



Achieving Alignment in an Age of Disruptive Velocity

These days, disruptive velocity is one of the few constants for organizations. Digitization drives disruption, as once-physical businesses are dematerialized into virtual ones with more reach, shorter time-to-market, and less capital intensity, financial or human (Salim, Malone & van Geest, 2014). Expedia kills off travel agencies. Amazon crushes brick and mortar competitors. Airbnb's market cap exceeds Marriott's and precipitates the Starwood merger. Uber turns the taxi industry upside-down. Tiny, 18-month-old Instagram and vastly larger, 90-year-old motorcycle manufacturer Ducati are acquired in the same month for the same price (\$1 billion each). Driverless cars are grabbing all the attention, but driverless trucks will eventually wipe out one of the top 10 largest occupations in America. Even agriculture is upended as drones, planting robots, and driverless tractors assume more and more of the work. No sector is safe.

Every generation has experienced velocity that turned industry leaders into dinosaurs. Automobiles, telephones, antibiotics, and personal computers are just a few 20th century examples. Over time, people and institutions generally adapt and embrace the increased speed that comes with innovation. However, disruptive velocity is not just about speed, it is also about acceleration. When the cycle time between innovations gets shorter, pace exceeds our capacity to adapt, and adaptation is essential to organizational alignment.

Alignment is about determining the answer to two fundamental and related questions. The first is strategic—when to stay the course and when to reinvent. The second is behavioral—how to keep everyone moving in the same direction or get them to shift into a new one. In an era of disruptive velocity, these two questions need to be answered with ever-increasing frequency. Since 1965, the average time a company spends on the S&P 500 has fallen by 50 percent, to less than 15 years.

This is just one indication that many companies are getting it wrong. As we evolve from industrial to digital to increasingly AI-driven, cognitive economies, this trend will likely only accelerate (Rometty, 2016).

Alignment Structures

Organizations rely on a range of structures and processes to create alignment. Core processes for product development, process engineering, quality assurance, and service delivery are all designed to ensure alignment on critical factors like cost management, product safety, and customer service. Across this broad range of core processes, continuous improvement is a deeply embedded and broadly recognized objective—faster cycle time, fewer errors, quicker response, better customer experience and overall, a more effective and efficient organization. These are the characteristics of **Continuous Alignment Structures**.

A host of other alignment structures are talent-related. Information structures like job descriptions and organizational charts, titles and salary bands, and processes for goal setting, succession planning, performance management, talent development, and pay decisions are designed to foster stability, describe relationships, reinforce rules of engagement, establish a performance cadence, and instill a sense of fairness. For most organizations, they are little changed in decades. They are cyclical and calendar sequential, and despite the considerable resources they consume, the continuous improvement ethos has generally passed them by. “Automating” these processes have mainly meant transferring the necessary forms and documents from physical file cabinets to virtual ones, but not much else. We’ll call these Traditional Alignment Structures.

Disruptive velocity is something Traditional Alignment Structures are least suited to navigate. They’re built for a competitive environment that is 80 percent “stay the course” and 20 percent “reinvent.” When organizations find themselves in an environment that is suddenly 80 percent “reinvent,” they become barriers to transformation. They slow decision-making with processes that feel ritualized, deliver out-of-date information, and proceed too slowly to be helpful.

For non-talent-related alignment structures, continuous (or radical) improvement is a central objective. Processes for developing strategy, managing risk, optimizing supply chains, and improving products and services are intensely scrutinized from every possible angle, looking for that next bit of competitive edge. Even M&A due diligence practices, which really haven’t changed in the last 20 years, are being altered as dealmakers integrate cybersecurity assessments into the process—realizing that the brand, business, and intellectual property they may be paying so dearly for will be worth far less if the target company has been hacked (NYSE, 2017). In 2013, Covidien established a cybersecurity unit that reported directly to the CEO. Its main focus was internal—were Covidien’s medical devices and patient records safe? But during the due diligence process for Medtronic’s acquisition of Covidien in mid-2014, Medtronic discovered that Medtronic itself had been the victim of a data breach. Improving core processes isn’t perfect and often moves slowly. Nevertheless, organizations allocate considerable resources on improving these non-talent-related alignment structures.

Talent-related alignment structures are a very different situation. Organizations operate with job descriptions that have no shelf life, career paths that bear little relationship to reality, fact-driven training models that are useless when most facts are available with just a few keystrokes, and rigid organizational structures that deploy resources suboptimally. Even the value of a resume comes into question as skills become the price of entry and factors like fit, perseverance, and “grit” determine organizational success.

Disruptive velocity changes more than the pace of work. It changes the nature of work. Increasingly, we ask people to think analytically, logically, collaboratively. Reason, rather than rote memorization, is what defines success (Duckworth, 2016). The challenge this presents for organizations is to capture what they can’t count. The way organizations have managed talent-related alignment structures—the ones they rely on to develop, assess, and organize talent—has been constrained by its ability to digest all the data that is required to accurately reflect the capabilities of a talented workforce. The main theme here is that technology, properly applied, eliminates this constraint.

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Talent-Related Alignment Structures Need to Play Catch-Up

Organizations are sociological constructs, and alignment structures are the glue that hold them together. Disruptive velocity requires an increase in the clock speed of all alignment structures (talent- and non-talent-related). Talent-related structures need to be subject to the same continuous improvement and radical restructuring efforts that characterize innovation elsewhere in an organization.

A universal attribute of organizations that thrive over time is the capacity to continuously reinvent themselves. Organizations that can, thrive and grow. Those that don’t, die. IBM is one of the longest-standing examples of this attribute, having

managed to reinvent itself for more than a century. Apple may be the most recognized, inventing personal computing, and reimagining music distribution, telephones and (again), personal computing via apps. Of course, transformation doesn't always translate to success. Motorola spent \$5 billion on the Iridium project, convincing themselves that the future of mobile telephony was a constellation of satellites used by 1 million elite customers, all paying \$3,000 for the phone and \$5 a minute for usage. Nokia spent almost \$2 billion buying Navteq, with the intent to build a network of traffic sensors into the world's highways, only to be upended by Waze, a zero-infrastructure app that crowdsources traffic data from smartphones.

Talent-related alignment structures don't get nearly the scrutiny that non-talent-related ones do, perhaps because they are so tightly woven into the fabric of an organization, or the line of sight to organizational performance is not as direct, or they are seen as organizational "traditions" or "anchors" that should not be disrupted, or they're simply seen as "HR" and irrelevant. We'll focus on just three of these alignment structures: performance management, training and development, and organizational design, and suggest ways that they can be altered to better handle disruptive velocity.

Performance Management: Creating Continuous Conversations

Humans find solace in patterns and cycles. We are hardwired by seasons, holidays, circadian rhythms, and an innate desire for closure. We like to work on things in routine and sequential ways. We love patterns, and we're programmed to work this way. Working in organizations amplifies this tendency. Resource constraints and conflicting priorities make it far easier to sustain something with a burst of resource intensity followed by checking the box and moving on to something new. When the pattern is continuous, and closure events are rarely evident, it's more difficult to sustain. Inside organizations, performance management and training are just two examples. Performance assessment is one alignment structure that can benefit by moving from cyclical to continuous.

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On the list of favorite things to do, managers and employees place the annual performance discussion below going to the dentist, yet organizations have persisted with the same approach for decades. Academics, practitioners, and the media have written extensively about the demise of performance assessments, and some organizations have announced they are abandoning them altogether. From a practical perspective, simply dismantling the annual event isn't practical.

Differentiating between stronger and weaker performers is an essential part of an organization's ability to allocate scarce resources, manage execution risk, and drive strategy. The real trick is to replace the traditional approach with structures that add substance, but not weight, structures that drive continuous conversations—contemporaneous 360s, check-ins, performance journaling, goal sprints, and so forth—structures and practices that more closely reflect the competitive rhythm of an organization (Rock & Jones, 2015). Contemporaneous 360 feedback channels serve to deepen an evaluating manager's perspective and increase the reliability of performance judgments. Performance "journaling" tools promote ongoing conversations, facilitate problem solving, and capture those conversations as data points, rather than anecdotes.

The big challenge with any continuous process is the mountain of data it generates. The current generation of AI-driven, mobile-enabled, cloud-based technology now makes this a completely manageable challenge. In a performance context, technology can support and reinforce continuous conversations, helping leaders make intelligent sense of that mountain of data, tracking progress, identifying progress barriers, and even assessing employee sentiment about how things are going. It can incorporate new insights into business plans, help manage job descrip-

tion “drift,” identify skills gaps, update training curricula, and identify individuals who are closing them the fastest. Based on a machine-learned “understanding” of specific situations, technology can deliver multilayered process- and decision-support that “pulls” managers and employees through a performance process as willing participants, rather than recalcitrant victims.

Non-talent-related alignment structures for product development and complex project management have been dramatically improved by moving them to a technology-assisted, continuous conversation model. Where the layered, sequential “waterfall” approach to complex project management has been replaced by a more iterative, fail-early/fail-fast, “scrum” approach, resource consumption is lower, progress is accelerated, and the outcomes are significantly better. The FBI turned around the post-9/11 Sentinel Project this way. After spending nine years and \$405 million attempting to build a comprehensive terrorist tracking system with a traditional “waterfall” project management, a new team, with less than \$20 million and in only 18 months, successfully completed the system with Scrum methodology (Sutherland & Sutherland, 2014).

Training and Development: Identifying the Adjacent Possibilities

“Lifelong learning” is a term that, for some, still conjures up the image of the lone retiree sitting in an undergraduate class with a bunch of 20-year-old students. Education and training programs are the ultimate alignment structure vehicles. They convey skill sets, define professions, and give license to specific activities. Disruptive velocity makes lifelong learning an absolute necessity, and yet there is often very little organizational support for it.

From the university system through the \$6 billion annually that corporations spend on training, disruptive velocity renders curricula irrelevant at an astonishing rate. “Today’s colleges give students no idea of the structure of knowledge: the topics they should learn, or the books and skills they should master.” (Gelertner, 2017).

Universities that used to update their curricula every five to seven years are contending with STEM content that obsolesces in 18 months. Higher velocity providers like Udacity, Coursera, Khan Academy, Degreed, and Make School deliver focused content and nanodegrees that are more relevant, more current, more affordable and much easier to consume than traditional learning models. Commons platforms like GitHub don’t provide training at all, but instead provide a content-rich community where learning is continuous, problems to work on are limitless, degrees are replaced by “street cred” within the community, and the only cost is in the form of personal commitment. Still other platforms like Patheer provide neither content nor community, but deal with a fundamental question created by disruptive velocity—“What do I learn next?” AI-assisted, algorithm-driven learning maps show employees the adjacent skills that they need to master to keep their careers moving forward, while giving organizations a clear picture of where the workforce is keeping up, where it might be falling behind, and where their learning investment is (and is not) working. In an environment of disruptive velocity, training venues and content are so varied that real control is impossible. Learning takes place wherever and whenever the content is available, and relying on the collective exploratory behavior of the entire workforce is the only way to stay ahead of the innovation curve. Career paths are multi-dimensional and complex. Accurate ones can’t be built by the logic and direction of a few, but instead require a blindly empirical, big data synthesis of huge numbers of skills profiles and career progressions. LinkedIn built the first requisite component—the largest automated skills inventory on the planet. With the Lynda acquisition in 2015, LinkedIn bought the third component. They (and others like Patheer) are working on the middle component—AI-assisted algorithms that will help people stay current, identifying skills requirements, connecting them to learning opportunities, and efficiently connecting them with venues to use those skills successfully.



Fact-based, rote memory-dependent training programs may need to be replaced with approaches that better reflect what we know about how people learn most effectively in a non-rote world (Brown, Roediger & McDaniel, 2014). Facts are easy to acquire, and mastery of a fact set is increasingly less relevant as a determinant of intelligence or competence. The sheer size of a complete fact set in most disciplines is now way beyond human capacity for memorization. Assembling, combining, and connecting facts are increasingly the skills that define intelligence, not facts themselves. Organizations spend billions on training and development programs and rely on a secondary education system whose primary objectives are to define and support conventional wisdom. Here again, technology, in the form of AI to reduce cognitive load, and cognitive computing to serve up statistically supported alternatives and conclusions, can ensure that curricula are updated, and that humans can make decisions based on the best available constellations of facts.

The technology of learning has gotten considerably ahead of organizations' capacity to accept it as legitimate and adopt it broadly. These kinds of directly relevant, higher velocity learning do not figure into many organizations' calculus of who to hire, who to promote, and who to ask to attack that next big problem. For-profit educational models are looked down upon, the value of online degrees is heavily discounted, and the educational value of nanodegrees barely register. Training departments seem stuck in old, traditional, face-to-face content delivery, where content is purpose-built or purpose-purchased from a central, tightly controlled site.

Organizational Design

last broadly adopted innovation in organizational structure was the matrix, as a way of facilitating the horizontal flow of skills and information in an otherwise vertical structure.

The fundamental nature of a hierarchical organization or a matrixed one is that the structure is basically fixed and immutable. Title structures and the organization chart still tend to be the defining characteristics of an individual's work identity, defining who we work with, who is at the same level, what we're responsible for and even the extent to which the organization "trusts" us. A variety of organizational forms that help handle disruptive velocity more effectively have been introduced, but their adoption has been limited. Task forces, leaderless teams, swat teams and advisory teams provide organizations with ways to quickly assemble and disassemble constellations of leadership attributes, skill sets, and competitive capabilities. However, companies rarely use these structures in anything more than an ad hoc, incidental way.

The primary constraint on broader adoption of these structures is data driven. In many organizations, the motivation is there to build focused teams that will be more effective problem solvers, but the underlying technology for assembling these teams is story based—basically, the "I know a guy" strategy of team formation. Once again, technology can help manage the cognitive load necessary to make the process

of rapidly assembling teams an empirical exercise, rather than an anecdotal one. Platforms like Ramco System's skills clouds help leaders quickly assess skills inventories across their organizations based on large

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numbers of continuously collected, informal assessments. Others, like Trustsphere, analyze relationships and leadership attributes via email and telecom traffic. Armed with these insights, leaders can manage talent as a portfolio, moving skilled staff from one challenge to another quickly and in an orderly way.

Building Better Talent-Related Alignment Structures

Better data handling and other technology-driven assistance make talent-related Continuous Alignment Structures possible. Introducing them effectively requires a few “headset” changes on the part of leaders and managers.

Redefining process ownership

Most talent-related, Traditional Alignment Structures are “owned” by HR. HR builds them, staffs them, tracks everyone’s progress, and reports the results. Continuous Alignment Structures, on the other hand, require shared accountability, which is more difficult to achieve and sustain. This presents dual challenges. First, getting HR to let go of its role as “owner,” and embrace the role of “curator” or “enabler.” In a shared accountability environment, HR has a significantly larger and much more nuanced role to play, as marketer, advocate and sustainer. The second challenge lies in managing adoption risk—conveying to leaders the advantages of a different approach. A well-designed, technology-enabled alignment structure will drive better decisions, be more effective, be more broadly accepted by the entire workforce and consume fewer resources. It’s up to HR to build the case, but it is incumbent upon all leaders and managers to listen carefully and embrace the possibilities that the case suggests.

Embracing the Stories in the Data

Continuous Alignment Structures generate lots of data. One of the challenges to broader leadership acceptance is that the data generate unexpected insights, or insights that contradict our own, anecdotally driven judgements.

Similarly, we are trained to prefer quantitative over qualitative data. In quantitative data, we see clarity and objectivity. In qualitative data, we see opinion and bias. The magic of massive amounts of data is its capacity to increase the accuracy and reliability of qualitative data. If one person has a view on something, it’s an anecdote or opinion. When 500 people have the same view, it’s more likely to be a fact. Of course, management’s responsibility to confirm the facts, and to build a culture that values accuracy remains. Multiple observations generally increase reliability and accuracy, but as we have all seen in other contexts, social media and similar environments can create “echo chambers” that magnify predisposed points of view, support “alternative facts” and generate otherwise dysfunctional outcomes.

Building Real Engagement

Poor employee engagement may be the very definition of poor alignment. Unfortunately, “engagement” has become one of those overused, poorly defined terms that often characterizes a transition from “concept” to “buzzword.” Observations about a massively “disengaged” workforce abound, along with descriptions of how sad, unhappy, unmotivated, and otherwise dissatisfied most employees are. This doesn’t quite coincide with any rational view of the dynamic and innovative engine that is the US economy. However, we fret over it, build programs to overcome it, and otherwise attempt to address “it,” even though there is little clarity or agreement on what “it” is. All manner of programs and interventions have all been justified in the name of better engagement, and yet, we’re not quite sure whether engagement has improved at all.

Real engagement is about the substance of the work. It begins with individual characteristics—A Growth Mindset (Dweck, 2006), or Grit (Duckworth, 2016). It is also about building organizational capabil

ities that foster and develop these individual characteristics. However, in an era of disruptive velocity, the sheer volume of data necessary to exercise these capabilities creates a cognitive load problem for employees. Issues requiring attention are too numerous, changes in direction are too frequent, and Traditional Alignment Structures are too slow.

The structures we need must not only inform and align like their predecessors, they must also solve the cognitive load problem. Again, traditional alignment structures can be supplemented with technology —AI-driven, dynamically adjusting algorithms that help employees absorb information in more organized and actionable ways, help managers make better decisions, and help everyone understand the adjacencies and collaborative requirements necessary for success.

Channeling Experimentation

It may seem an odd paradox, but dealing with disruptive velocity and its consequences for alignment structures requires a degree of temperance. Perhaps the most important thing leaders can do to foster sustained functional alignment is to curate change at a pace their organizations can handle. In their zeal to move forward, leaders subject otherwise positive, functional cultures to change that is simply too much to assimilate. Add pressure from boards, shareholders, and regulators, plus media- or consultant-driven fads and bandwagon jumping, and that delicate combination of unified purpose, shared vision, broad alignment and basic trust that we recognize as organizational alignment is completely undermined.

The ideal transition from cyclical to Continuous Alignment Structures is well-paced, gradual, and logical. The objective is sort of like replacing a bullet with a guided missile, but too often is like trying to turn a fish into a bicycle.

The Vertex Case

In 2011, the FDA approved Incivek, the first curative drug for Hepatitis C. It was the fastest drug launch in history. It was also one of the shortest drug life cycles in history. In 2012, Incivek sales began to slip simply on rumors of a better drug. When the competing drug hit the market in 2013, it sold more than \$6 billion in the first six months. Vertex pulled the plug on Incive in 2014, barely three years after its launch. Fortunately, reinvention was already underway. In one of the most successful product rotations ever, Vertex completed its first layoff in a decade, while simultaneously hiring teams needed to launch its first cystic fibrosis drug.

Thriving in Era of Disruptive Velocity

Building strong, aligned organizations in an era of disruptive velocity doesn't require a change in foundational leadership principles or objectives. Traditional Alignment Structures can't handle disruptive velocity, but it's their design, not their existence, that needs work.

Velocity is not the only culprit. As the nature of work becomes less rote, more reasoning intensive, and more intensely collaborative, decisions about talent and capability become more subjective. One person's subjective judgement is another's arbitrary or capricious decision (Feintzig, 2016) unless the statistical power that comes with synthesizing large volumes of subjective data can be harnessed.

When organizations need employees that are far more analytical, logical, collaborative, and engaged, those employees will expect to know why a structure exists, and what value it adds to the organization's success. Workforces that handle high velocity change will seek relevance and efficiency in everything they do. Traditional Alignment Structures are generally neither relevant nor efficient.