For over twenty five years, the Monthly Mentor has been a value added service to encourage our employer and candidate clients in their Personal & Professional Development.
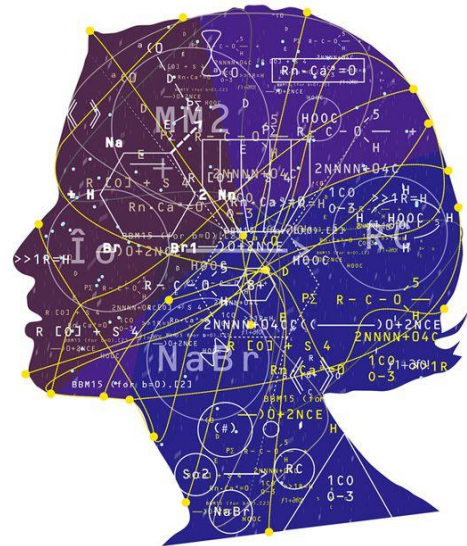
Hunt Executive Search, Inc.

Leader*Shift:* Data Analytics

The Genesis of the Algorithmic Executive & Consumer

By Joe Hunt

The tectonic shifting dynamics of domestics and international markets accelerated by constant advances in digitization and other factors requires leaders to have high levels of mastery on both Tech Savvy (Data Analytics) and Analysis Skills.

Broken down to its lowest common denominator, the single greatest instrument of change in business is the advancement of algorithms and its use in sophisticated software. Executives that master this Leader*Shift* competency can be game changers and create competitive advantage for their organizations.

As Ram Charan points out in The Attacker's Advantage, never before has so much brain power been computerized and made available to anybody who develops the skills to use it. Raw mental power to deconstruct and predict patterns and changes in everything from consumer behavior and human health to the maintenance requirements and operating lifetimes of equipment. In combination with other technological factors, algorithms are dramatically changing both the structure of the global economy and the lifestyles of individual people. (The others include digitization, the Internet, broadband mobility, sensors, and faster and cheaper-by-the-day data-crunching abilities.)

Algorithms and the decision engines they drive process enormous amounts of data, far beyond what the brain can handle, at light speed. They run through iterations that can number in the millions, examining options and second-and third-order consequences of a particular decision option, then producing outputs for a human mind to accept, reject, or have redone. Just as human beings can learn from experience and improve or change, algorithms can be programmed to learn from the outcomes of their decisions and improve subsequent decisions or predictions.

All these advances have been made in the last few decades, yet the use of algorithms is already fracturing time-tested business models and creating trailblazing new ones. Algorithms are most prominent so far for their role in radically transforming retailing, creating new and highly interactive relationships between businesses and their customers by literally making it possible for giant corporations to deal with customers as individuals. Now the revolution is entering a new and vastly expansive stage in which machines communicate with other machines without human intervention, learning through artificial intelligence and making consistent decisions based on prescribed rules and processed through algorithms. This capability has rapidly expanded into potential connections between billions and billions of devices in the ever-expanding Internet of Things (IoT), which integrates machines and devices with networked sensors and software. That's what allows consumers to use their smart phones to program the thermostat settings and check on their pets at home from just about anywhere. More sophisticated ones remotely monitor and adjust industrial machinery and manage supply chains. Machine-to-machine communication and learning also helps people increase their capability and capacity and the speed of their decisions. We have barely scratched the surface of the potential uses, and the growth opportunities of this bend in the road can be immense for those who seize the opportunity.

One of the biggest changes the algorithmic approach brings to both businesses and consumers is a rich new level of interactivity. The customer experience for many legacy companies is often secondhand and more often than not third hand. A company's offerings are, for example, bought by distributor X, who in turn sells to retailer Y, who sells to an individual. In today's online math houses, by contrast, actual users are more and more often interacting with the company—buying directly and providing feedback without any intermediaries. The companies can track and even predict consumer preferences in real time and adjust strategies and offerings on the run to meet their changing demands, which gives consumers leverage they never had before.

Decisions made through the use of algorithms enable a filter-free, back-and-forth dialogue between

"A" Player human capital leadership *by* HUNT EXECUTIVE SEARCH

the producer and the individual consumer, delivering information or decisions in real time consistently and reliably, according to predetermined decision rules embedded in the algorithm. For those decisions that do require human judgment, the machines kick the issue to a person. The data accumulated from these interactions can be used for all manner of purposes. For example, the end-to-end consumer experience has a large number of touch points, each of which—whether human, digital, or Web related—can be predictable or unpredictable. A company can map out all these touch points in extreme detail and gather information at each one. A math engine can then generate insights to guide managerial decisions about such things as innovation, new product development, and resource allocation. Such analyses of user touch points can be done continuously in real time or through mathematical sampling over time, not just for one event.

The data can also be used as a diagnostic tool—for example, they can reveal signals and seeds of potential external change and help identify uncertainties and new opportunities. They can point to anomalies from past trends and whether they are becoming a pattern and help spot new needs or trends that are emerging and could make your business obsolete.

The math house are shaping up as a new stage in the evolution of relations between businesses and consumers. The first stage, before the Industrial Revolution, was one-to-one transactions between artisans and their customers. Then came the era of mass production and mass markets, followed by the segmenting of markets and semi-customization of the buying experience. With companies such as Amazon able to collect and manage information on the entire experience of a customer, the math house now can focus on each customer as an individual. In a manner of speaking, we are evolving back to the artisan model, in which a market segment comprises one individual.

The ability to connect the corporation to the customer experience and touch points in real time has deep implications for the organization of the future. It speeds decision making and allows leaders to flatten the organization, in some cases cutting layers by half. A large proportion of traditional middle management jobs—managers managing managers—will disappear, while the content of those jobs that remain will radically alter. The company's overhead will be reduced by an order of magnitude; while creative experts are high priced, there will be an enormous reduction in the cost of management as well as that of low-skilled labor. In addition, performance metrics will be totally

"A" Player human capital leadership *by* HUNT EXECUTIVE SEARCH

redesigned and transparent, enhancing collaboration in a corporation or its ecosystems across silos, geographies, time zones, and cultures.

To take advantage of uncertainty, you must make the use of algorithms part of your vocabulary tomorrow as much as, say, profit margins and the supply chain are today. And your executive team must understand their role in growing the business. This is a factor so powerful that I feel confident in stating that any organization that is not a math house now or is unable to become one soon is already a legacy company. The transformation has nothing to do with how young or old the company is, but rather with how effectively it deals on a timely basis with the new paradigm. It will require more than hiring new kinds of expertise and grafting new skills onto the existing organization. Many companies will need to substantially change the way they are organized, managed, and led.

Leaders that can't master turning uncertainty into breakthrough opportunities will be left in dust.

....

Joe Hunt is a Managing Partner at Hunt Executive Search/The Hunt Group, a boutique executive search firm that provides human capital solutions to consumer goods, life sciences and diversified industrial markets.

....

Contact Joe Hunt:

212.861.2680 | 800.486.8476 | info@huntsearch.com

....

Retained Executive Search

Executive Assessment

Private Equity Advisory

Executive Coaching & Outplacement

Human Capital Consulting E-Dossier

Video Presentation

"A" Player human capital leadership *by* HUNT EXECUTIVE SEARCH