Viewpoint: What do CEOs Really Need?

CEOs and senior business executives need three things: business velocity and agility, continuous cost reduction, and business resilience. If anything is clear from the competitive landscape, it is that today all companies need to be technology companies and all CEOs need to be technology leaders. Companies that do not wisely drive their business processes with analytics and technology will suffer market losses at the hands of their competitors who do. Increasingly, the application of analytics and technology is the difference between winning and losing. Consequently, the perspective of the Chief Information (and Analytics) Officer has never been more relevant for enabling the strategy and operation of the enterprise than it is today.

Velocity Matters

Businesses are nothing more than an aggregation of business processes. Processes take inputs and produce outputs. If the terminal output of a business's processes is purchased at a profit, the business can continue its operations. Otherwise, the business fails. Anything that a business produces repetitively is the product of process. Sound process is what allows output to be produced cost effectively with quality and minimal variation from specification. Put simply, process matters.

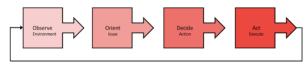


Figure 1: OODA Loop

However, to understand why velocity matters consider the steps of a typical decision process. A typical decision process can be characterized best by the OODA loop. First, the decision maker observes the environment. Next the decision maker (o) orients to an issue area of concern in the environment. Then a (d) decision is made and, finally, an (a) action is taken. When action is taken, the environment is changed as a result and this change impacts all actors in the



environment - they must react to it. The cycle then starts over again; in fact, the cycle never stops, it repeats endlessly.

Now imagine a business that completes a single cycle through the OODA loop in 12 units of time. For simplicity, 3 units of time are spent at each stage of the OODA loop. Compare this business to a competitor that completes a single cycle through the OODA loop in 6 units of time, spending 1.5 units of time at each stage. After 6 units of time elapse the competitor is beginning to observe the new competitive environment, having just finished acting on their initial observation. Meanwhile, the business that needs 3 units of time for each stage is deciding what action to take. Importantly, they will base their decision and their chosen action on an environment that no longer exists, since the competitor has already acted, impacting, shaping, and changing the environment.

As the business starts to act (9 units of time elapsed), the competitor is deciding what action to take, having just finished orienting to the new environment and an issue area of concern. The competitor will decide what action to take and complete the action, completing the loop for a second time as the other business finishes the loop for the first time. The business that takes 12 units of time to complete the loop will always be basing its action on an environment that no longer exists, so its actions will always be suboptimal. It will never catch the faster competitor. This is how the fast eat the slow! Therefore, velocity matters.

CEOs need to increase the velocity and agility (more on this below) of their business because if they do not, faster companies will adapt to the competitive environment, evolve more quickly, and put them at a competitive disadvantage that they cannot recover from. Consequently, in order to increase the velocity of their business, CEOs must increase the velocity of their business processes. It is business processes that shape, determine, and produce the output that clients pay for. If business processes are lethargic, the business will be too.

This leads us directly to the salient question that all CEOs must ask: How do I increase the velocity of business processes? There is only one way. CEOs must automate and make intelligent their business processes. In so doing, costs will reduce as labor is withdrawn and better business outcomes will result as processes execute at greater velocity with more certainty and consistency.



Continuous Cost Reduction is an Imperative

Labor is often one of the largest expenses that a traditional business has. So, it only makes sense that to reduce cost, labor must be reduced. The application of technology to business processes accomplishes this. By automating the execution of business processes, labor is removed from the equation and costs drop precipitously. But technology alone is not enough. Processes that are merely automated are static; they do not learn or evolve. By simply automating business processes, businesses become rigid and inflexible - two qualities that are not often rewarded today!

Businesses must devise, construct, and deploy processes that ingest and exploit all relevant enterprise data, including telemetric data from other processes. When this is the case, processes become adaptive; they evolve and become intelligent agents that work autonomously on behalf of the business. Intelligent processes are what will separate the winners from the losers in this new digital age that we are entering.

Previously, the ideal of a learning enterprise implicated the partnership of a CEO and his/her HR leader. Today, however, the Chief Information and Chief Analytics Officer are implicated by necessity. With more and more algorithms performing meaningful work, the ability of an organization to learn is no longer exclusively a product of its human work force! The Chief Information and Chief Analytics Officers are playing an increasingly determinative role.

By deploying intelligent processes that learn and evolve, businesses enjoy not just increased velocity, but agility too. Intelligent processes enable the business to move forward without constant reengineering and improvement efforts and their associated cost; they allow expensive human capital to be redeployed to higher valued tasks that require creativity and discretion, also significantly reducing cost; and, finally, when intelligent processes are loosely coupled as a result of their integration with an enterprise data bus, the resilience of the business is increased.

Resilience can be Life Saving

One-way businesses are disrupted is when a new competitor re-segments an existing market and delivers a product that is "good enough" to the new segment at a price established firms cannot compete with. Over time, through the novel application of process, analytics, and technology, the new



competitor hones its operating model, locking in its cost advantage. Operational excellence becomes the quality that makes the competitor's market position secure and unassailable.

Leveraging a cost structure that makes it an existential threat to traditional businesses with lethargic, expensive processes that are neither adequately automated, nor intelligent, the competitor is now free to move into, and disrupt, other segments of the market. Established firms with "heavy," rigid, and inflexible processes are flat footed and unable to react fast enough to maintain their market share, so they trade market share for the time they require to re-tool their processes and technology infrastructure. Survival is not a guarantee and the journey to recovery is fraught with challenges that existing leaders may be ill equipped to deal with. Sound familiar?

All businesses are subject to disruption from more agile competitors. However, those businesses that are resilient because they have deployed loosely coupled, automated, and intelligent processes are best able to respond to competitive threats. This is because in many cases they can quickly change how the business reacts to its competitive environment with changes to algorithms, code, workflow, or robotics. The alternative is labor based, involving the hiring, training, supervision, and retention of people at a high on-going cost. The marginal cost of an algorithm is zero! Which of these businesses is more resilient, because it can quickly adapt and change in the face of disruption?

All CEOs Need to be Technology Leaders

Waiting for a competitive threat to provide the impetus for establishing a resilient infrastructure is not a recipe for competitive success. CEOs need Chief Information and Chief Analytics Officers to be forward leaning and assertive in working with Line of Business and Functional owners to devise and deploy resilient infrastructures to support business operating and go-to-market models.

But CEOs have a role to play too. CEOs must prioritize and consistently fund the evolution of the business's infrastructure. It is too easy to temporarily" reduce funding in the face of changing business fortunes.

CEOs that are steady and stay the course are the ones achieving long term success. Today, all CEOs need to be technology leaders.

To learn more about how your company can prepare for competition in this new digital era, please contact us - info@cognisive.com