

## The Current State of Innovation

"If it's not measured, it's not managed"- Peter Drucker's famous statement has become ubiquitous in the management world, and more relevant each year as managers gain access to unforeseen amounts of data, insight and measurement tools. In return, senior leadership expects measurement and proven return on every program. For sales pipeline questions, that might seem like a simple ask- but what about more intangible outputs like innovation? We know innovation is essential for a company to remain competitive, particularly in today's rapidly evolving technological landscape.



Companies need to be on the forefront of invention as they work to discover the next breakthrough medicine, computing product or consumer product. As the **Head of R&D and Analytics**, Humanyze **Chief Scientist Taemie Kim** says her team focuses on creating value from their product through innovative feature updates based on customer feedback. But how can R&D teams know if they are actually being "innovative"? What does it look like, and what metrics are available to track progress? Once the terms for measurement have been established, how can you build a team to ensure success? For this paper we interview leaders in R&D and innovation to get their take on this abstract, but essential, quality.



Leaders are increasingly recognizing innovation's importance, with **85%** of leaders ranking it as "very Important" and a full **64%** ranking it equally to operational effectiveness in their company strategy; but recognizing its value isn't enough. Despite this recognition companies struggle with how to implement changes to their innovation processes- almost **60%** admitted they have no formal innovation processes within their organization and **54%** of executives struggle to align innovation strategy with the business' goals<sup>1</sup>. This lack of process is having a measurable impact- the US Chamber of Commerce Global Intellectual Property Center ranked the US 12th in patent system strength, down from the number 1 ranking almost every vear prior<sup>2</sup>.

Today's digital society means that everything is measured, tracked, iterated, and then measured again for efficacy. If a disruptive technology is financially successful one could consider the innovative process a success but there would be little proof of process for the team to repeat the process.

"Research is digging in multiple directions, and if one of them happens to be a gold mine then we could call that innovation" says Kim. It's unsurprising then that over half of company leads admit they struggle with aligning innovation strategy with business goals. As an abstract metric innovation can be slow to show the return that business leaders are often looking for.

"For us there's 2 lower hanging measurement units- what new ideas have been developed or prototyped, and are we able to product-ize them? The other measure is publications and papers- but that can be a slow metric, as it can take months or years for an idea to go from creation through research and into publication."



### -Taemie Kim, Chief Scientist

## **Can't We Just Give Them A White-Board?**



When managers look at methods for encouraging creativity many of them get stuck. Beyond brainstorming sessions some are confused, or doubtful of the idea that creativity should be measured at all. After all, "creativity" and "closely managed" aren't exactly synonymous. Many creative teams are given the end goal (usually measured by the aforementioned business KPIs) and a timeline, then told to produce an output based on those qualifications. This can leave managers of these teams struggling to identify the processes and teams that are successful (and thereby repeatable). Emerging research is pointing towards the need to remove the 'standard' measures of innovation and instead look to the organizational culture and structure that allows innovative processes to flow.



For his PhD research, **Daniel Olguin Olguin** looked at how team interaction patterns influence performance.

"We looked at things like *centrality*\* and other network metrics and tried to determine if those were predictors of team performance as well as innovation, creativity, and productivity."

Using wearable sensors that identified when team members were collaborating both internally and with other teams in the organization, Olguin Olguin and his team were able to identify informational flow patterns that correlated to successful outputs.

"What we found was that centrality was highly predictive of team innovation. [Managers] need to better understand how teams collaborate as well as how much they communicate both internally as well as externally with other teams, and be able to make interventions to the way their teams are structured or the way they collaborate in order to either incentivize certain behaviors that we know are indicative of high performance or discourage patterns that could reduce performance."

### Centrality

How much you connect with others in your workplace.

#### **High centrality:**

You connect disparate groups, information flows through, you are exposed to more knowledge-transfer, but also have potential to be a bottleneck.

#### Low centrality:

You may be disconnected, disengaged.

## Example behaviors that may increase centrality:

- •Acting as a liaison between teams
- •Acting as your team's representative in cross-team projects.



**Cross team collaboration** shows value in repeated research studies; "At a more micro level, this entails cross-boundary collaboration, meaning that no enterprise–and no person or element within the enterprise–operates in a vacuum. The more we can include–and the more we can connect–the people within an organization, the greater we can increase our overall capacity."<sup>3</sup>

Creating a culture where collaboration is **not only encouraged but expected** helps managers open their team to new ideas- remember "**Two heads are better than one**"? This thinking amplifies as the team grows. Inventions aren't created in a silo - they often come from the input and feedback of a team, and often as the result of several people working off each other's ideas.

### Given this input, what can leaders do to ensure success?

A few steps to create the ideal innovative environment:



**1. Remove your company's org chart.** We all know the standard org chart that flows from the CEO at the top, through the VP's to the directors and ends somewhere around a mail room intern. We also all know that this isn't actually how information and ideas move around a company (if this is how your company insists on communicating may we shamelessly suggest a visit to the Humanyze careers page?\*) By putting everyone on the same "level" and asking each team member for equal contribution you open the door to an influx of ideas from different perspectives. When everyone at the organization feels heard & valued they are more likely to share ideas and provide feedback, which is where collaboration happens.

**2. Encourage diversity.** Building off your free flowing organizational structure is the need to hire and build diverse organizations. A cross functional team will bring new ideas and perspectives. The application of one function's methodology could be the solution that another team has been searching for.

**3. Identify how your team works.** Communication and collaboration are key to innovation, but are you sure that your teams are being given ample opportunity to join forces? Do you know if they are looking outside of their 'bubble' for ideas and seeking input from other teams? Even within the team some members may be so focused on heads- down work that they rarely interact with others and as a result miss out on valuable idea generating conversation.

**4. Encourage failure.** Wait, what? Think about it: most innovations fail. Most ideas that are thought of never take off. Not exactly encouraging, but we need these failures to encourage the feedback that creates successes. If team members are in a situation where this is accepted as a fact, they feel encouraged to bring forward more ideas and explore new territories. More input means more ideas and more opportunity to find that breakthrough.

**Innovation** doesn't happen in a box, and it doesn't happen over night. Team leaders need to make sure that team members are set up for success if their goal is to drive innovation. "The most innovative companies in the world view establishing and maintaining a creative work environment as one of three primary core capabilities that foster innovation."<sup>3</sup>

An environment where employees are encouraged to collaborate, communicate and given the freedom to take risks gives teams the opportunity to **innovate** and **create**.



# Is your organization's environment designed to optimize innovation?

Find out today.

## **About Us:**



Humanyze helps companies make more informed organizational decisions. Born out of the MIT Media Lab, Humanyze measures digital and face-to-face corporate communication data to uncover and improve how work gets done.

Our world-leading **Organizational Analytics** platform is used by top Global 1,000 companies to answer specific business questions around *organizational health*, *business process optimization*, and *workplace strategy*.

Learn more at https://www.humanyze.com

## **References:**

**1.** CB Insights, The State of Innovation Report (2018.) <u>https://www.cbinsights.com/re-ports/CB-Insights\_State-of-Innovation-2018.pdf</u>

2. <u>https://www.uschamber.com/press-release/us-chamber-releases-sixth-annual-international-ip-index</u>

**3.** Hoque, Faisel, Can Innovation Actually Be Measured? (2018) https://www.fastcompany.com/3015229/can-innovation-actually-be-measured