EMBRACING THE ROBOTS AT DESK
Simplistically making businesses efficient

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The low hanging fruits are surprisingly ~~bitter~~ better

Automation finds its roots in manufacturing sector, before being adopted by the service industry in multiple different ways. LEAN, Six Sigma, Kanban, Scrum all evolved on the shop floor, driving efficiency, optimization in resources management. These were later, successfully, tested in unstructured operational set ups and found to be implementable despite the kind of discipline they bring to the entire process. Each follows their own pre-defined structure and have their own rules from identification/definition of the problem statement to implementation/leverage. Over a century in practice now, these have designed and even changed course of large multi-national corporations. The more complex the situation, these tools enabled resolution in a simplistic manner, understandably by the stakeholders. In the new era patience has run out, project teams have toiled to get time in diaries and technology teams' interests lie in big daddy projects, the low hanging fruits a.k.a. the smaller, tactical yet critical issues remain untouched, unattended and hence the processes remain highly manual and error prone.

This paper intends to bring these issues to the surface and how the corporate can still look at being lean and healthy through use of some of the better modern-day techniques that have recently evolved. It is not just the big-ticket projects that deliver efficiencies. Business/Process heads need to put together mindshare and question existence of manual processes, criticize their low-hanging automation opportunities being unattended and put a short, and yet achievable, plan to achieve their cost optimization goals.

When the gold glitters, it is only the revenue on the goldsmith's mind

Operational efficiency was always seen as a job of the below the line operations manager belonging to the COO's lineage. A more ignored (*read as thankless*) but important workstream in the business, efficiency management has always been given a secondary treatment carrying lesser weight in many 'business' reviews. In fact, some organizational structures that I have seen closely, were designed in such a way, that there was a clear segregation of the COO's role vs the business head's role and the business head's attention was top line focused.

But nCovid19 has thrown open the need to look at cost control measures and 'efficiency' is back in boardroom discussions beyond just sustaining client servicing. The 'nut-cracking' accountants would always opine on doing more with less and perhaps the only other vertical that would be looking closely at the costs, alongside their operations counterparts. The next few years to come, would lay a strong ground for being more cost conscious, with high focus on expense awareness than the traditional revenue build-up mindset. The question is, are the businesses equipped or prepared to look at the costs closely enough when the top three cost buckets are staff costs, real estate, and technology?

The good, the bad and the ugly pile-up

There has been an emphasis on technology capabilities and efficiency being driven through various tech initiatives. In fact, Gartner's latest forecast says, that although there is an expected drop in the overall technology spend globally, by 8% [(1)] on account of nCovid19 in 2020, it would still be a

whopping $3.5 trillion. Looking at the Exhibit 1.0 below, it is clear that the de-growth would be across all major initiatives and that technology teams globally would also be facing an equal challenge to keep the lights on for a longer duration till things get back to normalcy.

Exhibit 1.0: Global IT spend (in $m)

	2019 Spending	2019 Growth (%)	2020 Spending	2020 Growth (%)
Data Centre Systems	211,633	0.7	191,122	-9.7
Enterprise Software	458,133	8.8	426,255	-6.9
Devices	698,086	-2.2	589,879	-15.5
IT Services	1,031,578	3.8	952,461	-7.7
Overall IT	3,756,862	1.0	3,456,344	-8.0

Source: Gartner (May 2020)

The double-edged sword of sustainability of the piled-up infrastructure and tech machinery (people and material) and lack of further expenditure, would create another vicious circular reference over the businesses. How? It is simple, the accumulated costs of piled up technology (resources included) would need to be allocated to the businesses which would be reeling to sustain from the demand shock of nCovid19 and this would further add pressure on allocating additional budget to drive technology initiatives across the enterprise. This is a classic case, when technology leaders assume responsibilities of being in-house profit centres, compete with the outsiders, and look at sustainability. The crux of their preliminary existence i.e. service the business to the last mile at cheapest cost, is somewhere dissolved. It could also be inferred that the focus could have diffused towards castling the infrastructure of the franchise, from the 'dark world' technology that has grown in parallel over the last decade.

Our industry entered 2020 IT/Change fatigued after a decade of expensive programmes predominantly driven by corporate mergers, replacement IT (e.g. in-house to cloud platforms) and complex regulation. Big money has been spent and resources have been built to further the enhancements and meet the, what was thought as, an ever growing demand. With the pull back on transformation projects, the technology partners would be caught off-guard, re-strategizing and re-allocating 'piled up' technology resources to what is available as demand. This is a bigger threat, especially when the organisation is technology dependent to reduce high dependency on manual labour to drive output. Post-nCovid19, many CXOs would resort to various cost cutting measures around the top three cost drivers through initiatives such as pay/incentives cuts, structure realignment, change in operating model, etc. just to ensure the 'piled up' resources do not eat too much on the bottom line.

As roles evolved with advent of newer technologies, it would also mean that the future jobs of specialist or functional experts would collapse to single-person upskilling business knowledge to understanding (and mastering) technology and coding and provide single window opportunity for recruiters. For example, in the fund accounting world, what is mere operational role of today would need to transform into a partial operational and partial automation analyst. Technology competencies would, perhaps, become an integral part of the new profile – especially the workforce in with 10+ years of work experience and have gained subject matter expertise.

The froth got built, little realizing the fizz lied in the bottom

Traditionally, the so called 'in-house technology partners' have always looked at big ticket transformation programs where complex ideas were to be resolved or ideas that would find their way into a multi-year, multi-million-dollar technology investment initiatives. The word 'strategy' was pushed beyond limits to an extent that the projects never seemed to end or the investments were carried over year after year, leave aside the number of resources consumed or the 'real return' on

investments thus made. Eventually, not all ideas went on to become revolutionary, but a few certainly did. As a result, the built-up cost largely remained under-consumed and the reallocation cost kept on increasing, leaving little head room to do cheaper technology. If one looks at the diagram below in Exhibit 2.0, it would not be incorrect to state, where the resource alignment of technology vs business needs, has developed a sweet spot for technology:
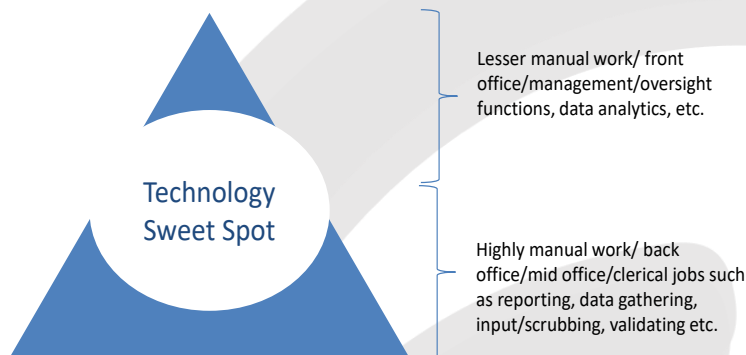

Lesser manual work/ front office/management/oversight functions, data analytics, etc.

Technology Sweet Spot

Highly manual work/ back office/mid office/clerical jobs such as reporting, data gathering, input/scrubbing, validating etc.

Exhibit 2.0: Labour intensive roles at the bottom of the pyramid and sweet spot towards automation, improvement, enhancement

Various technologies have been developed to address systems and processes – be it risk management, client relationship, algorithm-based modules etc. All these have certainly eased the pain at which the user of technology was performing the tasks and have significantly addressed the efficiency quotient – catering to volume, speed and accuracy. Needless to say, these technologies have evolved (and are evolving) over time and fund allocation towards the development have surged exponentially. Having said this, it still does not address the larger portion of the bottom of the pyramid, work that is still highly manual, routine and done through millions of resources on daily basis at high arbitrage locations.

If one looks deeper in the services sector Industrial Revolution 4.0 (IR4.0) technologies are the way forward. Enough is being written around the IR4.0 technologies such as blockchain, machine learning, virtual assistant, virtual reality, drone technology, artificial intelligence, augmented reality, chatbots, etc. but two that certainly standing out are AI/ML and robotics process automation (RPA), especially now in the age where costs are the focus and automation through accuracy is the key, for resources 'piled up' over the period of time.

Robots at desk

In the post-nCovid19 age, more and more emphasis need to be laid on straight through processing. It is very evident that rise of robotic process automation (RPA) coupled with machine learning (ML) would change the diaspora of processing routine activities with far more accuracy in shortest timeline and more intelligent compared to the way processing happened in pre-nCovid19 era. Financial institutions have embraced this fact and have started to adopt and test these tools in more structured manner for the day to day routine jobs. Relative to the cost of running operations manually (including the rarely accounted Cost of Poor Quality or COPQ), these tools are far more effective as per the initial stage of test results.

In Exhibit 3.0, if one looks at the RPA spend between 2017 & 2018, it would not be wrong to state that these are still considered early stage adaption phases but growing popularity and projections to cross over a billion dollar spend, each year from 2019 & thereafter. According to research done by Gartner in 2017, the global spending on RPA was expected to reach $680 million, with a spending pace up to $2.4 billion by the year 2022 [2]. The numbers below clearly surpass these expectations and would cross the $2 billion mark way before 2022 and would not be wrong to say, have the potential to cross over $10billion by 2025.

Exhibit 3.0: RPA Software Market Share by Revenue, Worldwide (Millions of Dollars)

Company	2018 Revenue	2017-2018 Growth (%)	2018 Market Share (%)
UiPath	114.8	629.5	13.6
Automation Anywhere	108.4	46.5	12.8
Blue Prism	71.0	105.0	8.4
NICE	61.5	70.6	7.3
Pegasystems	41.0	41.9	4.8
Kofax	37.0	256.6	4.4
NTT-AT	28.5	480.9	3.4
EdgeVerve Systems	20.5	30.1	2.4
OpenConnect	16.0	5.3	1.9
HelpSystems	13.7	34.3	1.6
Others	333.8	22.2	39.4
Total	**846.2**	**63.1**	**100.0**

Source: Gartner (June 2019)

Some of the functions automated through RPA include but not restricted to logging into applications, connecting to systems APIs, copying & pasting data, managing files and folders, extracting and processing structured and semi-structured content from documents, PDFs, emails and forms, reading and writing databases, opening emails and attachments, scaping data from web, pictures and more interesting doing calculations. Not just the payback period on investment is unmatched but the cost to benefit is worth evaluating.

With proven value in all aspects of commerce – security, intelligence, operations, advancing businesses will further integrate spend in these advancing technologies alongside a strategic effort to upgrade the skills of its employees.

An inference this draws is that, over the coming years, the popularity to get robots at the desk would increase. Workforces would need to upgrade themselves to understand that automation is critical to remain afloat and only those who can, not just identify the low hanging fruits but also be able to crack open the solutions would be in heavy demand and a clear signal for HR managers to look beyond single subject expertise.

As the fruits ripen, the taste gets better

Certainly not everything can be automated through standalone RPA and there are intertwined technologies and processes that need to support the implementation. The transformation industry is closely monitoring the shift from traditional routine jobs automation to expand to other value chains in an organisation. AI/ML combined with RPA is mimicking human response pattern while handling complex use cases such as employee & client onboarding that were done only through human intervention. As per Zinnov Management Consultancy, while top RPA platforms are building native Intelligent Automation capabilities, collaboration with technology giants such as Microsoft, Google and IBM, and other specialist vendors to leverage their strengths in AI/ML, OCR, NLP, etc., is increasingly becoming the norm. Also, per their research back in 2019, over 34% of large global enterprises had set up RPA centres of excellence (CoEs), of which 80% were in the US or India and over 250+ global MNCs ran their global RPA charters from their Global In-house Centres (GICs) located in India.

Transformation is here to stay

Experts from within the organisation need to step up, be given freedom to experiment and where external help is required to look at the bigger picture, it needs to be called for. The world saw growth of technology companies after the dot com bubble, the industry never got back to cocoon, in fact it kept expanding the boundaries. Transformation is here to stay and more so in a cost centric environment where the 'new normal' is being defined each day. Challenges have always surrounded organizations and leaders but the ones who took them head-on and maneuvered through these, came out victorious.

Back in 2005, whilst addressing Stanford students, Steve Jobs remarked 'Stay hungry, Stay foolish'. This could not have come from a better master and this certainly calls for business leaders to look at their low hanging opportunities as they enter a cost-aware-mindset in post nCovid19. Also, a wakeup call for technology leaders, that not all projects need to be multi-year, multi-million dollars, certainly things can be done smartly and at lower cost through proper balance of in-house and consultants specialized in these technologies.

Change is constant and to sustain, transformation is way forward, more now than ever

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Sid has won several awards and accolades and skilled in leading multiple complex projects from concept to completion – including but not restricted to trading algorithms, Web-crawling technology, CRM, LEAN, etc. in Capital Markets, Asset Management & Securities businesses. His hunger for learning technology made him certify himself in RPA using UiPath.

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CommSol Associates is a UK based advisory firm having offices in Ireland, UK, Luxembourg and India. The team is committed to solving business problems existing in organisations, streamline processes and working very closely with each and every stakeholder off the back of their deep understanding of the industry. CommSol specialise in driving end to end transformation projects for mid and large multi-national organisations and expertise to catch the pulse that triggers efficiency and optimal return on investment

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