**Upskilling and cross-skilling of existing resources**
Existing resources are acquiring new skillsets due to automation of monotonous and repetitive jobs. IT/support resources are learning new RPA/AI products. BPO resources are learning programming skills, process/business analysis and consulting skills. This is helping organizations migrate to a more digitally enabled workforce.

**Increase in demand for knowledge workers**
These new roles involve analytical/judgemental tasks involving creativity. Need for data scientists, data analysts, cloud engineers, app developers, design leaders, etc. is already at an all-time high. Universities have also started changing their educational curriculums to support such industry needs.

**Rise in freelancing**
Human workforce skillset requirements will keep on shifting, driving contractual or freelancing engagements. Over 20 percent of workers in the US will be in a contingent (not permanent) role in the next 2-3 years as per one of the analyst reports.
Increase in focus on R&D
Currently, about 1/4th of an organization's total talent typically focuses on product development. This number will increase going ahead as new age companies, stalwarts and service integrators invest heavily and contribute to a hybrid model of providing services and products via third-party partnerships and in-house intellectual property.

Changing role and importance of HR
With evolving mix of robotic and human workforce, the biggest factor will be change management. Companies will benefit from better employee satisfaction, reduced time in training, and enhanced scope of activities. HR teams will have to create new policies, procedures and mechanisms to deal with complex human workforce requirements. HR will also have to plan and execute retention strategies for the new breed of workers. Skillsets, roles, expectations from the HR teams will increase greatly because of this change.

Changes in business models
Gradual but consistent move towards output and outcome based models will eventually help drive organizations towards end-customer satisfaction.

Coming together of Business and IT
Organizations have realized that business and IT units need to be in sync with the overall organization's goals via automation programs. This is helping organizations deliver better services and products to their end-customers.

Reliance on human intellect
External changes like political and social instability, regulatory requirements like GDPR, immigration, etc. are best left to human intellect.

The power of bots
Deployment across processes
After initial inhibitions, organizations have slowly recognized the power of bots and are keenly evaluating existing processes, and set mechanisms of delivery. While early stage bot deployments were focused on back-office processes (unattended automation), now, front-office process (attended automation) are also being targeted.

Cross utilization and reusability
One business unit that leads the charge in automation will become a benchmark for the remaining business units in the organization to ensure that they learn from its mistakes, imbibe the best practices and ensure reuse by means of creating a bot library or marketplace that can shorten the time to deployment and ROI achievements. This will help faster bots to take on higher targets in shortened time durations.

Perforation across industries
Healthcare, banking and telecommunications were the early movers in case of bot deployments but slowly and steadily other industries such as manufacturing, retail, energy, utilities, media, insurance, etc. have also started taking aggressive targets of deploying bots in manual and rule based processes.

Evolution of new features
As business requirements change, expectations of what bots can deliver has also increased multi-fold in the past few years. Every version's release introduces new technical features and capabilities and every release is getting faster (down from a yearly update to a bi-annual update). Soon, we will move towards cloud-based deployments where version controls/upgrades will be seamless and bots will keep on getting new skillsets, if you will, as their human counterparts.

Single view of the robotic workforce
Organizations use different bot solutions from different product vendors owing to technical capabilities, functional requirements, or business asks. An evolving organization would want to not only view the multi-faceted bot workforce but also want mechanisms to make changes on the fly. In a futuristic scenario, bot capabilities will be able to support orchestration, creation and monitoring via a single app.

End-to-end digitalization
Role of process-specific bots will also evolve as we deal with complex scenarios that require inputs from artificial intelligent solutions (OCR, virtual chat), workflow management solutions, and digital solutions. This is ensuring that these bots become
Learning bots

Majority of the bot workforce today is rule-based and task-oriented and can only support areas that are repetitive in nature and already defined in the automation solutions at work. The nature of our business processes is such that it will require bots to start learning over time, create their own hypothesis, provide a potential solution, and course-correct to start delivering a more concrete value proposition. Simply put, the line differentiating a plain vanilla bot and cognitive bot will merge.

The future workforce

One thing is for sure - we are living in exciting times, where organizations that proudly claim to be 'employee centric', 'employee first', 'employee oriented' are going to have to redefine their operating values and vision. Employees are now human and robotic – the values, policies, vision, etc. will have to be updated and realigned.

At the same time, employees will also need to enhance their skillsets and ensure that they are working towards the common goal of making their organizations successful with the changing vision and mission. Technology solutions such as enterprise relationship management, customer relationship management and supply chain management have always been an enabler for driving better operational efficiencies, enhanced productivity and increased customer experiences, and automation solutions are no different.

About the author

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