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Applied Science and Humanities Department

THE MISSION

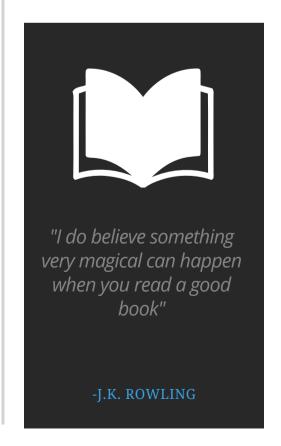
The department is carrying a mission to create and disseminate the knowledge and techniques in the intellectual areas of Engineering and other core areas of Applied Science and Humanities for the betterment of Ecosystem.

To inculcate the importance of Applied Science and develop a natural flair for Engineering and Technology which in turn shall mold students into a competent professional.

THE VISION

The Department of Applied Science and Humanities committed to dynamically integrate the components Science, Humanities Engineering to groom students to transform them as globally acknowledged professionals.

To keep pace with fast developing scenario of technology and socio economic environment while planning to develop a world class technical institution.



How data is Transforming Healthcare, Criminal Investigations and football.

From disruptive culture to out-of-this-world inventions, this issue celebrates the innovators and their relentless need to question the way things work.



How Meta Is Using AI To Understand How The Brain Works -by Will Calandra

At the cutting edge of healthcare research, the unique ability of computers to process not only large volumes but diverse types of information continue to reveal exciting insights about our anatomy.

For example, in their recent publication, Meta's AI Research team launched a big first step in their initiative to model brain activity using non-invasive methods. While neuroscientists typically must enter the skull to place sensors on the brain to record electrical activity, data science offers the capability to instead take data from retroactive brain recordings to project a model of the brain for research.

In this case, Meta paired audio with brain activity to train a model which recognizes patterns from the brain's response to common speech sounds. Think of the implications of such a project: How Police Work with Google to Obtain Cell Phone Location Data for Criminal Investigations — by Spencer Karp

Ever wondered what the police can really do with your phone data? Ramon Padilla and Javier Zarracina take you inside that process through an interactive visual story. Police cannot simply take anyone's phone data unless they have probable cause to believe they were at the scene of the crime.

Padilla and Zarracina take you through the process of how detectives develop a geofence around the scene of a crime and use anonymous location data to identify suspects. Only after they analyse this data from companies like Google can they obtain warrants on specific cell phone data for their desired suspects.

This case was solved thanks to mobile phone data obtained from Google!



DeepMind is Using AI to Revolutionize Football — by Sameer Tirumala

Tactics have come to the forefront of modern football, but so has data. Players wear all kinds of sensors and commentators read off countless statistics of how teams and players perform, but can this be used to give a team an advantage on the pitch? Researchers and DeepMind and Liverpool Football Club collaborated to explore the possibility of finding patterns and hopefully predictive tools to explain the uncertainty of the beautiful game.

A researcher who authored the paper cautioned that these tools should assist managers who bring their seasoned experience and human perspective, but one particular application is compelling. Perhaps the most controlled event possible during a soccer match is a penalty — 1 player taking the shot against the other keeper.

This paper was able to cluster players by their playstyle and from that predict where they would shoot their penalties. Findings could be used to prepare a goalkeeper to save more penalties or inform a field player on where he should aim to improve his odds. Along with player intuition, Al-based prep like this could decide a nail biter match!



COMPLIED BY: Jenisa Dsilva

SOURCE: https://medium.com/hoyalytics/in-the-news-how-data-is-transforming-healthcare-criminal-investigations-and-football-9341a7697e30

The Importance of Mental Health Awareness in Tech

"You don't have to struggle in silence. You can be unsilent. You can live well with a mental Health Condition as long as you open up to somebody about it"
-Demi Lovato



Mental health and employee retention

Tracy goes on to share results from a study by Catalyst that shows empathy contributes massively to employee wellbeing across multiple aspects. The study found that when employees feel their leaders are empathetic of their current situation, they are more likely to feel innovative, engaged, and included. Empathy is effective across the board as these metrics came from both female and male responders from multiple cultural backgrounds. As the connection between careers and mental health continues to be studied, both employees and employers are taking note of the importance of how their work lives directly connect to their mental state. With the current talent shortage in software development, employees are much more willing to seek new opportunities if they aren't happy in their current jobs. As Tracy told us, "We're seeing that mental health is viewed as being much more strategic. Because we know that employees are differentiating where they might work based on a company's or an organization's approach to wellbeing and mental health."

While there are multiple ways to approach the questions above about the connection between mental health, productivity, and employee satisfaction, one pivotal factor for employers is the concept of culture. Defining culture is different for each organization but as Site Reliability Engineer Ryn Caniels writes for Increment, "Many organizations use the word 'culture' when talking about their shared principles, but this is largely theory; culture is what happens in practice."

MENTAL HEALTH IS
JUST AS IMPORTANT
AS PHYSICAL HEALTH.
REMEMBER THAT.

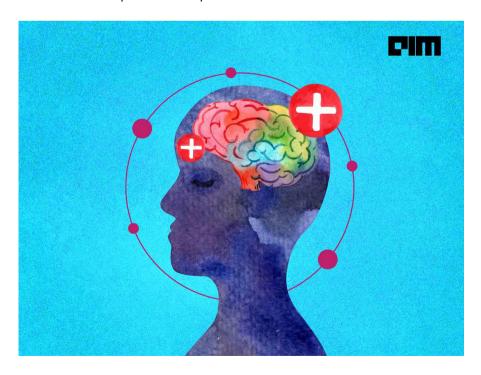
Those are good, but what's more powerful is to link people through tasks and projects. where we share a common goal. We start to work together on something that we both care about and we can better understand our roles and what makes us a team as opposed to what separates us."

Addressing mental health in tech

The self-isolation caused by Covid-19 and the new reality of working from home has created new obstacles for both org leaders and their employees. Numerous questions have arisen from our lack of in-person connectivity:

- •How do we discuss mental health in the work setting?
- •What signs should managers look for and when is it appropriate to discuss mental health with employees?
- •How do we track seemingly unmeasurable data that may positively or negatively be affecting team members?
- •How should managers adjust their leadership styles to facilitate healthy change?
- •How can we stay connected and remain engaged?

These questions, and countless others like them, are challenging to answer but not impossible. One all-encompassing tool that every tech leader can take advantage of is empathy. In a recent piece written for Forbes, Dr. Tracy Brower notes, "As we go through tough times, struggle with burnout or find it challenging to find happiness at work, empathy can be a powerful antidote and contribute to positive experiences for individuals and teams."



COMPLIED BY: Jenisa Dsilva

SOURCE: https://www.pluralsight.com/blog/platform/mental-health-awareness-in-tech

Mental health is an ongoing campaign

Assuring that your employees have a positive outlook on both their own work and how it impacts business goals has been proven to be beneficial on multiple fronts. Studies show that when employees feel fulfilled, they are more productive and more likely to stay at the organization. We also know that upskilling current employees is far more cost efficient than hiring and training new employees to do these jobs. Also, on a basic human level, we should care about the people we work with. We should want to know that they're happy and healthy.

Fostering healthy mental wellness for employees benefits everyone across your organization but it's not a task you can check off and be done.

Thus, Mental health matters and fostering a healthy culture of engaged technologists is essential to the ongoing success of your organization, the sustainability of your teams, and the personal and career growth of your employees

What the Great British Baking show teaches us about teamwork in software development



In the ten-plus years that "The Great British Baking Show" has been on-air, it's inspired millions of people around the globe. Regardless of whether you bake bread daily or if you don't even want to risk following a recipe from Nestle Tollhouse, the show will happily welcome you to their famed tent for an hour of good times and soothing vibes. At its core, the show is hardly revolutionary. Talented cooks come together in a competition and their creations are judged across various metrics like taste and presentation. "The Great British Baking Show" didn't invent competitive cooking shows, but it might be the best example of them. What sets it apart isn't the quality of the food made—although the results are often stunning—but rather the spirit of the show itself that constantly inspires me. And it's left me thinking a lot about software development and creating a healthy environment. I'll explain.

Bake Off's baked-in teamwork

The secret ingredient (yes, I'll be doing puns in this post) of "Bake Off," as it's lovingly known, is the feeling of camaraderie and teamwork that is peppered throughout. It's a competition show, so there will always be a winner at the end, and one baker ends up going home after each week, but in every episode, you'll see the bakers helping each other if they need extra hands or offering constant encouragement to one another.

The hosts and judges walk around the tent where the competition occurs, breaking the tension with jokes, compliments, and light-hearted quips. The show takes place over several months, so the bakers end up building close relationships and frequently shedding tears of sadness every time someone must leave at the end of an episode.

A Recipe for A Healthy Tech Team

Just like there are countless ways to make a perfect tarte, there are also endless ways to build a thriving tech team:

- Much like the hosts of "Bake Off" stop by each baker's station to check in, leaders should connect with their employees to see how they're feeling and make sure they have everything they need to thrive. This is especially important in the world of workfrom-home.
- Provide cross-team collaboration opportunities to strengthen bonds and allow unique ideas to form by pairing unexpected team members together on projects.
- Set up a Coffee and Tea slack channel where two random people get paired up every week for a fifteen-minute chat.
- Schedule frequent hack-a-thons and brainstorming sessions where new project ideas have time to proof.



In the lightning-paced world we work in, it might feel challenging to take time to do these things, but they are key to creating happy employees who feel connected to their work and the organization.

As technologists, we know that culture isn't a singular thing you can simply fold into an organization in one day. It takes patience and practice, but it's worth it.

By showing your team members you care about their wellbeing as well as their work, you create a space for richer communication. Adding compassion to your spice rack of leadership tools can only help improve the satisfaction of your team.

COMPLIED BY: Jenisa Dsilva

SOURCE: https://www.pluralsight.com/blog/teams/the-great-british-baking-show-and-teamwork

It is time to reduce employee fears, concerns, and confusion by implementing an effective business communication strategy.

"The single biggest problem in communication is the illusion that it has taken place.

~ George Bernard Shaw



I'm sure we've all had times when we thought we sent an important email or text, but it turns out we never hit send. That's not uncommon. However there is a difference between making this mistake in our personal lives and making careless communication mistakes a habit in the workplace.

EDITED AND COMPLIED BY JENISA DSILVA & MARINA THOMAS STUDENT COORDINATORS: GATI SHINDE AND SANKET SHIRKE

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- 1. Employees often spend up to two hours a day (which equals one quarter of the work week) worrying and gossiping.
- 2.55% of employees say their benefits materials are neither clear nor comprehensive.
- 3.33% of workers are worried their pay will be cut; 30% are worried about getting laid off; 30% are worried their hours will be cut.
- 4. When there are more questions than answers at work, the consequences are uncertainty, frustration, rumors, and lowered productivity.

Contributed by: Gati Shinde

Source:

https://blog.vingapp.com/ 5-surprising-factsinternal-businesscommunication