

2018 Innovation Culture & Trust Report

Published August 2018

Release 18b

Innovation is just the tip of the iceberg



The Trust Formula

$$T = \sqrt[3]{C \times F \times V} \times \sum t \times \left(\beta + \frac{(1 - \beta)t}{\sum t} \right) \times i \times \left(\frac{\delta + 1}{2} p - \frac{\delta - 1}{2} |p| \right)$$

T - Trust	
C - Competence	[0 to 1]
F - Fairness / Symmetry	[0 to 1]
V - Shared Values / Predictability	[0 to 1]
t - Interaction time	[hours]
i - Intensity of interaction	[0 to 1]
p - Positivity of interaction	[-1 to +1]
β - Minimum time impact	[0 to 1][0.25]
δ - Critical Positivity ratio chosen	[1+][3]

Trust is developed and measured between any two individuals, once in each direction.

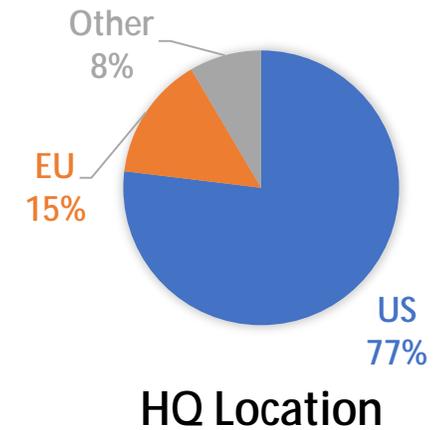
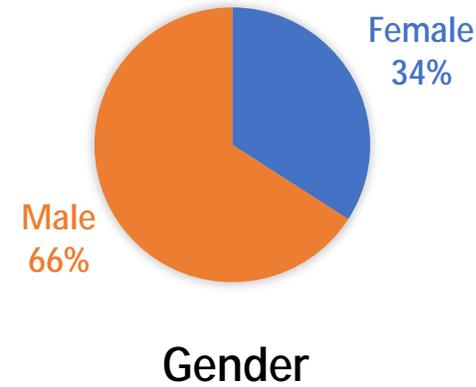
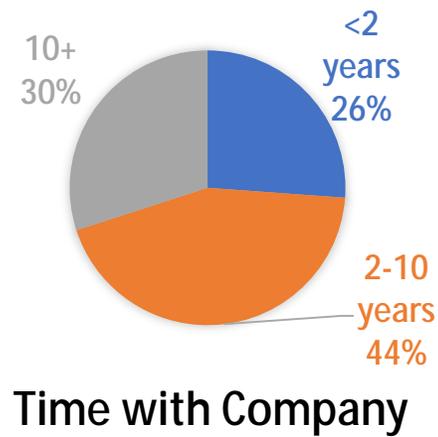
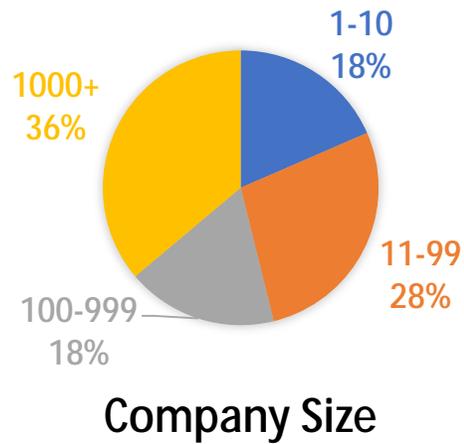
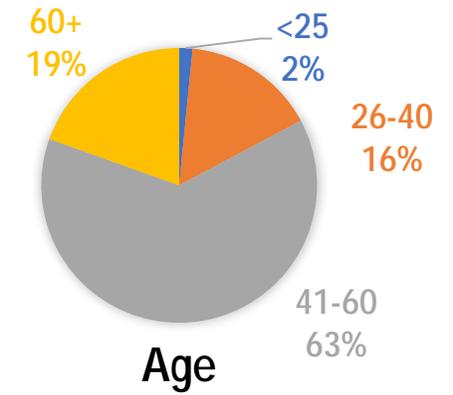
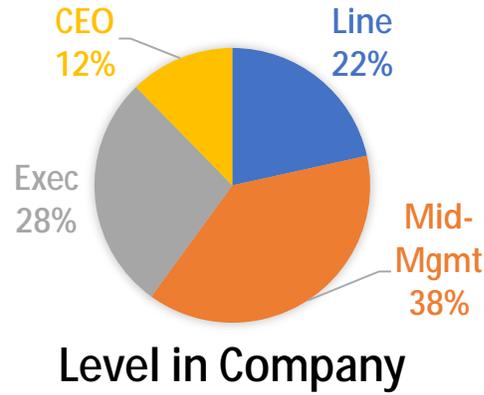
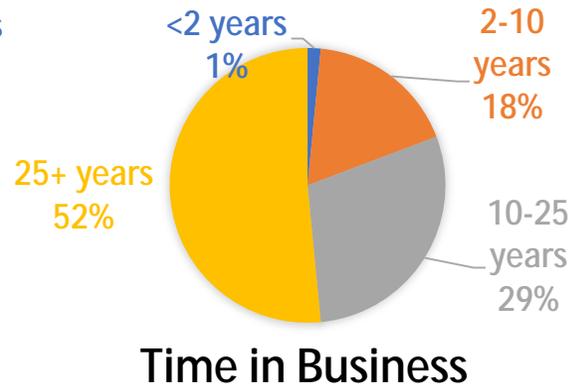
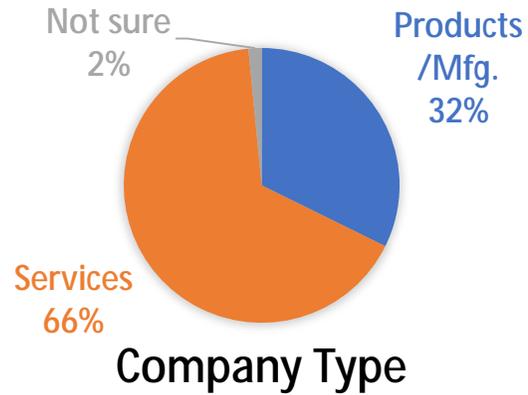
Trust is built between any two individuals. The trust level in a team can be the average of all trusting relationships between any two members of the team. In fact, there are two trusting relationships even between two individuals, one in each direction. I may trust you more (or less) than you trust me, based on the factors described here.

Our research shows that trust is built based on the formula above. There are 3 contextual factors, and three transactional factors. In fact, one of the reasons that we call this framework TrustActions is because it represents “trust interactions.”

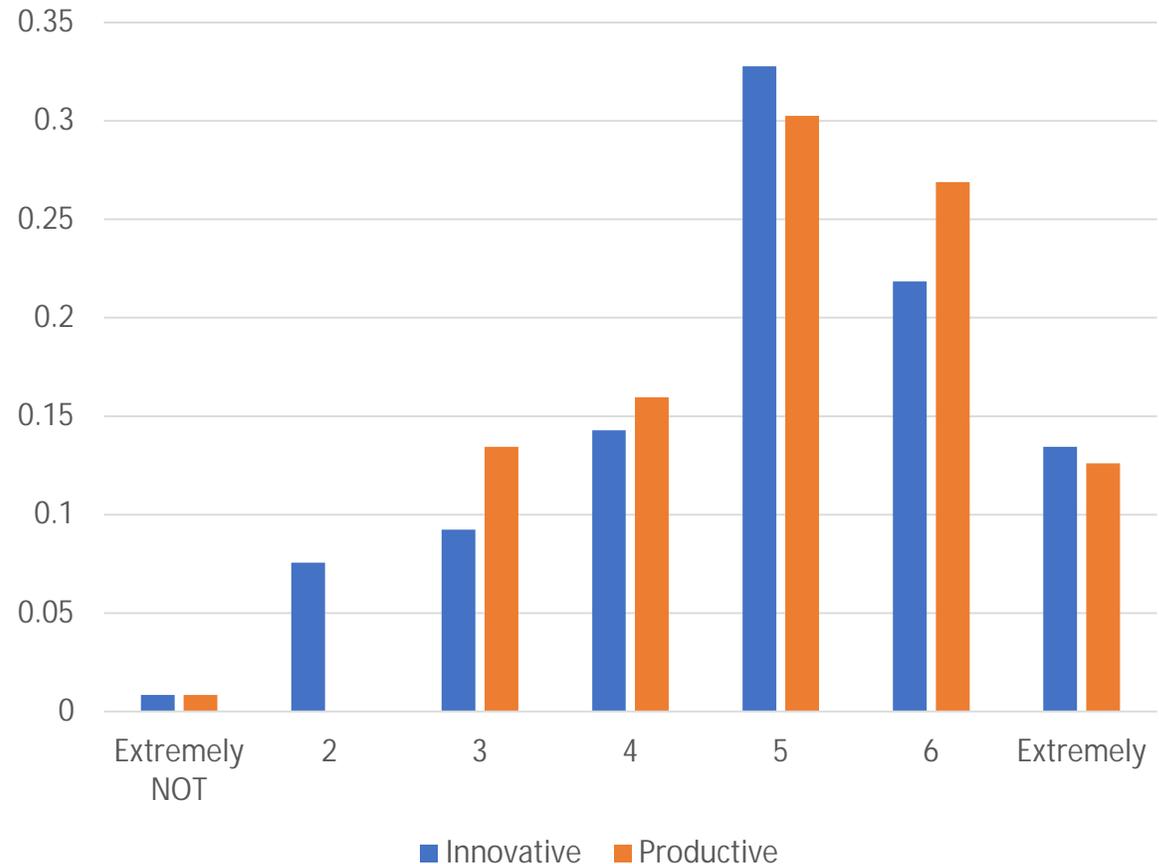
The contextual elements are slow to change, to the point of almost considered static. They also erode over time between interactions, and exist between those meetings. The contextual elements are Competence, Shared Values, and Fairness/Symmetry. As time between interactions increases, the perception of competence and shared values declines, and fairness/symmetry become more important.

The transactional elements can change significantly (for better or worse) during an interaction between two people, and are thus considered a lot more dynamic than the contextual elements. They change during an interaction between two people. The transactional elements include the amount of time spent together (including the first impression effect), the intensity of interactions (words, tone, face-to-face, per the Mehrabian theory), and the positivity of interactions, adjusted for the Losada Critical Positivity Ratio.

Participant Demographics



Innovation & Productivity

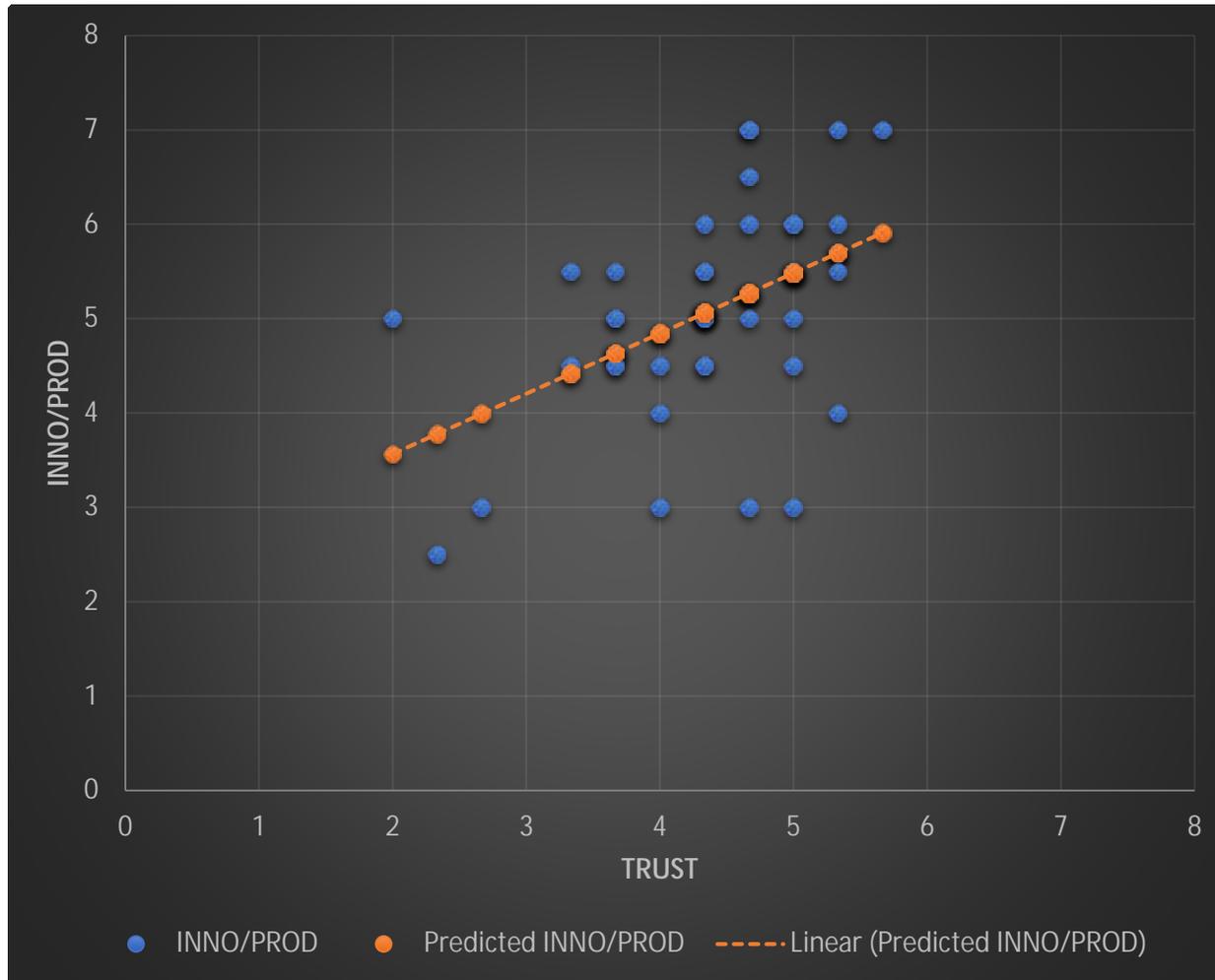


The 2018 averages are:

- Innovation: **4.875**
- Productivity: **5.042**
- Overall Trust: **4.307**

Every year, we will ask how innovative and productive people feel their companies are, so be able to observe trends in those perceptions. Both perceptions seem to be relatively consistent with one another, with both averages being significantly above average.

Innovative/Productive as function of Trust



A regression analysis of the relationship between the level of trust in the organization shows that such a relationship exists and is strong.

Trust was measured as the sum of the trust that employees felt toward each other, and towards their bosses, as well as how they believed they were trusted by the others.

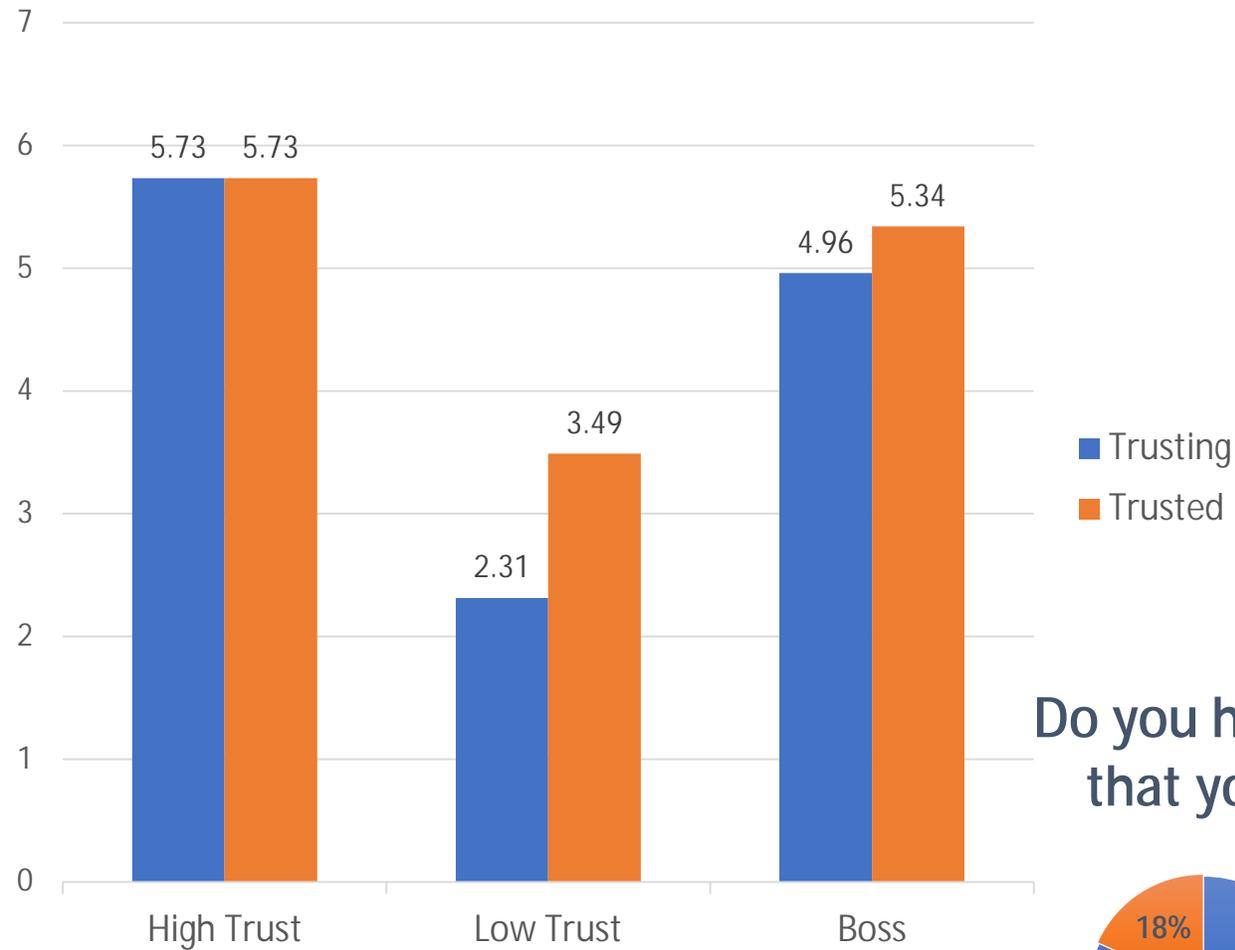
The formula on the left shows the ability to predict the level of the perception of company innovation and productivity as a function of the level of trust experienced by their employees. This relationship comes with a very strong statistical significance.

$$\text{Innovation} + \text{Productivity} = 2.28 + 0.64 \times \text{Trust}$$

Both **innovation** and **productivity** in the company increase 64% as the level of **trust** in that company increases.

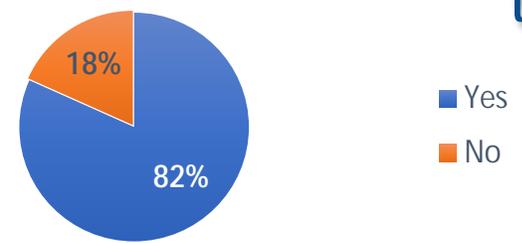
$p=0.004$ to 0.016

Trust Reciprocity



Participants were asked to rank how much they trust their peers and their bosses, and also how much they think their peers and bosses trusted them. Generally, trust was perceived to be reciprocal. In high trust environment, both trusting and trustworthiness appeared to be high (and identical). However, in low trust environment, not only both directions of trust were significantly lower, but also the difference between the two directions was significant. Participants believed that in low trust environment, their peers trusted them significantly more than they trusted their peers. To a lesser extent, the same applied to the trusting relationships with bosses. The overall trust level with a boss was closer to that of a high-trust relationship than to a low-trust relationship.

Do you have a peer that you trust?

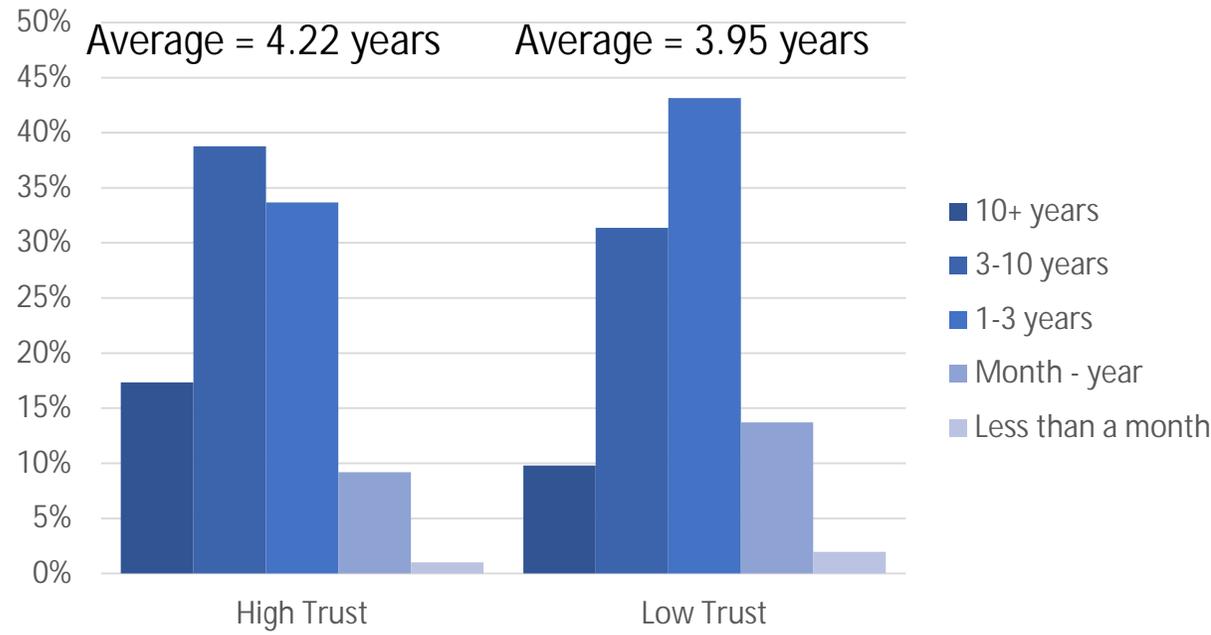


We believe others trust us at least as much as we trust them.

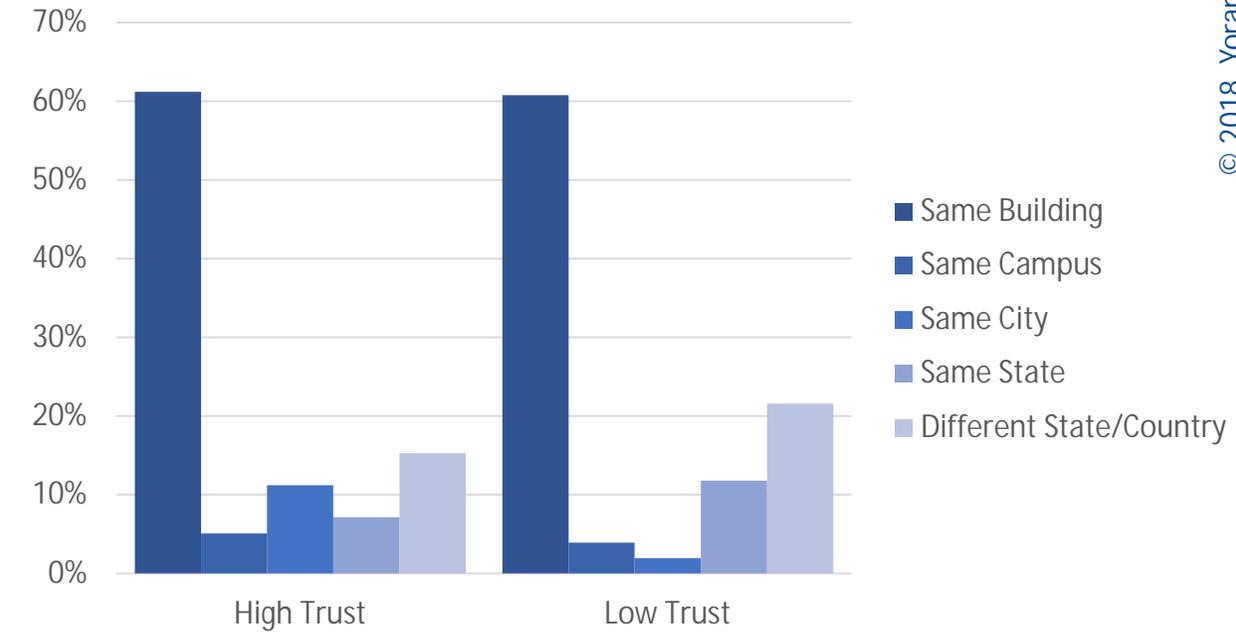
18.3% working in companies with more than 2 employees reported they don't have a peer they can trust



Time together



Co-Location

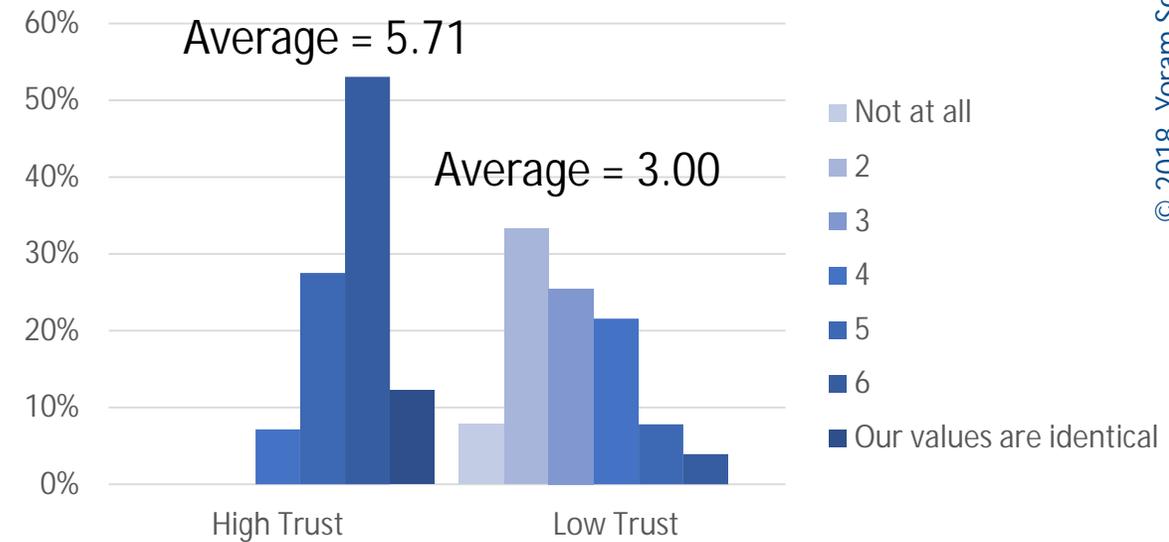
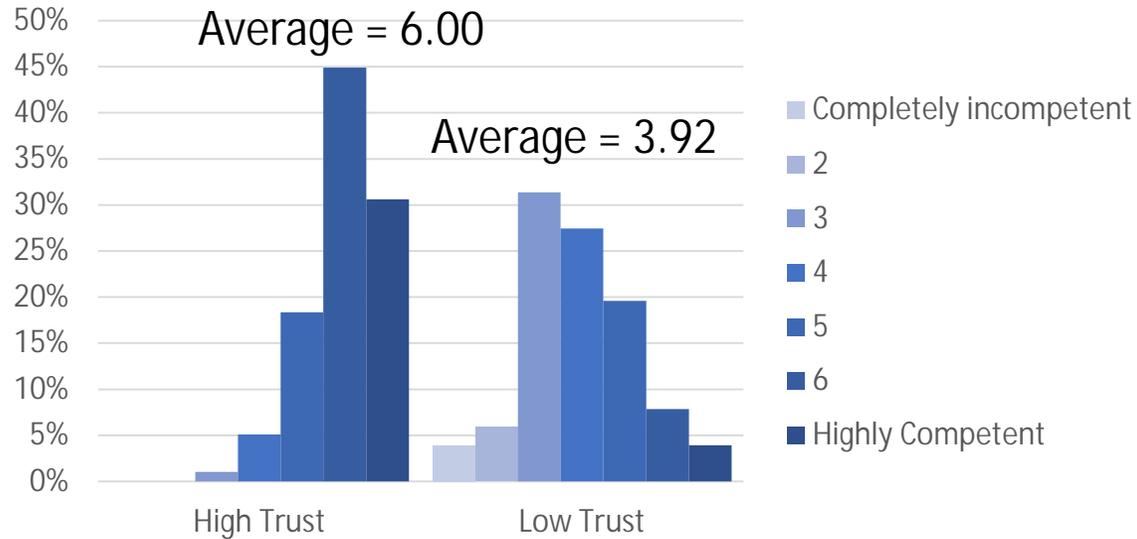


Total time spent together with peers didn't seem to have a significant effect on the level of trust. The average time together was 4.22 years in the high-trust environment, and 3.95 years in the low-trust environment.

The same was true for the co-location factor. The majority of participants (more than 60%) worked in the same building with their peers. However, before you reach the conclusion that remote working is fine, see the results for the intensity of interaction.

Neither time together nor co-location play a major role in developing trust.

Competence & Shared Values

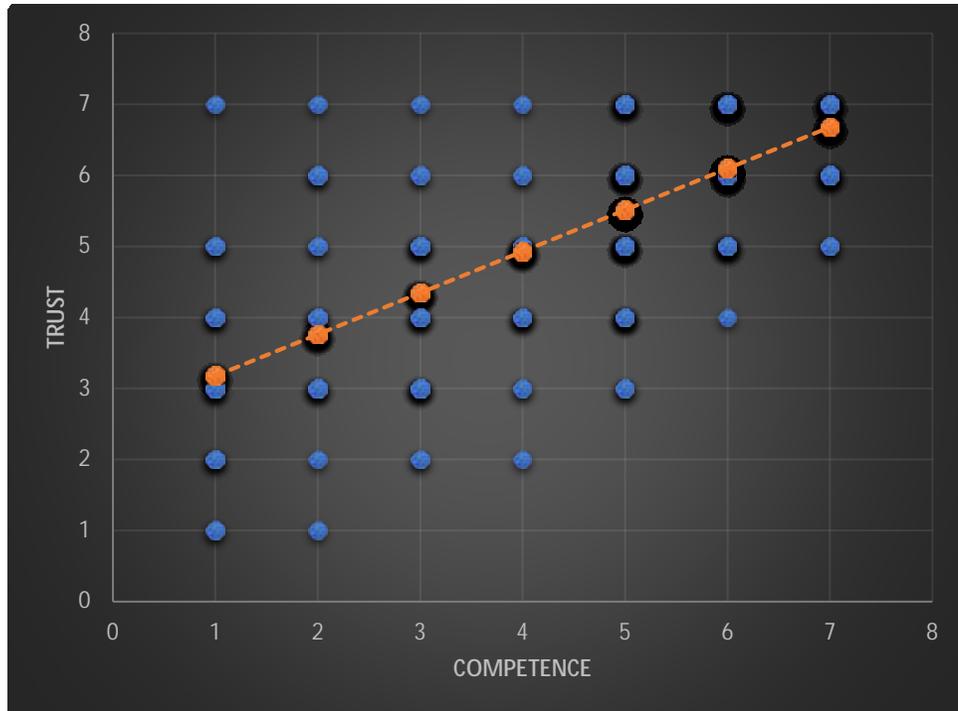


Perceived competence of a peer appeared to be a very significant predictor of the level of trust we extend to that peer. The average competence score in high-trust environment was more than 50% higher (6.00) than the average competence score in low-trust environment.

The difference in the perception of shared values was even more dramatic. The average “shared value” score in high-trust environment (5.71) was almost twice as that in the low-trust environment (3.00).

Competence and Shared Values play major roles in developing trust.

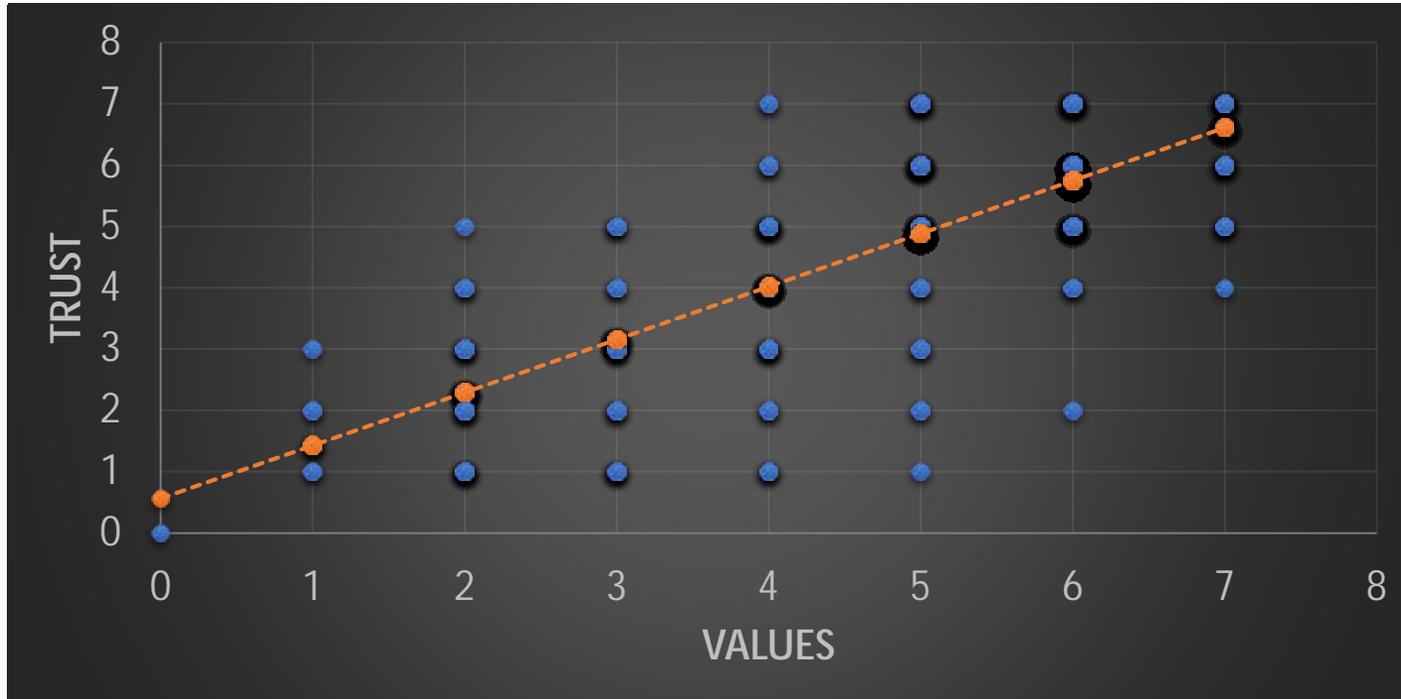
Competence & Trust



$$Trust = 2.59 + 0.584 \times Competence$$

Trust increases 58% as the level of **competence** increases.

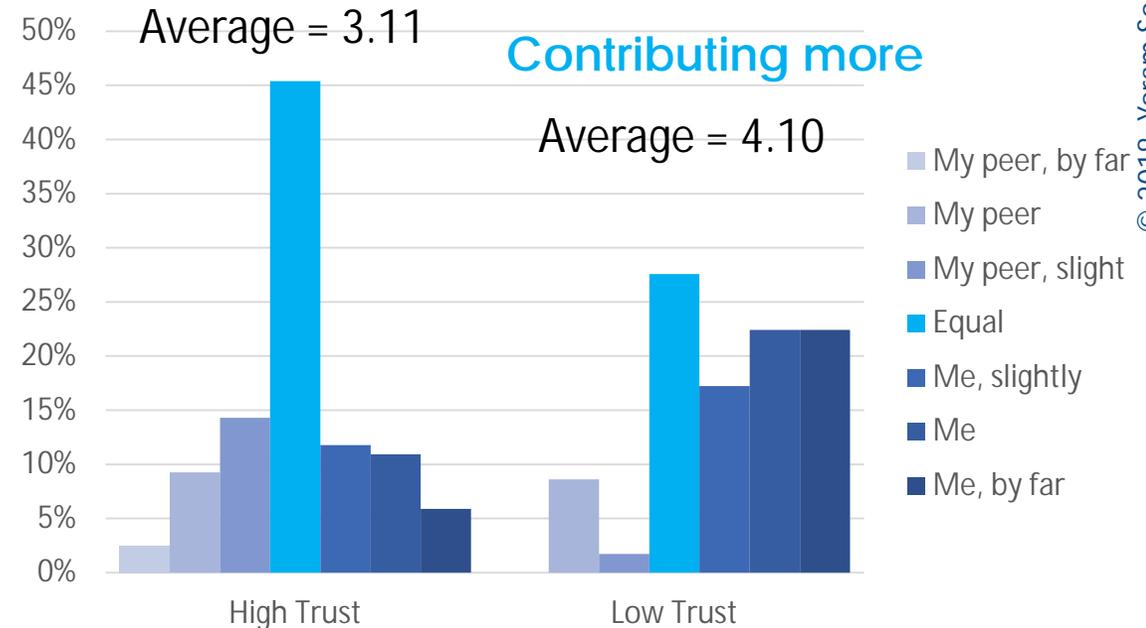
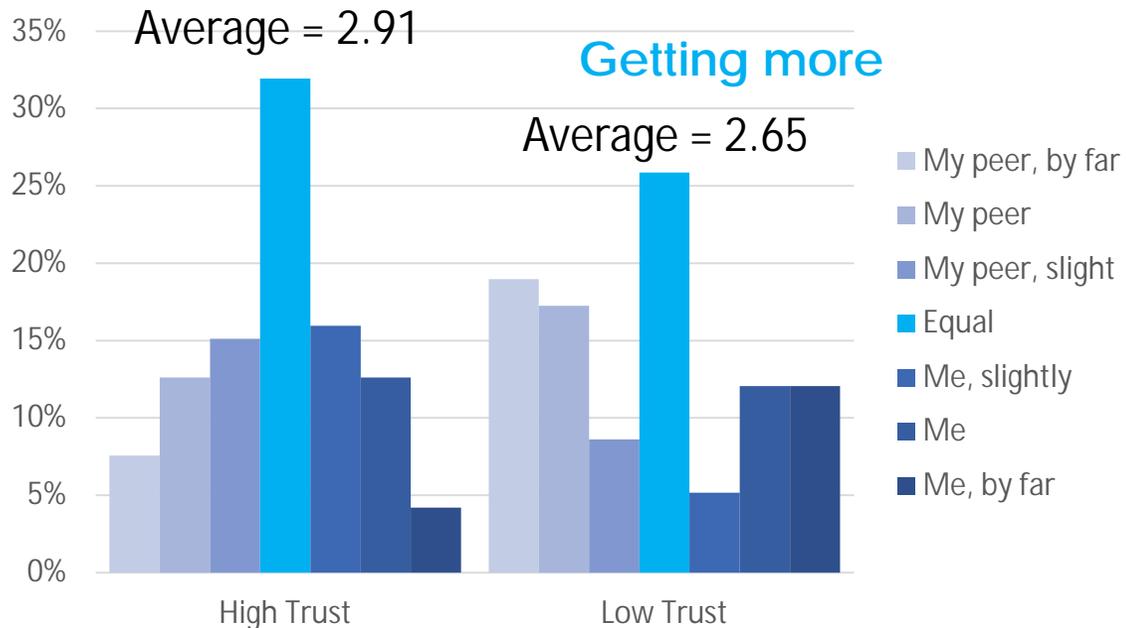
Shared Values & Trust



$$Trust = 0.57 + 0.863 \times Shared\ Values$$

Trust increases 86% as the level of **shared values** increases.

Fairness & Symmetry



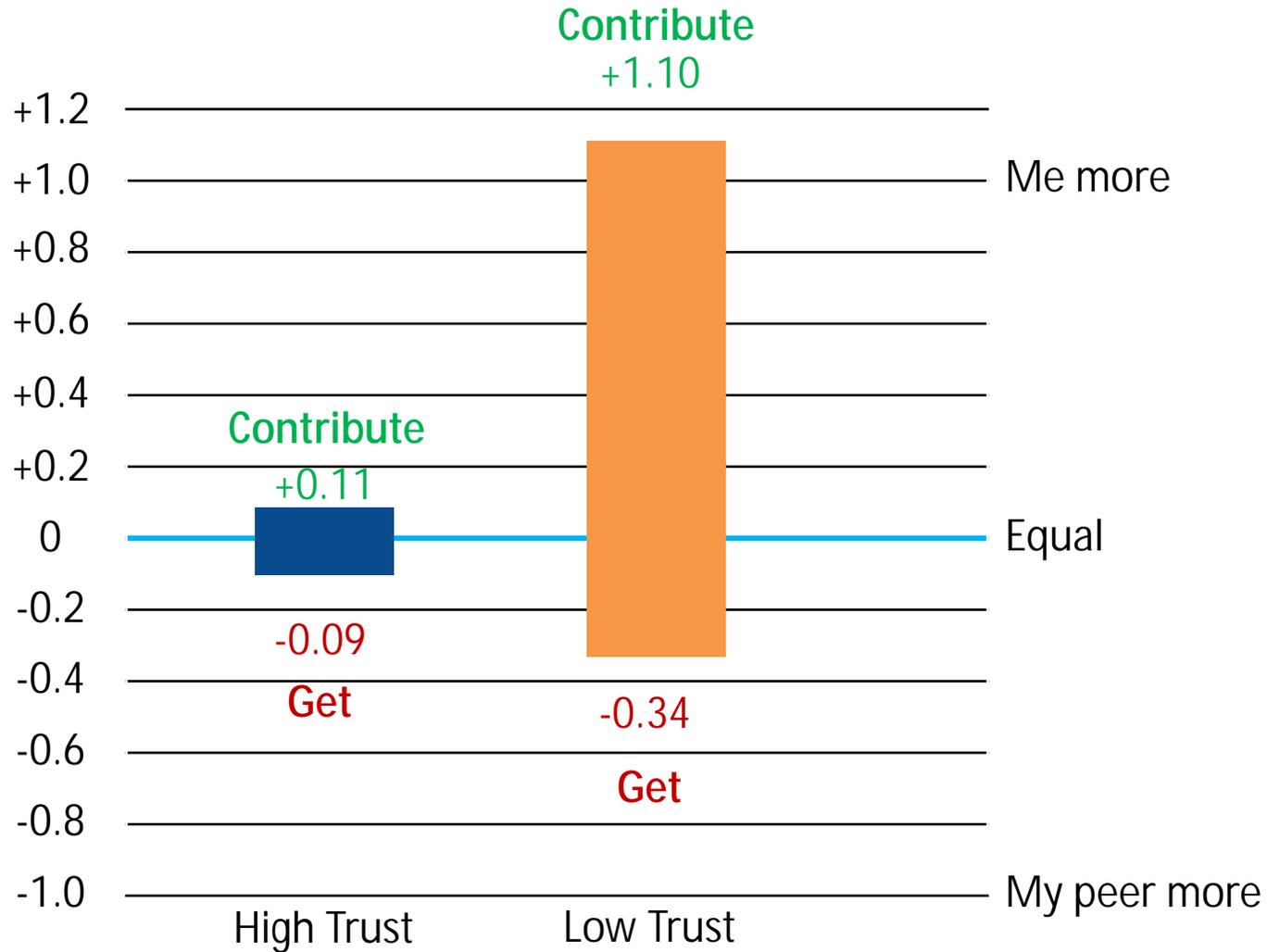
The results for fairness and symmetry provided interesting insights. The first was somewhat expected: in the high-trust relationships the average of “getting” and “contributing” was much closer to one another (0.2 difference in scores) than in the low-trust relationships (1.45 difference in scores). Not surprising, in the low-trust relationships participants believed that they are contributing more than their peers while their peers were getting more than them. In the high-trust relationships, participants believed they are getting very similar to what their peers are getting, and they are contributing very similarly to what their peers are. In fact, the “equal” (light blue) lines are much higher in high-trust relationships (32% and 45%) than in the low-trust relationships (26% and 28%).

Fairness and symmetry in a relationship plays a major role in developing **trust**.



Question: Who is getting more (compensation, support, and/or appreciation), you or your peer?
 Question: Who is contributing more (time, effort, energy, etc.), you or your peer?

Fairness & Symmetry



We always believe that we contribute more than the other person, and that the other person gets more than us.

However, in a high-trust relationship, we believe we contribute only 0.11 (on a scale of 7) more than the other person, and that they get 0.09 more than us.

In a low-trust relationship, we believe that we contribute much more than the other person (1.10), and the other person is getting much more (0.34) than us.

Symmetry and Trust

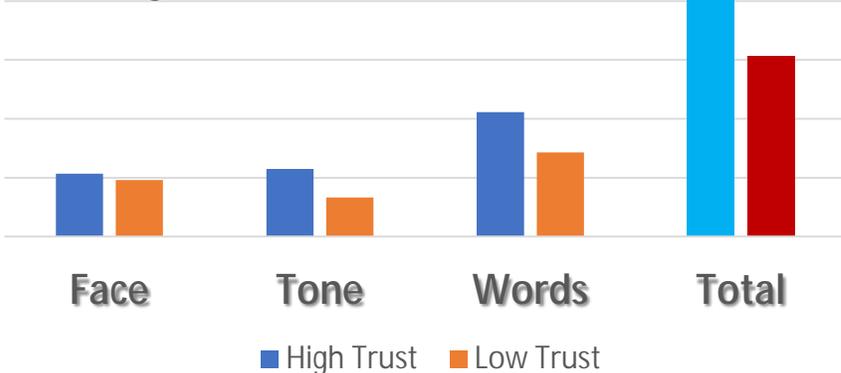


$$Trust = 4.84 + 0.318 \times (Getting\ More - Giving\ More)$$

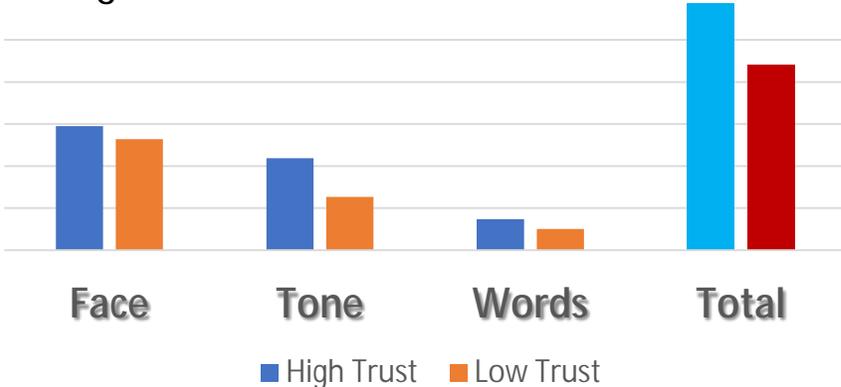
Trust decreases 32% as we believe we are **getting less** and **contributing more** than the other person.

Intensity

Unweighted



Weighted for 55-38-7



The intensity of interactions was measured by the number of times in the past month that the two peers met face-to-face, held phone calls (excluding conference calls), and communicated via email or text messages.

Initially (upper chart), it appears as if the communications through email and text message had the most significant impact on the overall level of communication intensity.

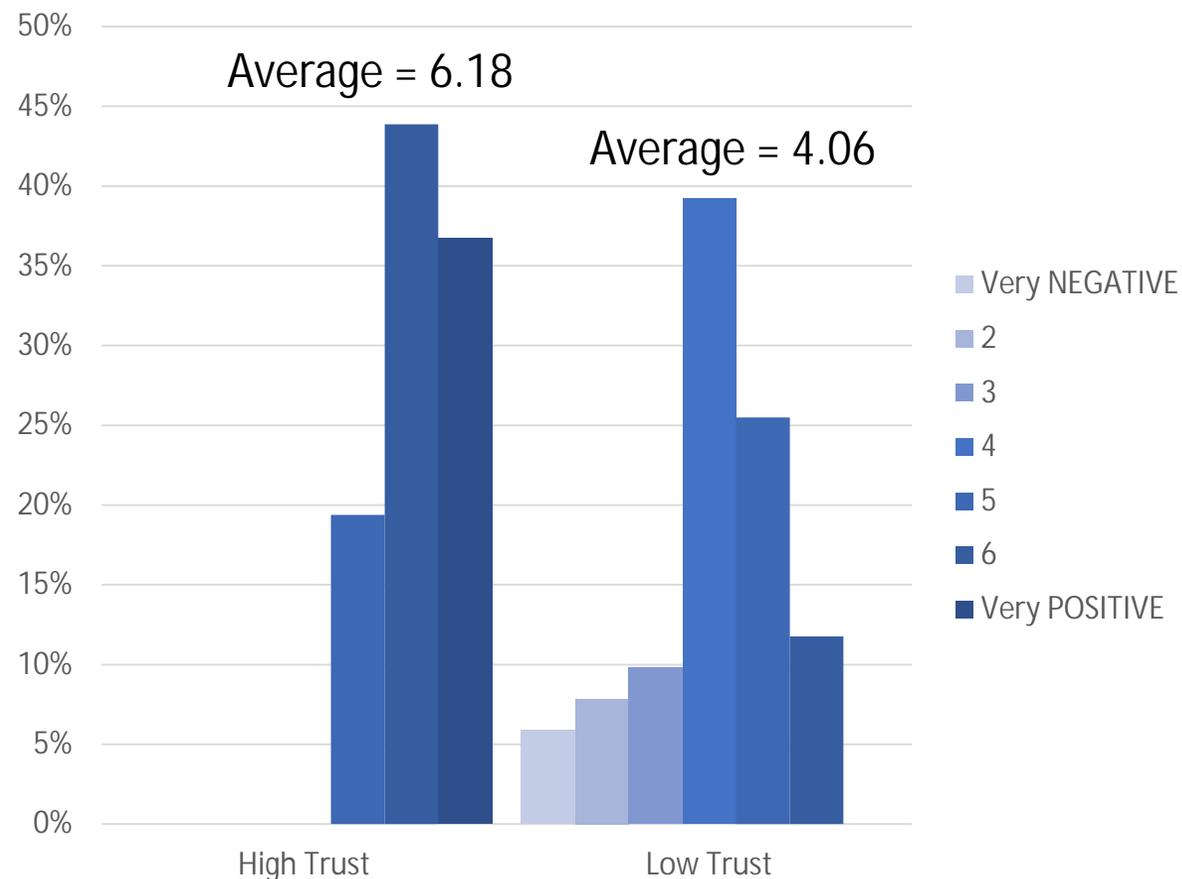
However (lower chart), once weighted for Mehrabian's 55% (face-to-face meeting), 38% (phone calls), 7% (email/text), phone calls seemed to have the biggest impact.

Regardless, the intensity of communications was significantly higher in the high-trust environment than in the low-trust environment.

The frequency of **communications** plays a significant role in developing **trust**.

Question: In the last month, approx. how many times did you meet with your peer (face to face only)?
 Question: In the last month, approx. how many times did you speak with your peer over the phone (not conference calls)?
 Question: How often do you communicate with your peer electronically over email, text messages, and the like?

Positivity



Not surprising, the peer positivity perception was more than 50% higher in the high-trust relationship than in the low-trust relationship. In fact, in the high-trust environment not a single participant ranked his/her peer's positivity at neutral or lower.

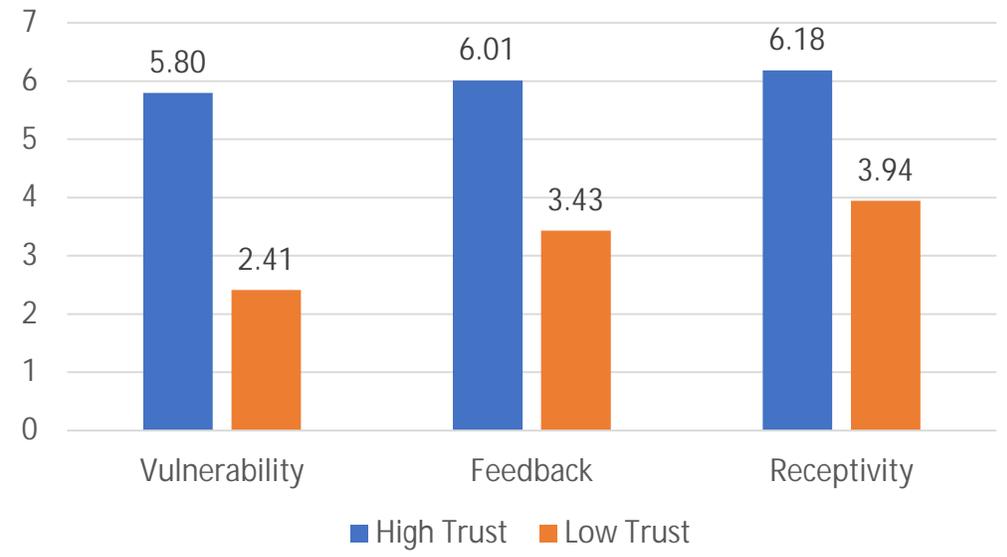
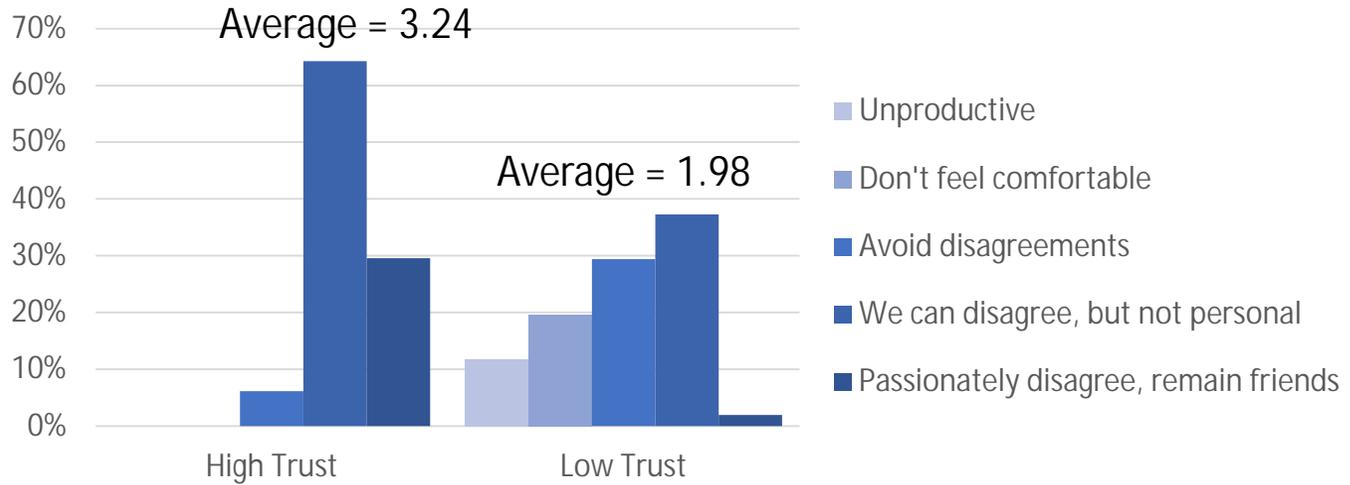
The positivity factor was not adjusted for the Losada/Critical Positivity Ratio.

It is important to note that the positivity measured and reported is not the positivity of the situation, but rather the positivity of the other person's behavior during the interaction/situation. In fact, an adverse situation may play the role of a common enemy that galvanizes the relationship between two people.

Perceived **positivity** of peers plays a major role in how much we **trust** them.



Constructive Disagreement



If there were any doubts that the existence of trust has significant impact on the ability to have constructive disagreement, the charts in this page would eliminate them. In low-trust environment the average ability to have constructive disagreement was 1.98, while in the high-trust relationship the ability to have constructive disagreement was 3.24, or 64% higher. In fact, in high-trust relationships, no participant reported that disagreements were unproductive or that they didn't feel comfortable disagreeing, and only 6% reported that they try to avoid disagreement. 94% reported their ability to disagree without it turning personal, or the ability to passionately disagreeing while remaining friends. In the low-trust relationships, on the other hand, 61% of participants reported inability to, or avoidance of disagreements, and only 39% reported the ability to disagree constructively.

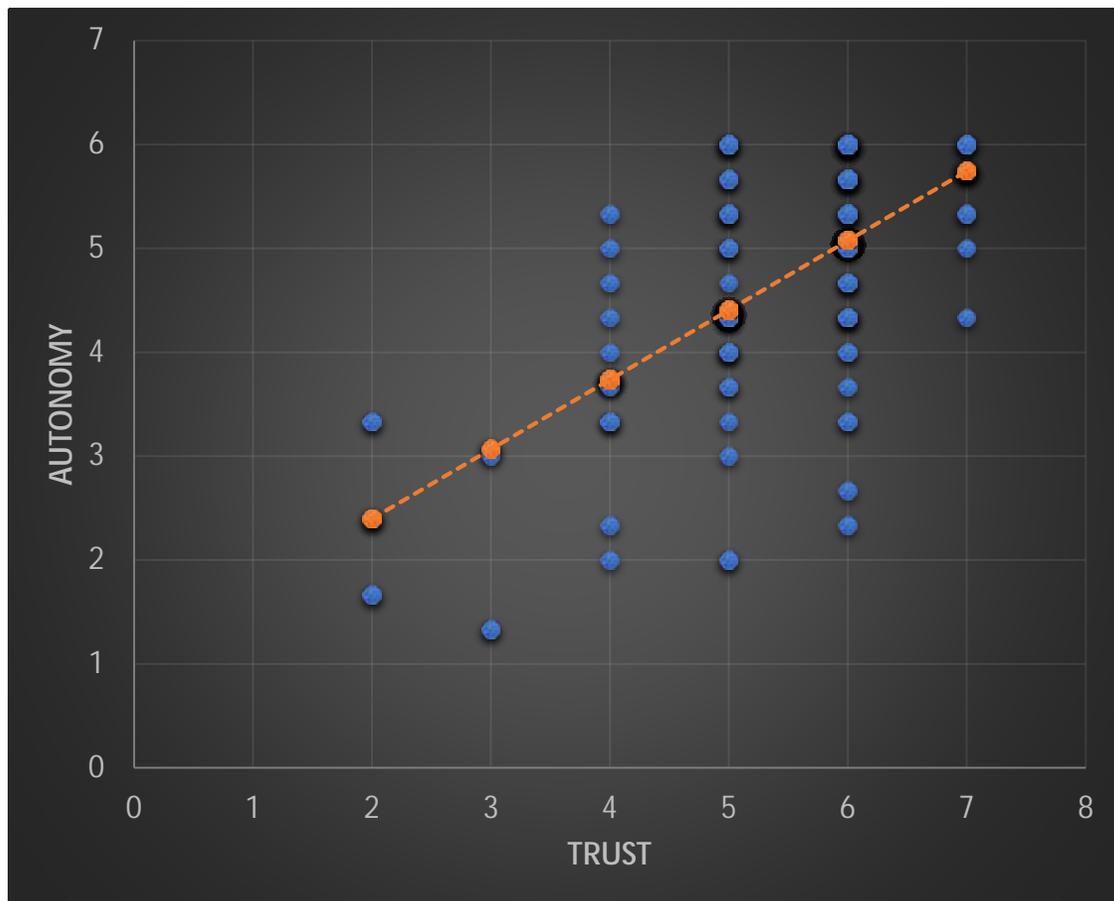
The three foundational behaviors to the ability to have constructive disagreement (vulnerability, feedback, and receptivity) all ranked significantly higher in high-trust relationships than in low-trust ones. On average, those three behaviors were scored 84% higher in high-trust relationships than in low-trust relationships.

Trust results in a higher ability to have **constructive disagreement**, through willingness to be **vulnerable**, provide **feedback**, and be **receptive** to it.



Question: How productive are disagreements between you and your peer?
 Question: How vulnerable do you think you can be with your peer?
 Question: How comfortable are you providing feedback to your peer?
 Question: How receptive are you to feedback from your peer?

Autonomy



A strong correlation (with very strong statistical significance) was found between the trust that was reported between participants and their supervisor/boss and the autonomy they received from that supervisor/boss.

We venture to guess that the cause-and-effect here is between the trust that the supervisor has in his/her employee and the level of trust he/she are willing to extend to that employee. The correlation is so strong, that the level of autonomy can be predicted accurately based on the perception of that trust.

$$\text{Autonomy} = 1.06 + 0.67 \times (\text{Trust})$$

The **autonomy** you get from your boss increases 67% as your boss **trusts** you more.

Summary

- Trust is developed and measured between any two individuals, once in each direction.
- Both innovation and productivity in the company increase 64% as the level of trust in that company increases.
- We believe others trust us at least as much as we trust them.
- 18.3% working in companies with more than 2 employees reported they don't have a peer they trust.
- Trust increases 58% as the level of perceived competence increases.
- Trust increases 86% as the level of shared values increases.
- The more we believe we are getting less and contributing more than another person, the less (-32%) we trust them.
- In a high-trust relationship you believe that you give and get as much as your peer.
- In a low-trust relationship you believe you give much more and get less than your peer.
- The frequency of communications plays a significant role in developing trust.
- Perceived positivity of peers plays a major role in how much we trust them.
- Trust results in a higher ability to have constructive disagreement, through willingness to be vulnerable, provide feedback, and be receptive to it.
- The autonomy you get from your boss increases 67% as your boss trusts you more.



About the Author

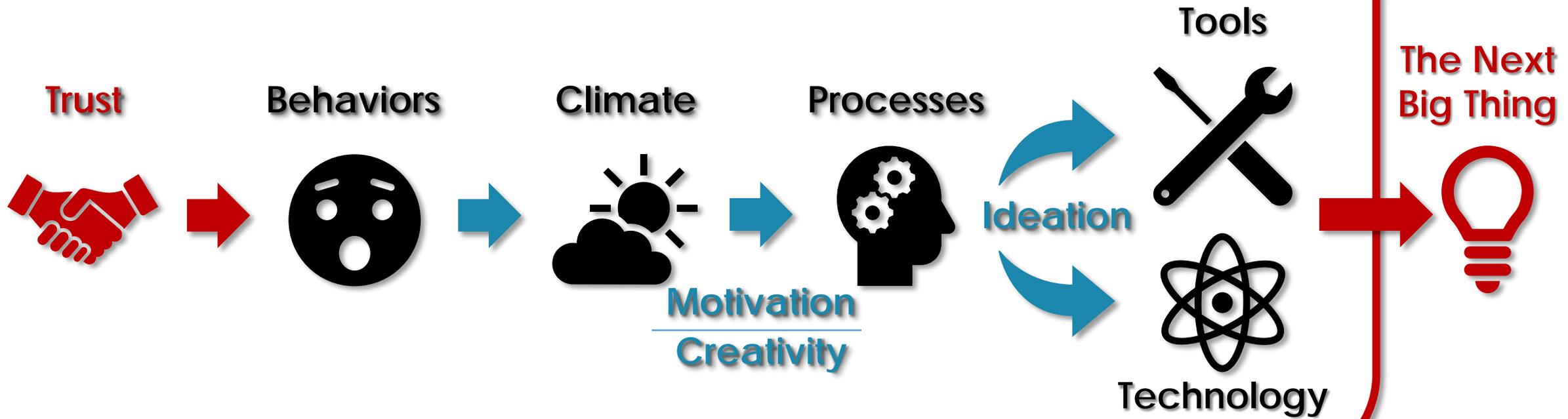
Yoram Solomon, PhD, MBA, LLB, is the founder of the Innovation Culture Institute. He is a passionate creativity, innovation, and teamwork thought leader, and a Professional member of the National Speakers Association. Published 8 books, 22 patents, more than 200 articles, and one of the creators of Wi-Fi and USB 3.0. Named one of the Top 40 Innovation Bloggers in 2015, 2016, and 2017, and was a columnist at Inc. Magazine and Innovation Excellence.

Yoram spent more than a decade studying why people are creative in startups more than in large companies, learning the cognitive processes that lead to generating creative ideas, and earned his PhD for that study. He is an adjunct Professor of entrepreneurship at the Southern Methodist University, the University of Texas at Dallas, and the Hadassah Academic College in Jerusalem.

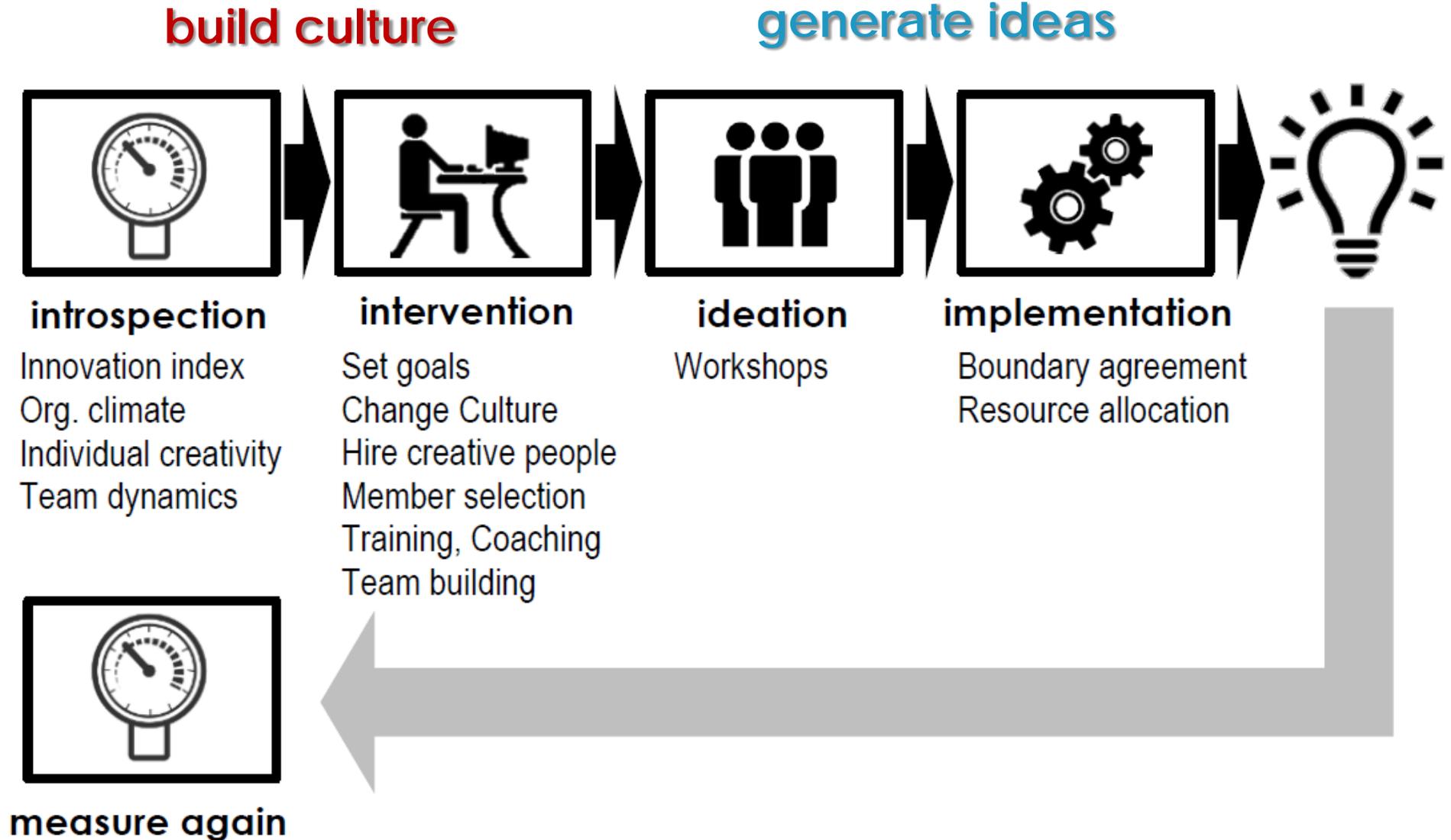
He was the host of **TEDx**Plano 2014, and a speaker at the **TEDx**OakLawn 2018. Elected in 2015 to the Plano ISD Board. Yoram brings his experience as a shooter, serving in the IDF 35th Airborne Paratrooper brigade, and as a USAF CAP pilot.

In 2015, he founded the Innovation Culture Institute, with a mission of helping every company become the most innovation company in the world through building innovation culture and trust.

Innovation Culture



The 5i™ process



"As we are heads down with our daily work, its easy to lose track of innovation and the creative spirit. While many think it's like lightning and uncontrollable, Yoram and his research show otherwise. Yoram came in and engaged our multi-site teams both with science and humor and gave the organization a basis for which to invoke creativity as opposed to waiting for it to possibly arrive. The team truly enjoyed the session as well as left with a set of tools to help in future innovation."

- **Director, Big Data Platform Development, AT&T**

"Yoram's workshop helped us think outside the box. I would recommend the workshop to stimulate the thinking how to create an environment which fosters innovation."

- **Sr. Director, Strategy, Qorvo**

"We walked in to the workshop with unknown expectations and left enlightened with a clear Strategic Intent and set of rules. Dr. Solomon created an environment that allowed us to be open and truthful with ourselves allowing us to understand where we were and where we wanted to be. He helped guide us through the process that allowed us to discover and develop our real strategic intent as well as the rules that we needed to achieve it."

- **Sr. Manager, Product/Process Engineering, DRS**

"I've seen first-hand how Yoram can transform organizations so they are able to predict technology trends, unleash their creativity, and successfully launch new products based on these insights. He is an absolute master at blending real-world experiences with unique perspectives making him the ideal change catalyst for any group."

- **Training Manager, Texas Instruments**

"...gifted thinker and motivator in innovation, strategy, and pushing teams outside the box to drive best ideas. His direct experience and success in the semiconductor and other fast changing industries is a valuable asset to leverage by any company looking to drive innovation. He has the ability to relate to businesses across many fields."

- **General Manager, Transport Business Unit, Qorvo**

"He has a superb command of all major schools of thought on strategic management. He has demonstrated exceptional abilities to lead strategy development and facilitate team activities. He is also a true outside-the-box thinker."

- **Executive Director, Product Marketing, Kodiak Networks**

"... a terrific facilitator. When the company began re-looking at its diversification strategy, Yoram was instrumental in setting the agenda for the discussion, hunting down relevant research information for the team to study beforehand, and facilitating the entire session. Through his efforts, the company's diversification strategy took shape, and I am not certain we could have done it without him!"

- **Chief Executive Officer and Chairman, Interphase**

"... enthusiastic and inspiring communicator who has an enjoyable sense of humor which permeates throughout his presentation. He keeps the listener engaged at all times with his thought provoking activities, stories, and examples. Based on Yoram's presentation, the audience was motivated to immediately apply successful team building principals and knowledge gleaned within their areas of influence to make a greater impact."

- **Chair, Community Nonprofit Excellence Workshops, Junior League of Collin County**

"... a brilliant public speaker, who is both engaging and informative. Dr. Solomon's inspirational nature and innovate thinking processes present a cutting edge to thinking in the fields of education and creativity. I would strongly recommend Yoram to be a speaker on a wide range of topics, because is width and depth of knowledge in the areas of inspired thinking and education."

- **Executive Director, Bridge Builder Academy**

"Yoram developed a clear concise strategic vision for our wireless development. He was between 2 to 5 years ahead of the marketplace. Yoram has a wonderfully strategic mind."

- **Chief Financial Officer, PCTEL**

Preparing the workshop was easy, it was like they knew exactly what we needed. I am impressed with the level of knowledge, commitment, and incredible easy way to communicate. Yoram helped us see ourselves from a different point of view, analyze the opportunities, and use our creativity to help us to move to the next level.

- **Performance Manager, The Dannon Company**

