As AI and automation advances rapidly, the role and relevance of the middle manager is at risk.

While it is widely accepted that automation, robots, and AI have caused or will cause large scale job losses among low-skilled workers, their effect on middle-management jobs is not that well understood. In this article, we claim that even middle management jobs are being
replaced by machines and AI at an alarming rate. COVID has only accelerated this trend. We provide some suggestions to middle managers on how to stay relevant in the new era, based on three-box solution framework.

Middle management is a link between top management and lower-tier workers. Middle managers enable workers to perform effectively and efficiently. They administer day-to-day routines, monitor employees’ work, track divisional performance, and ensure compliance with organizational directives. They also motivate, lead, and inspire subordinates. In addition, they provide critical information to top management for formulating new strategies and to correct past dysfunctional strategies. Skills required for middle management include leadership (persuasion, empathy, communication, and motivation), decision making (creating on-the-spot solutions for day-to-day problems), and performance management (setting clear and measurable objectives for subordinates and monitoring them).

The biggest challenge to middle management jobs has come from new digital native companies. They either operate with flat or matrix structures or entirely eliminate middle management layer. Consider DoorDash, that recently went public. Its algorithmic self-servicing tools and real-time dashboards have taken the middleman out of the equation. More than 200,000 drivers and 340,000 restaurants have no direct supervisors. The Order Manager app for the restaurant owners takes orders, collects money, keeps track of orders from pick-up to delivery, maintains restaurant ratings, marks out-of-stock items, distributes moneys to restaurant, and processes cancellations and refunds. The app for drivers provides them real-time access to all the necessary insights and performance metrics like scheduling, ratings, and earnings. The algorithm sends additional work towards better performing drivers and fires or “deactivates” non-performing drivers. The critical jobs performed by middle management, supervision, work allocation, decision making, and performance management, are replaced by AI. This is an example where emerging technology largely eliminates the middle management, while preserving low-level jobs, such as cooks, food packers, and drivers.

This pattern is not just confined to disruptive business models such as AirBnB and Uber, but also applies to traditional businesses such as banking (what do branch managers manage when there are no bank branches and AI takes credit decisions), sales force
management (work allocation and performance measurement is done by customer management software), shopfloor supervisors (whom to supervise when robots run the factory), logistics managers (scheduling and route planning is done by machines), office managers (a trend towards freelancers, who work from home, and are contracted and paid by algorithms), and media planners (Google marketing platform optimally and instantaneously selects online media for placing ads on for the given budget).

The threat to middle management jobs is supported by numerous studies. **Gartner predicts that** by 2024, robo-bosses will replace almost 69% of the manager’s workload. In a 2019 book “Invisible Robots in the Quiet of the Night”, Forester research notes that AI will most impact middle managers, cubical workers, and coordinators. In a **global survey by Pega**, 78% of the executives surveyed believe that increasing the use of AI and robots will dramatically reduce the middle management ranks. A **2020 BCG survey** declares that “traditional management has reached a breaking point.” A **recent academic study** shows that robots and automation are increasingly equipped with decision making algorithms and have low variance of performance, diminishing the need for supervision and monitoring of a few workers who operate them. Gary Hamel and Michele Zanini, in their seminal **HBR article**, estimate that on average, one manager supervises 4.7 workers and that excess management slows down productivity and innovation. Such lost productivity counts for almost $3 trillion dollars to U.S. economy every year. In sum, these forces point to diminishing need and roles of middle managers in U.S. corporations.

So, what can middle managers do to keep themselves relevant? We propose three solutions.

**Juniorize**

You rose to middle management because you demonstrated excellence in a select skills. Over time, you added additional tasks such as scheduling, supervision, and filing reports. Contrary to what you learned in the executive development programs, you may now consider abandoning activities that helped you rise in the organization, those that can now be routinely done by machines. You need to fight what is being referred to as **juniorization** in Wall Street, where high-salaried sales directors are replaced by young, tech savvy
traders who can accomplish the same trading tasks at a faster rate with technology with half the cost. You now need to become junior again, refocus your energies on your job expertise, gut instincts, and memory bank, and marry it all to the latest technology, so that you can play the same game better than new juniors. Stated differently, you may need to roll back from being a supervisor to being an expert worker, that you once were, when you relied on your job expertise, critical thinking, and acute judgement. Don’t think of this proposition as a demotion. Think that you are becoming that expert worker again that you always enjoyed, and being someone, who will always be in demand.

**Upskill**

Getting up to speed with analytics and foundational AI skills is not a choice anymore, it is a necessity. If you have not done programming for years, or haven’t learned a new programming language, or haven’t kept up with new software solutions relevant to your work, then you must reinvent yourself now. Upskilling doesn’t require giving up your job and going to a university. Various EdTech startups have programs, platforms, and bootcamps that can help managers upskill from their computers at their own pace and time of choosing. For example, The New York Institute of Finance and Google Cloud recently created an ML and AI specialization courses for finance professionals that are offered completely online through the Coursera platform. The Artificial Intelligence Finance institute offers a 10-day bootcamp that covers the theory, implementation, and use of AI in finance. On the low-cost side, edX and Udemy offer free introductory courses in AI and ML for finance professionals.

**Lateralize**

Even when the middle-level jobs get transformed, someone must infuse technology with the day-to-day work and create solutions, while keeping the wheels of organizations going. You can facilitate that task and prepare your organization for a better future; for example, you can help in the transformation from the current pyramidal structure to the new matrix structure. Your industry expertise can also help in identifying where automation can provide most value. A bank manager with experience in customer service along with an in-
depth understanding of bank’s products and services, can spearhead the development of AI Chatbots and other NLP based applications (robo-auditing) by collaborating with cross-functional teams. In the same vein, Accenture has identified new jobs that require both domain expertise and AI knowledge: trainers, who work with machines and teach AI systems; explainers, to provide the clarity and bridge the gap between AI specialists and business leaders; and sustainers, who avoid any unintended consequences of fully automated AI-enabled processes.

To sum it all, middle-management jobs are being replaced by artificial intelligence and machines at an alarming rate. If you have already not started doing so, the time has come to adopt one more of three strategies to protect and prosper in your job: juniorize, upskill, and/or lateralize.
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