

Talent Economy

WINTER 2017

PEOPLE • ORGANIZATION • INNOVATION

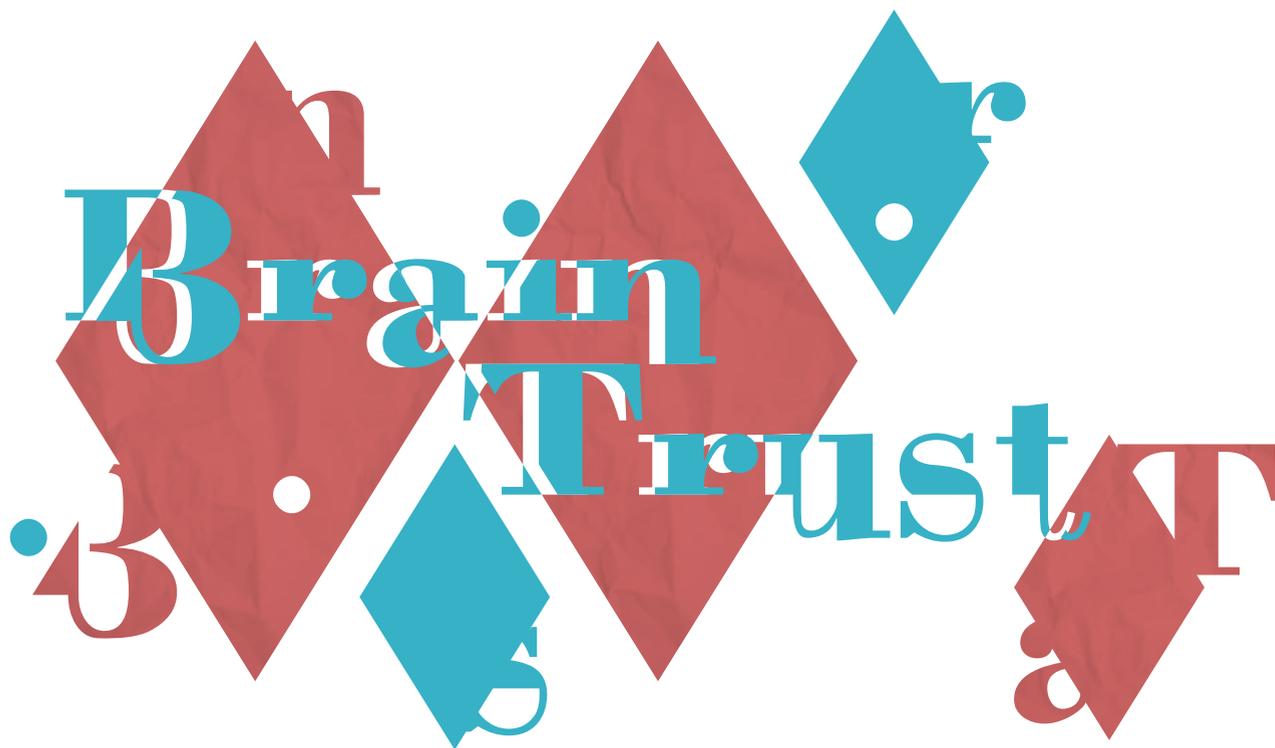
A stylized illustration of a person with their eyes closed, holding a glowing green orb with both hands. The background is a green circuit board pattern. The person's face and hands are rendered in shades of green and purple.

TECH
VS. YOU:
TECHNOLOGY
AND THE
TALENT ECONOMY

The Experience
Engine

The New
Big Thing

Brain
Trust



Brain & Trust

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Trust is a leading currency in today's talent economy. Here's the science behind how leaders can cultivate it in their organizations.

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Numerous management books, articles and conferences have focused on the topic of trust. Trust is claimed to be some near-magical economic elixir explaining everything from productivity gains to enhanced happiness at work. But in reality trust is complicated and challenging to measure at an individual, team and organiza-

tional level. Fortunately, discoveries in neuroscience have provided new, rigorous, peer-reviewed and actionable insights into what trust is, how it can be measured and, most important, how organizations can build and enhance trust to improve their performance.

What is Trust?

The first comprehensive mathematical derivation of trust came from a 2001 biologically based model introduced by one of us, Paul J. Zak, and Steve Knack. It showed that trust reduces the transaction costs associated with investment decisions by increasing confidence in what the other party would do. In a sample of 41 countries, trust was among the strongest predictors economists had ever found to predict investment

and per capita income growth. Trust is an economic lubricant, reducing the frictions that often occur during economic activity. This same mathematical relationship can also be applied to describe interpersonal interactions within organizations.

Trust is Chemical

Is it possible that when we interact with others and perceive that they are capable, caring, ethical and predictably consistent in their behavior that some type of "switch" in the brain turns on to signify we should trust them? A turning point in the study of trust was the discovery of the role of the neurochemical called oxytocin.

For more than 15 years, we have explored the neurobiology of trust, initially using a cooperative dilemma

known as the trust game. In the trust game, participants are placed into anonymous dyads and randomly assigned to the roles of decision-maker 1 (DM1) and decision-maker 2 (DM2). Both DMs are allocated money as compensation for their time and pain from the experimenters — \$10 for showing up and agreeing to have their blood drawn, and up to \$40 based on their performance. Important for a study of trust, there is no deception in this experiment and DMs cannot contact each other before, during or after decisions are made. All interactions take place via computer while participants sit at desks with privacy dividers.

After identical instructions, DM1 is prompted via software to send any integer amount (including zero) of their money to the DM2 in their dyad. Participants know that whatever is sent comes out of DM1’s account and is tripled in DM2’s account. The software then informs DM2 of how much money they were sent by DM1 and then prompts DM2 to send some amount back to DM1 (including zero). Transfers from DM2 to DM1 are not multiplied and constitute a dollar-for-dollar allocation out of DM2’s account and into DM1’s account.

This research approach allows for the quantification of both trust (DM1 to DM2 transfer) and trustworthiness (DM2 to DM1 return transfer). Zak’s idea was to obtain blood samples before decisions to assess oxytocin. Zak’s team of researchers found that the receipt of money denoting trust, but not money in general, causes the brain to synthesize oxytocin. Furthermore, the amount of oxytocin produced predicts trustworthiness — the return of money to the DM1 who had initiated trust. This shows that the intention behind someone’s actions is important. This research team also demonstrated the causal effect of oxytocin on trust by safely infusing synthetic oxytocin into people’s brains (through their noses). Those given synthetic oxytocin, compared to participants who received a placebo, trusted strangers with 17 percent more money and were twice as likely to show maximal trust by sending all their money to another person.

Outside of our conscious awareness, our brains seek the right balance between being wary of strangers and interacting with them. Cooperating with others puts us at risk of exploitation, but it also allows us to derive value from such interactions. This value could be friendships, romantic part-

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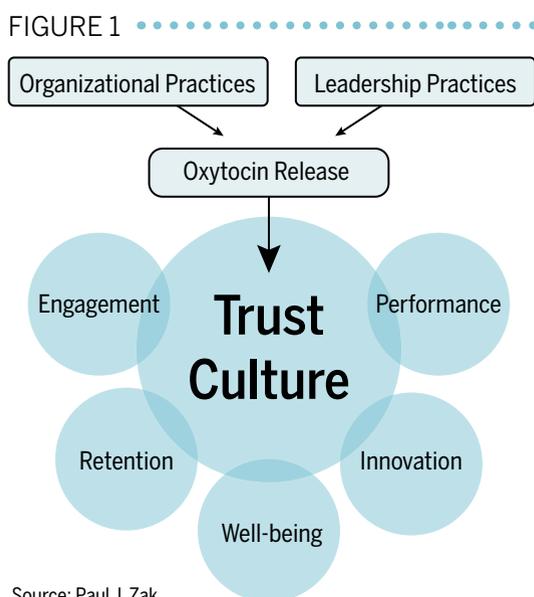
nerships or agreeing to work together on a project. Oxytocin signals that a person is safe to be around by reducing the natural wariness we have around strangers. Functional magnetic resonance imaging (fMRI) experiments have shown that infusing oxytocin in people results in a marked reduction in fear-associated brain activity.

Subsequent research has shown that oxytocin influences trust by increasing our emotional connection to others; that is, our empathy. When our empathy is enhanced we are motivated to help others, even complete strangers. Administering extraneous oxytocin does not always enhance trust. In fact, when individuals who possess some personality disorders (e.g., social anxiety, trait aggressiveness and borderline personality) are given extraneous oxytocin, they show increased in-group bias and greater distrust in their relationships with others.

High Stress Inhibits Oxytocin

A number of neurochemicals promote or inhibit the brain’s oxytocin release. This means that not every positive social encounter will be reciprocated as such. A primary inhibitor is a stress hormone called epinephrine. During high stress, epinephrine spikes heart rate and blood pressure, inhibiting our ability to connect to and feel empathy for others. Interestingly, though, it turns out that moderate stress increases oxytocin release. When we’re facing a challenge, we often turn to others to help us surmount it.

Other neuroactive chemicals,



including the primary female hormone estrogen, increase a person's sensitivity to oxytocin. Indeed, in every oxytocin study by Zak's lab, on average, women released more oxytocin than men. This helps explain why women tend to connect more easily with others than do men and may actually have a leadership advantage.

Nature has played a further trick on the sexes when it comes to oxytocin. A potent oxytocin inhibitor is testosterone, a substance that is five to 10 times higher in men than in women. In experiments in Zak's lab in which synthetic testosterone was administered to men, compared to men on placebo, testosterone-enhanced males were less generous toward others but also demanded more from others. Testosterone makes all of us self-focused and selfish.

4 Cs of Interpersonal Trust

Harvard Business School professor Amy Cuddy has been studying first impressions alongside fellow psychologists Susan Fiske and Peter Glick for more than 15 years, and has discovered some important patterns in these interactions. Two key dimensions are cited by Cuddy and colleagues that define the extent to which a person respects and will trust another: competence and warmth/trustworthiness. Of the two, trustworthiness appears to be the most important factor in how we actually size up and relate to others.

Additional research from Roger Mayer, a professor at North Carolina State University, along with Professor David Schoorman from Purdue University shows that attributions of trust extend beyond just competence and warmth. They have found two other factors that each of us use when we meet and interact with others — the integrity/honesty of the individual and his or her expected reliability in behavior.

These four attributes of trust are also necessary for teams to work effectively. In our own research and work, we refer to these four attributes, which are independent of each other, as the “4 Cs of Interpersonal Trust.”

Capability: I believe you have the appropriate knowledge and skills (i.e., possess competence, knowledge and ability that make me trust you).

Caring: I believe you are on my side (i.e., display empathy, warmth and caring about my wants and needs).

Candor: I believe you will act with honesty and integrity (i.e., will follow through on your promises and not deceive me).

Consistency: I believe you will act in a predictable and reliable manner (i.e., behaves in a dependable manner that minimizes surprises).

Building a High Trust Culture

The neuromanagement challenge is to design a work environment in which oxytocin can be released many times during the day. Understanding the brain circuit that oxytocin activates has allowed us to derive a set of actionable ways to design organizational cultures that bolster and sus-



tain interpersonal trust. The causal flow is derived from an organization's culture and leadership practices that produce opportunities for oxytocin release that builds trust between colleagues (Figure 1).

The neuroscience experiments we have done identified eight classes of organizational and leadership practices that promote the release of oxytocin, increasing trust and sustaining high performance. The eight factors have been organized into a convenient acronym OXYTOCIN. Each factor contributes to building a high trust culture and increases productivity, engagement and retention of high-performing talent and will be briefly described below.

1. Ovation: Ovation recognizes accomplishments through praise. Social recognition in mammals causes the brain to release oxytocin, which then induces the brain's reinforcement learning chemical, dopamine, to be released. Dopamine is part of the brain's learning circuit, reinforcing behaviors so they are repeated in

the future. Public and unexpected recognition together are the ovation double whammy, causing both dopamine and oxytocin release. Both leaders and organizations that “catch employees doing things right” will create a culture where oxytocin is released enhancing rapport, cooperation and teamwork. Survey research from Bersin by Deloitte shows that “high-recognition companies” have 31 percent lower voluntary turnover than companies with poor recognition cultures.

2. eXpectation: eXpectation designs time-limited challenges for colleagues as a group. Group challenges stimulate the release of oxytocin and build trust among team members. Challenge stressors also improve engagement and job satisfaction. Leaders must be careful that challenge stress does not devolve into destructive chronic stress by setting clear objectives and end points. As we have seen in our own research, stressors that are uncontrollable and threatening tend to inhibit the release of oxytocin so it is important to set challenging but realistic goals.

3. Yield: Yield enables participative decision-making and celebrates mistakes as learning opportunities. Extensive research by Robert Karasek and his Job

responses found that 1-in-4 employees do not have the tools to be successful in their jobs. High transfer organizations let colleagues manage their work hours, vacation days, location of work and collaborations with others, treating them like adults rather than micro-managing them.

5. Openness: Openness shares information broadly with colleagues throughout the organization. In interpersonal interactions, self-disclosure and candor facilitates the release of oxytocin enhancing rapport and a reduction of the chronic stress associate with uncertainty. Openness drives performance by clarifying goals and giving colleagues the information necessary to make decisions like owners. Openness provides the most information to the most people so that they can perform at their best.

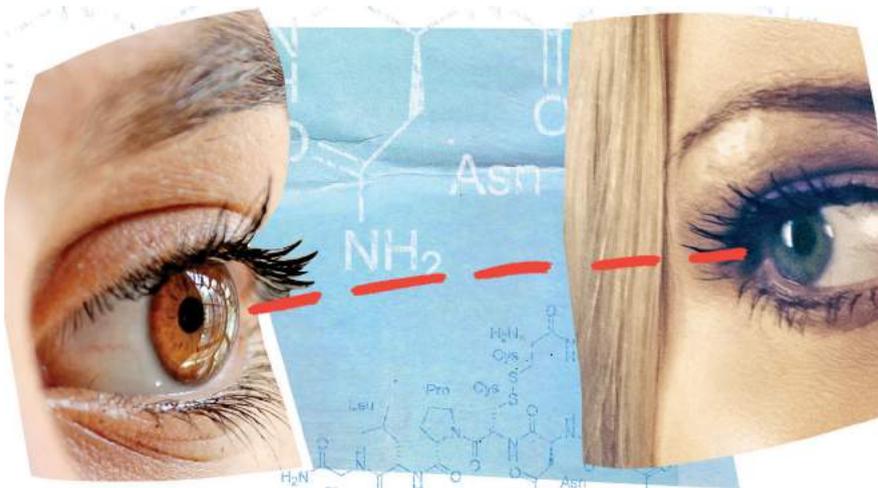
6. Caring: Caring intentionally builds relationships with colleagues. As social creatures, human beings naturally form relationships with others that serve as the foundation for trust. Those who do not empathize with others, dismiss their ideas and treat them with disrespect cause physical and emotional pain. Our own research confirms that employees who work in caring environments are more productive, innovative and less stressed.

7. Invest: Invest enables whole person growth. Investing in colleagues’ professional development is a key driver of job satisfaction. Talented employees who feel trapped often leave their companies to find new challenges elsewhere. Invest also recognizes that colleagues want to develop their personal and emotional lives. Invest embraces people at work as whole human beings, not as pieces of

human capital. Organizations with an orientation to develop employees are 92 percent more likely to be innovative, 52 percent more productive and 17 percent more profitable than those with low learning cultures, according to Bersin research.

4. Transfer: Transfer allows people to choose which tasks to do that create value for the organization. This means providing the resources needed to be successful. Results from the 2014 TINYpulse Employee Engagement and Organizational Culture Report from more than 500 companies and 200,000 anonymous

8. Natural: Natural leaders are honest and vulnerable. Being natural demands that leaders not only talk about trust but are themselves trustworthy. Rather than dictate to others, natural leaders ask for help, solicit opinions and, when a decision is made, embrace outcomes whether the result is positive or negative. Asking for



Demands-Control-Support model support the importance of endowing colleagues with flexibility and control in deciding how work is done. Maximizing yield for employees minimizes threat stressors that inhibit the release of oxytocin.

help from volunteer-colleagues is the first step to being a natural leader. Natural leaders make those around them successful, taking a “servant-leadership” orientation and are more trusted by their colleagues than are hierarchical leaders.

Return on a Trust Culture

We have analyzed the advantages of building a culture of trust in a variety of ways. We ran two experiments that measured the change in oxytocin in blood, obtained survey measures of organizational trust and collected objective measures of productivity and innovation from employees working in two different companies (N=148). We used these data to develop a survey we call Ofactor that measures organizational trust and the OXYTOCIN factors that create it.

FIGURE 2

Outcome	Low vs. High Trust Quartile Percentage Difference
Engagement	+76%
Joy at Work	+60%
Job Satisfaction	+56%
Productivity	+50%
Job Retention	+50%
Life Satisfaction	+29%
Sick Days	-13%
Burnout	-40%

of productivity and innovation from employees working in two different companies (N=148). We used these data to develop a survey we call Ofactor that measures organizational trust and the OXYTOCIN factors that create it.

We then confirmed the predictive value of the Ofactor survey in several ways, including using a nationally representative sample of 1,095 working adults in the U.S. We report the results of the latter study in Figure 2, comparing business-relevant outcome measures for the highest quartile compared to the lowest quartile of organizational trust.

These results show that building a culture of trust directly improves employee engagement and profits. Correlations between trust and job burnout (Maslach Burnout Inventory) and engagement (Utrecht Work Engagement Scale) were meaningful and significant, providing evidence that higher trust cultures are psychologically healthier than lower trust cultures.

Unsurprisingly, those who work in high-trust cultures report substantially more job satisfaction and plan to remain with their present employer longer than colleagues in low trust organizations. We also discovered that those in high trust organizations take substantially fewer sick days and report greater satisfaction with their lives overall.

What Can Organizations Do to Create a High Trust Culture?

We have described why trust is critical to succeed in the talent economy. By taking a neuroscientific approach to measuring and intervening in culture, leaders can create a culture that instantiates interpersonal trust and inspires performance at the individual, team and organizational levels.

Here are 10 things leaders can do to build a culture of trust:

1. View employees as “volunteers.” Volunteers need to be engaged by the organization’s mission or they will move on.
2. Include a measure of joy at work as an important snapshot of your culture. Which division/location is most joyful? Which is the least?
3. Run an experiment by changing one of the OXYTOCIN factors and measuring the effect on joy, innovation, customer satisfaction or productivity. Repeat with another factor.
4. Create an “Ovation” committee and have them create a weekly peer awards program.
5. Disseminate financial statements (profit, loss, debt, etc.) widely with colleagues and be sure they can understand them; consider making salaries transparent within the organization.
6. Pay new hires to leave the company if they don’t feel they fit the culture after 30 days.
7. Conduct a “stay interview” annually for all colleagues focusing on professional growth and personal development.
8. Develop and implement a weekly “feedforward” performance goal setting and review check-in system.
9. Celebrate colleagues at every level who have contributed to the achievement of team and organizational goals.
10. Invest in programs that develop professional, personal and emotional goals including education subsidies, volunteering and appropriate work-life integration. 

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