
JOBS VERSUS CAREERS: A CONCEPTUAL PAPER EXPLORING THE FUTURE OF EMPLOYER-EMPLOYEE RELATIONSHIP

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Introduction

Businesses are operating in an environment that is globally recognised as VUCA (Volatile, Uncertain, Complex, Ambiguous). Technology has been identified as a prime factor causing rapid changes within and outside of a business enterprise, impacting roles across the rank and file. Michael Porter¹, in his theory of Five Forces, indicated the role of technology, which brings in changes to the core product, processes as well as to the desires of its consumption. This is now becoming evident with the evolution of robots, artificial intelligence and other technological advancements that appear to radically change existing systems and practices. Robots can think and work like human beings (artificial intelligence). When global collective knowledge is put into such machines, they become plenipotentiary – fully equipped to take independent decision and action. By definition, machines are more accurate and reliable, and now with added knowledge and skill, they are altering the way roles and careers are being designed for human beings.

Virtual organisations - where people are in different locations physically but are connected to one another by tasks and responsibilities via systems and processes - are now capable of tapping into a global resource pool as compared to developing skills within a given geographical location. Thus,

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jobs are moved to places where skills are easily available, which is akin to manufacturing companies putting up factories closer to the source of raw materials. This leads one to believe that in future, when newer skills are required, organisations would shift their activities *virtually* to that country or city, where talent is available. In the process, existing talent may become a business overhead and competitive pressures would determine their future outcomes. Training and development may cease to be one of the core activities of an organisation, while global sourcing will become an important aspect of skill management. Jobs may become more contractual in nature, and organisations would exploit the relevant skills accessible to them, making the relationship with employees, transient. Employees may themselves look at opportunities to work with multiple organisations at a given time, to exploit their skills, rather than accepting full-time employment status with a single organisation.

Factors Influencing Job-Career Decisions

The business environment:

Businesses are striving for growth – profits, revenue, market share, customer satisfaction, employee retention, etc. This actually means, growth achieved in comparison to the previous period than growth per-se in the current period. Thus, rate of growth is an important factor of measure of success. Likewise, stake-holders expect a better yield this year as compared to previous year; employees expect a higher rate of increment than the one they received in the previous review cycle; a customer's expectation is of a better service than what it was the previous time she interacted with the brand, and so on.

In effect, references and benchmarks are changing rapidly. What was considered good yesterday is not necessarily good today – something more is expected from the environment. This expectation is compelling the operating parameters to be improvised constantly. Efficiency is a comparative parameter, and given that the environment is seeking improvements based on past results, efficiency has become the driver of business success. In the current context, efficiency means faster output, cost reduction, better timing, defect free features, optimal utilisation of resources and highest quality of service rendered. The previous performance becomes the comparable reference table, which acts as the ‘default value’ for measuring the current year’s performance. Such efficiency factors are easily computed by information systems – there are dashboards displaying efficiency in figures, words and pictures that allow the management teams to quickly decipher as well as make course corrections, almost in real time. Technological advancements are also enabling managers to know how efficiency can be further improved. For instance, the Big 5, consisting of Robotics, Artificial Intelligence, 3-D Printing, IoT and Big Data Analytics are capable of achieving unprecedented higher efficiencies on activities that are repetitive or predictable in nature.

In order to achieve higher efficiencies, businesses are being pushed in the direction of defining jobs that are performed by a combination of machines and human beings, which is now being referred to as ‘Machine + Human’ systems. Machines will have the capability to think (contextual references), solve (choose a course of action), resolve (conflicts, constraints), act (perform, execute), conform (standards and compliances) and deliver (create the experience), while the human factor is expected to keep a watch for unforeseen situations that machines may not be trained to handle.

Where efficiency becomes a key operating factor for success, machines shall become the natural choice - machines are more accurate, faster, dependable and predictable and work relentlessly (24X7). Hence, with mechanisation of jobs career choices are getting impacted.

A research report by Bank of America Merrill Lynch titled ‘The Fourth Industrial Revolution’ⁱⁱ avers that technology will cut back millions of jobs in the next five to 10 years. This report identifies 12 categories of jobs that will vanish – human beings would not be doing these jobs in future, as they would get mechanised – robots will be performing these tasks. Some of the jobs that come into the purview of a commercial enterprise (other than activities in agriculture, healthcare and education) are:

- **Factory workers:** Robotics and extensive mechanisation are expected to make many functions of production, quality control, store keeping, etc. redundant for human beings. Drones are expected to perform delivery functions while robots can assemble machines, separate parts, as well as manage a huge warehouse without human assistance.
- **Accountants:** Globalisation leads to standardisation and standardisation leads to automation. Trained robots can do activities that are predictable in terms of actions and processes. Technology like Block Chain will make accounting a sub-function of interactions between people, without demanding any specialised knowledge or skill. Thus, when every one can keep accounts, the role of a specialised accountant becomes redundant.
- **Cashiers:** As more transactions are done online, the role of a cashier becomes non-value adding. When people use plastic or electronic currencies – as the future promises to have bit-coins

and cashless transactions, the need to dispense change, account for cash and then manage the cash will get obsolete, making cashier's role dysfunctional for human beings.

- **Drivers:** In his book 'The Inevitable'ⁱⁱⁱ, author Kevin Kelly makes an interesting observation about how technology impacts the future. 'The highway parts of long haul trucking routes will be driven by robots embedded in truck cabs. By 2015, most truck drivers won't be humans. Since truck driving is currently the most common occupation in the US, this is a big deal.

- **Software testers:** Automation in testing has been on the rise over the past few years. However, it still required human involvement in setting up the testing tools, defining scenarios for testing, understanding business perspectives from the development team to make meaning to test results, etc. However, going forward, intelligent bots would perform all such roles, including understanding the business context of testing. This would reduce a whole lot of people required in the testing team. It is expected that when bots write software codes, they would be self-tested thoroughly too, which would be part of the mechanisation.

- **Call centre employees:** What was a boon to Indian IT during the turn of this century is now likely to become the bane of employability in India. Experts believe that millions of call centre jobs are at stake as intelligent machines and robots have started performing these functions over mobile phones. Banking industry, which is generally conservative, has already started deploying robots to assist customers with formalities of opening an account or responding to their queries or complaints and then directing them to the concerned person in a branch, which is in the physical world. Human beings in the same bank were doing these functions, a few months ago. Telecom is another industry that has automated its customer acquisition and support functions through well-trained bots. With

mobile connectivity is improving, mobile based apps are making self-service concepts more practical and therefore connecting the principal with the end user with least number of intermediaries.

- **Hospitality workers:** Hospitality services were always considered to be a human-based business – courtesy, personalisation, giving a human touch, etc. were the core values of its services to guests. However, technology has led to concepts such as self check-in, self-ordering, self check-out. In recent times, some of the leading hospitality brands have implemented robots that are capable of interacting with guests intelligently and rendering appropriate services. As a result, automation and processes are replacing the human touch. This in turn, is enabling hotels to operate at higher efficiencies while meeting with guests’ expectations. It appears therefore that mechanisation is the way in which businesses can sustain themselves and logically therefore, will need fewer human beings to be working.

Flatter organisation structures

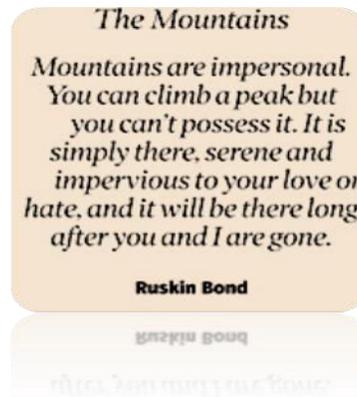
Klaus Schwab^{iv} - Founder and Executive Chairman of the World Economic Forum terms the 4th Industrial Revolution as a technology led disruption in which *‘demand for highly skilled workers has increased while the demand for workers with less education and lower skills has decreased. The result is a job market with a strong demand at the high and low ends, but a **hollowing out** of the middle’*. It implies that there may be jobs that need deep thinking (strategic) and doing (execution), but not separated by a layer called the middle management, which is expected to do a bit of both. The gap between the top management and execution team will therefore shrink.

A recent news report titled Mid level Employees in Indian IT Sector Facing an Uncertain Future^v (Alawadhi, 2017) estimates ‘nearly 1.4 million mid-rung employees, who typically have 8-12

years of experience, are now at the centre of reskill and restructuring conversations happening across the sector. Roles in IT companies that were typically assigned to employees with over 10 years of experience — the middle-level bracket — are now going to machines. As a result, even as IT companies fight to retain their top talent, they are not very forthcoming in handing out pay hikes to mid-level employees. Human resource experts say the mid-level group, which has the most to lose, is also the most resistant to change.’ This report confirms the earlier observation that role of middle management is getting to be less relevant, leading to flattening of the organisation’s structure.

In a survey conducted for the purpose of a research study on the role of middle management, the author contacted over 80 respondents at the CXO level and about 180 respondents at the mid-management level and, a strong majority indicated that organisation structure would be flatter in future. While over 60% of mid-management level felt the structures in future will be flatter, 100% of the CXO confirmed this view. This can be easily explained by the fact that automation is taking away repetitive jobs and fewer human beings are required to monitor these activities that are done by machines. Technology, like the mountains, is impersonal and impervious. However, technology is also indeterminate.

Are new technologies disruptors of existing jobs - the kind of jobs human beings have trained themselves thus far on? Or, are they enablers of new jobs – forcing human beings to explore relevant skills and create newer jobs? It is still undecided. With increased data and the type of data that can be collected, the role of Data Scientist is gaining importance along with Data



Forensics – analysing the nature of data creation. Virtual Reality is driving the need for Impact or Experience Managers, akin to product managers in a products company. Some of these emerging roles are transforming into jobs. Hopefully, they may become career options in future.

Just-in-time culture: As business embraces newer parameters to define, measure and control efficiency, their impact is also seen in other areas. The need to maintain head-count ratios (business turnover to number of full-time employees) leads to moving jobs to temporary employees or independent consultants. Tracking lead-time to hire implies that if there are business exigencies, then sub-contracting is a better option. If there's a need to hire a completely new skill within a team, lateral hiring (read as poaching) becomes the preferred option. In all cases, the need to act quickly and respond faster to a given situation, in the most accurate manner, becomes the normal expectation, and thus, business practices are shifting towards being 'responsive' than being 'foreseeing'. While planning is still an important function for hiring, employee retention, career planning, etc. the execution is invariably more ad-hoc, driven by business demands, which over-ride all planning processes - *'Career Jobs "Are Dead" (Cappelli, 1999)^{vi}- 'the defining features of the new*

relationship of employment —careers, compensation, development—are governed by the competitive pressures of product markets’.

In the past, organisations hired talent and nurtured them for managing more important and responsible tasks, and thus evolved career planning. As uncertainties of the environment started influencing business activities, the need to quickly respond to a changed situation became more relevant than continuing on a planned strategy. Thus, lateral hiring started. This implied that a person with better skills available in the marketplace, is preferred to someone from within the organisation who could be trained for that skill. As the velocity of doing business increased, mergers and acquisitions happened, which led to headcount rationalisation –one of the two of the same kind survived till the next acquisition. Repeated mergers and acquisitions opened up the emotional feeling that engagement with organisations is ‘transient’.

As technology started becoming core to business needs, the need to hire just in time become relevant. Having the right skill at the right time was more important than having the right skill and not use it. Software industry set up few trends like employee utilisation, which led to linking each employee’s cost to the overall cost of doing business. If a department did not stack up well on the costs, that department was considered as non-performing. Training and development was one such department that could not see its contributions directly connecting to the overall growth of the organisation. The department itself needed support from external agencies to impart ‘skilled’ training programmes, and hence became a candidate for outsourcing. Consequently, in-house training for grooming also faded and organisations preferred to ‘hunt’ out talent from the marketplace. The active pursuit of spotting

talent outside of the organisation and luring them into joining the company at the right time became a smart business strategy, and ‘poaching’ became the practice.

‘Just-in-time’ hiring was a high impact activity that organisations started to reward. The fall-out of just-in-time hiring was that the ‘poached’ resources became irrelevant once the specific need for which they were hired, was over. Either they had to be re-skilled or retrenched. Re-skilling became a business opportunity for 3rd party training organisations, who offered specialised and specific skilling programmes to enable an employee’s continuity, whereas retrenchment gave business opportunities for placement companies.

In both cases, employees realised that skill is key to a job and skill gets outdated rapidly. Thus, unless one looked at re skilling, jobs did not lead to a career.

Aspirations and desires of individuals:

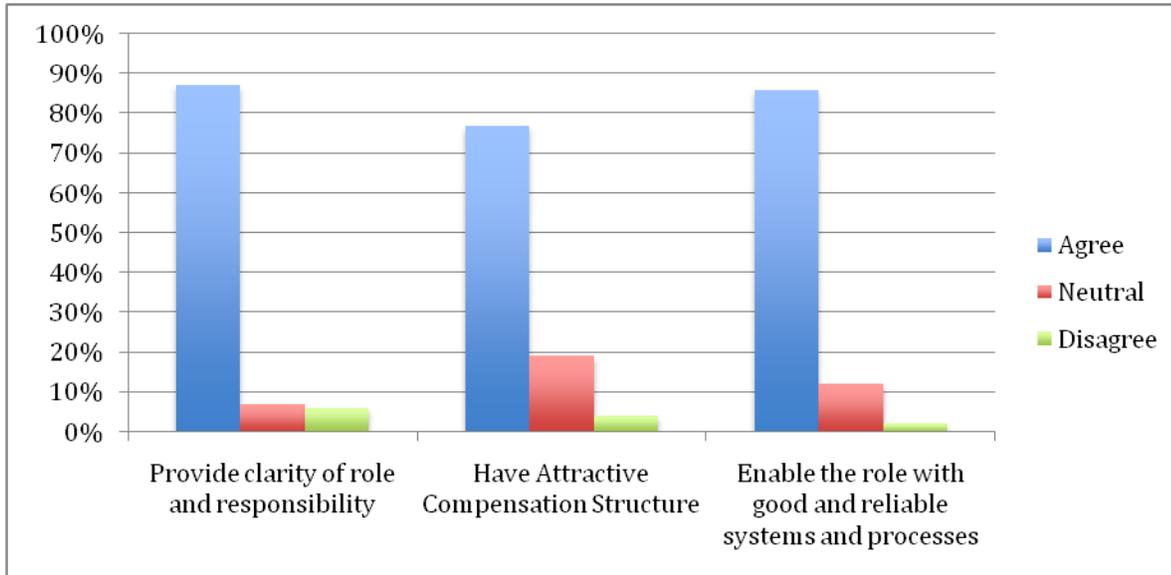
Socio-economic changes over the past couple of decades – thanks to exposure to international cultures and practices, increased ability to acquire assets, easier access to resources, desire for progress, etc. have altered the aspirations of the educated Indians.

Earlier, job-seekers, who form majority of the educated class, wished to secure themselves financially, and a career option in an organisation helped them to seek economic independence. Thus, a career was understood as not just managing greater responsibilities at the work place, but also becoming economically more liberated and socially better accepted. When India changed its policies towards liberalisation, the economic value of a career got impacted. High paying jobs, uncertainty of tenure, moon-lighting business engagements, became accepted norms. Higher education led to

development of intellectual capital, which became an important skill in the knowledge economy era. Men and women found jobs that altered a family's economic disposition. Consumerism increased, and taking breaks in professional careers was not considered to be a risky proposition. On the contrary, the concept of break in career got encouragement, and individuals set out to discover other facets of their life.

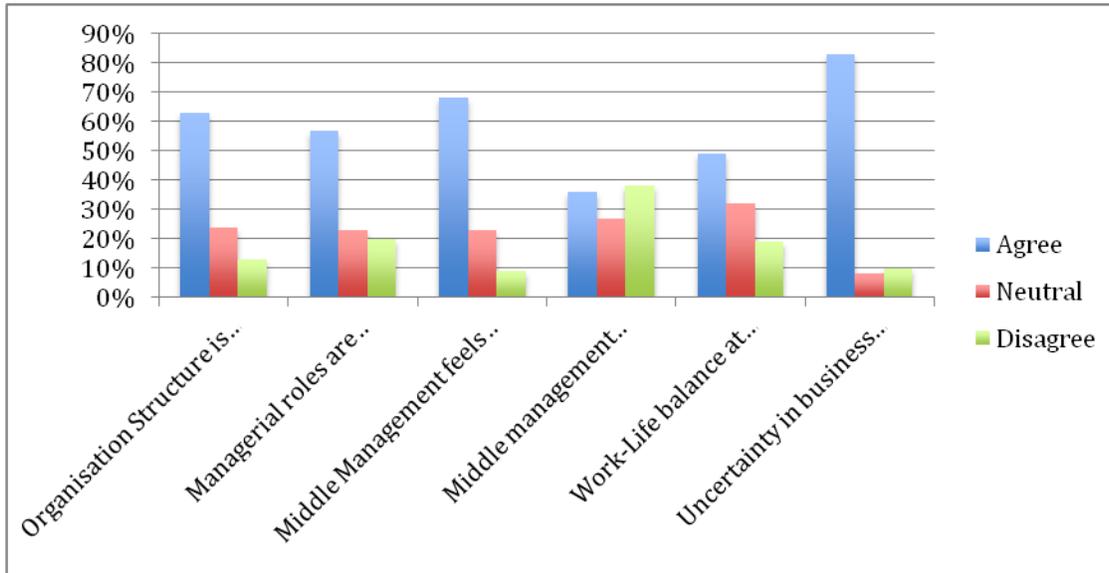
As Gen Y (those coming of age around 1998) joined the work-force, their aspirations were not sketched on a career term sheet. Switching companies for a differential salary or joining a rival who offered a better position, became norms for career planning. A new and strange belief emerged that a person who served a company far too long was infact 'incompetent' to find a better job elsewhere. Thus, 'better' was not within an organisation and individuals thought that career development happened by doing several kinds of jobs with different types of organisations. Selection of employees also confirmed this viewpoint- that too much of specialisation is a liability in the long run. Thus, it is believed that individuals seek changes in jobs and would not look for long-term career prospects in a single company.

Surprisingly, in a survey conducted on over 100 mid-management level individuals, it was found that individuals are seeking long-term career in the organisation they join. They expect clarity of role, good compensation, transparent processes and systems and learning and development to be key factors for staying with an organisation.



Parameter: to attract and retain talent at middle management level, organisations need to	Agree	Neutral	Disagree
Provide clarity of role and responsibility	87%	7%	6%
Have Attractive Compensation Structure	77%	19%	4%
Enable the role with good and reliable systems and processes	86%	12%	2%

What is deterring them is the factor of uncertainty at the top management level. Frequent changes in strategies leads to ambiguity in performance, making the system appear less transparent towards appraisals and personal growth.



Parameters:	Agree	Neutral	Disagree
Organisation Structure is getting Flatter	63%	24%	13%
Managerial roles are getting to be unclear and ambiguous	57%	23%	20%
Middle Management feels stretched from top and bottom	68%	23%	9%
Middle management functions are driven more by technology than by human-beings	36%	27%	38%
Work-Life balance at middle management level is a myth	49%	32%	19%
Uncertainty in business operations impacts performance of middle management	83%	8%	10%

The above aspects indicate that while employees are seeking more predictability in their roles and responsibilities, they believe that technology is an enabler for them and not a disruptor of their jobs.

Conclusion:

It is becoming evident that with increased speed of business, the emphasis is shifting to immediacy, and therefore, relevant skills are more in demand than long-term competencies. The management's outlook, thanks to pivoting strategies, is also limited to achieving immediate goals. Since the business environment is changing fast, long-term planning and forecasting are becoming irrelevant. Although employers wish to retain employees, the environmental pressures are directing them to look at short-term engagement that is need based. The real numbers don't stack-up to confirm this fact, however, a trend is clearly emerging towards contractual and short-term based engagements.

Merger and acquisition happen irrespective of an organisation's performance. The senior management team only has limited powers to thwart an impending merger or acquisition, which, as per fiduciary norms, needs to be considered and examined before being rejected.

Contractual jobs are easier to manage in a merger/acquisition scenario. The headcount to turnover ratio is an indicator of how many jobs will be career oriented in the foreseeable future, which itself is dotted with uncertainties. If machines take over those jobs that have the potential to build careers in future and are currently being performed by human beings, the threat of massive unemployment will become real. In such a scenario, even basic jobs will be either limited or lost. In such an environment, long-term career options will be meaningless.

The outlook of organisations is that automation will replace human beings for the kind of work human beings are currently performing. So, even though they may want to employ people, the competitive pressures and business sustenance strategies will compel organisations to adopt such

technologies that may drive performance to the next levels of efficiencies, albeit without human beings. Robotics, Artificial Intelligence, 3-D Printing, IoT and Big Data are here to redefine jobs that human beings can do and cannot do.

From an individual's perspective, the desire to stay with an organisation for a longer period is high, however, this is also factored by conveniences of better salary, job protection through training and re-skilling and providing her with opportunities of growth. In that sense, it appears that individuals are looking at a more 'picture perfect' scenario and not connecting it with business realities, which are unpredictable, volatile, ambiguous and complex.

This leads to a conclusion that individuals seeking employment will have to constantly re-skill themselves to stay relevant for the jobs in demand, at all times in order to experience a career. However, organisations may look at creating jobs that expect fulfillment to happen only in the immediate context.

The need to develop individuals at company's cost will be abhorred by practitioners of efficiency, which will make jobs limited; those possessing the desired skills will be highly compensated for the time they are utilised.

Human endeavour to survive by overcoming all hurdles and obstacles is its greatest virtue. It is not that technology hasn't taken away jobs in the past, impacted careers and then brought a new set of skills that created new set of careers. However, the difference this time is that the force of technology is far greater than any change witnessed in the past, and it may be a long time before new jobs get created. Till then careers would be a word in the English dictionary waiting to get its place

back in business. The long-term, future – beyond 2030 – may see possibility of new careers, but until then, it will be short-term jobs.

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