

Harnessing Growth-Mindedness to Enhance Organizational Effectiveness

Jonathan Lenchner¹, Anna Topol¹, Mariusz Sabath¹,
and Laura Challman Anderson²

¹IBM Research – Yorktown, Yorktown Heights, NY 10598, USA

²IBM Research – Almaden, San Jose, CA 95120, USA

ABSTRACT

We consider the organizational and individual benefits of implementing activities focused on increasing employee growth mindedness within a global Fortune 500 organization, with the objective of enhancing organizational effectiveness and employee retention. Growth Mindset Theory, pioneered by Stanford psychologist Carol Dweck, focuses on promoting an environment of continuous learning and openness to growth and change. Mindset theory, more broadly, posits that there are two essential mindsets, or frameworks, from which we operate: a “fixed mindset” where one believes that ability is predominantly innate and a “growth mindset where one believes that ability is in large part learned. We examine the dynamic of instilling a growth mindset within an organization, and the activation effect of injecting growth mindset-focused activities within a larger employee engagement.

Keywords: Growth mindset, Employee engagement, Workplace culture

INTRODUCTION

We examine an effort to shift the mindsets of global Fortune 500 organization employees from being “know-it-alls” to a humbler frame of mind that the leader of our organization calls being “learn-it-alls”. The initiatives, focused on both the individual and the organization, target key behaviours identified by Stanford Motivational Psychologist Carol Dweck in her Growth Mindset theory (Dweck, 2016). These interventions were set in motion in 2020, resulting in the formation of a Growth Mindset team who created a set of activities to foster growth mindedness throughout the organization. The key questions addressed are:

- How can an organization, counted on for their deep knowledge, shift their mindset to one of greater humility regarding knowledge?
- How does a focus on growth mindedness and employee engagement address the challenges in today’s workplace?
- What are the measurable impacts attributable to activities focused on growth mindedness and employee engagement?

OVERVIEW

According to Carol Dweck, a “growth mindset” is associated with the belief that one’s talents can be developed through hard work, good strategies and

input from others, rather than being innate gifts (Dweck, 2016). The opposite of having a growth mindset is often referred to as having a “fixed mindset”.

Misconceptions about growth mindset abound. When introduced into our own organization we encountered some common obstacles: some of our colleagues brushed it off, saying they already had such a mindset, while others dismissed the notion of “growth mindedness” as pop-psychology without a concrete scientific basis. Indeed, there has been some amount of popular press challenging the Growth Mindset theory in this regard. (Bennett, 2022). Thus, the process of initiating a perceptible shift in our organization was not an easy one. People in an organization must ask themselves about the nature of success: Is there more success in learning something new, or proving how much, you already know?

The dilemma about whether there is more “success” in learning something new or proving how much one knows has been called a “knowledge worker’s prisoner’s dilemma” (Brodie et al., 2007): a dilemma between sharing one’s knowledge with others or hoarding it, in the belief that knowledge is the source of value in our “information economy”. Taking the high road in both our case and in the knowledge worker’s dilemma requires a certain amount of humility. We might also call it the “student’s dilemma.” Often students are in a situation where they do not understand the teacher. Is it better to speak up and ask a question to learn as much as possible (but at the risk of looking foolish) or to remain silent?

One societal and organizational dynamic, however, that is helping us all to lean toward the “growth-minded” behaviour is the need to continually learn. We intuitively know that more learning is expected every day, and most organizations place learning new skills in performance evaluations as a top priority.

We now examine the literature on these topics, the practical dynamics of coupling employee engagement programs with growth mindset interventions, and the outcomes realized. We will discuss activities aimed at the growth mindedness of the organization: bureaucracy busting, employee-led learning, and engineering excellence, as well as those of benefit to individual employees, and their impact.

IN THE LITERATURE

Growth mindset: “..the beliefs people hold..and how these beliefs can affect their motivation, achievement, and well-being” (Dweck, 2019, p. 21), was first pioneered by Carol Dweck (2014, 2016) focusing on interventions impacting academic achievement, mental health, and social functioning. Growth mindset studies have continued in academic/learning settings and have also expanded to a wider context by other researchers, including peer review (Cutler et al., 2022), leadership development (Dweck and Hogan, 2016); and corporate settings (Dweck, 2014). Central to fostering a growth mindset are creating and delivering interventions which (1) positively influence one’s beliefs, and (2) influence behaviours toward positive outcomes. Microsoft’s growth mindset program (Dweck and Hogan, 2016) emphasized learning and creativity and deployed annual hackathons, support for

high-risk projects, augmenting the traditional talent program with a broader review of the potential of employees across the organization (Dweck and Hogan, 2016). The outcomes of these interventions included movement of employees into expanded leadership roles. Han and Stieha (2020) identified three categories of growth mindset initiative impacts: individual-level outcomes (e.g., work engagement), dyadic level outcomes (e.g., supervisor-employee) and organizational-level outcomes.

Employee engagement (Kahn, 1990; Anderson et al., 2021; Andrew and Sofian, 2012) is another concept that is important in organizational development, and which has continued to be an active area of research and exploration for the past 30 years. Strategies to reinvigorate the organizational workforce have been of particular interest after the pandemic (Hassan, 2023; Fulmore et al., 2023; Iddagoda, et al., 2023; Tao et al., 2022). Well-being is a focus which had been increasing in importance prior to the pandemic and which continues to grow in importance as a factor affecting employee engagement (Boccoli et al., 2023). Understanding employee engagement coupled with remote work configurations and tools in a post-pandemic world (Kral et al., 2023) is an emerging topic.

There is a powerful synergy between growth mindset and the employee engagement dimensions (Han and Stieha, 2020; Caniëls et al., 2018). They note that some interventions, such as peer-mentoring, multi-source feedback, and offering a variety of learning opportunities (e.g., educational programs) have the potential for higher impact in the employee population.

ACTIVATING GROWTH-MINDEDNESS AND EMPLOYEE ENGAGEMENT

We have found that ongoing employee engagement activities are foundational “catalysts” for growth-mindset change in our dynamic workplace culture. Learning from each other while collaborating is one of the greatest values of the Engagement Catalysts (ECs) organization launched at the beginning of 2020. The ECs Community mission (Anderson et al., 2021) is to amplify organizational impact by creating a vibrant workplace where everyone feels connected and valued. A global coalition of advocates serves as the voice of our community and works to build awareness, skills, and collaboration across geographies.

The organization structure in the ECs community has an Executive Sponsor and either EC Leader or EC Co-Leads at the helm followed by energetic Lead(s) for each workstream and geography. The EC leadership is responsible for maintaining a community spirit and establishing the fine balance between individual passion and collective impact to our organization. Teaming is evident through the inclusivity of all stakeholder input and through the diversity of the community (with representatives of all parts of the organization, roles, and seniority) – thus ensuring broad coverage of pain points, fruitful brainstorming, and many different approaches for implementing solutions. The community is characterized by close relationships, trust, and communication. There are three pathways the ECs community follows to identify employee engagement interventions (or workstreams) – first is the results and feedback

of the Annual Engagement Survey. Second, are the ECs themselves initiating ‘known’ areas to improve. Finally, organizational leaders often raise issues or share issues surfaced to them by employees. The combined list of these topics is prioritized, the top issues are actively worked on, and progress is periodically evaluated.

According to Susan Sorenson from Gallup (Sorenson, 2023), when comparing employee engagement levels, the top- and bottom-quartile business units and teams had the following differences in business outcomes: (listing here only parameters that are comparable to our organization): 41% in quality (defects), 18% in productivity (sales), 23% in profitability. Baldini in Harvard Business Review (Baldini, 2013) observed that organizations with a high level of engagement report 22% higher productivity.

In a review of our activities in the past three years (2020–2022), we see a mix of short and long-term projects. The ECs community has worked on diverse workstreams that produced many positive outcomes towards organizational clarity, career progression and growth, driving social impact with our technologies, and fostering a vibrant culture of well-being and growth. We now highlight several of these: bureaucracy busting (a long-lasting and fruitful activity), “Focus on Focus”, the “On Not Knowing” Podcast series, Palaver talks, and revamping learning focusing on engineering excellence.

Bureaucracy Busting Use Case

The Bureaucracy Busting (BBs) workstream harnesses the power of both growth mindedness and employee engagement with a grassroots approach to update legacy corporate processes. BB is a sometime thankless challenge that members of our organization embrace to improve the everyday lives of all employees. Often, in a mature organization, legacy ways of doing things persist that are extremely inefficient. In fact, there can be portions of the organization entirely created to support these legacy processes. It therefore takes a certain humility for the organization to recognize inefficiency and be open to doing things differently. In some cases, the way people do their work, or their jobs may be on the line, creating resistance to change. In 1988, sociologist Ron Westrum developed a typology of organizational cultures (Westrum, 2004). Table 1 shows his division of organizations into pathological (power-oriented), bureaucratic (rule-oriented), and generative (performance-oriented).

Table 1. Organizational cultures by Westrom (2004).

Pathological (Power-Oriented)	Bureaucratic (Rule-Oriented)	Generative (Performance-Oriented)
Low cooperation	Modest cooperation	High cooperation
Messengers “shot”	Messengers neglected	Messengers trained
Responsibilities shirked	Narrow responsibilities	Risks are shared
Bridging discouraged	Bridging tolerated	Bridging encouraged
Failure leads to scapegoating	Failure leads to justice	Failure leads to inquiry
Novelty crashed	Novelty leads to problems	Novelty implemented

Here we ask an important question: ‘what is the difference between a generative and bureaucratic culture?’ Westrom posits that bureaucratic (rule-oriented) organizations protect departments. Those in the department insist on their own rules, and generally do things by the book. Generative (performance-oriented) organizations focus on the mission. The work of the BBs therefore is focused on deploying the growth mindset to position our organization as a generative organization and transition from legacy rule-oriented behaviour to an approach that is performance-based.

BBs come from teams across the global locations and in various roles, but they all show one common characteristic: passion to enhance the quality of work in our organization. With a supporting leadership team willing to foster a proactive organizational lens, the BBs have permission and flexibility to put everything under the microscope, starting with an evaluative stage followed by the selection of topics with a big return or important outcomes. Most critically, the team has a growth mindset by being open to discuss where the challenges may exist, and demonstrating the capacity to change if there is an opportunity and justification.

In the early years of EC work (2020–2022), as we adjusted to post-pandemic times, we saw an ever-increasing need for transparency and ease of finding relevant information to enable a more agile organization. The results for the Engagement Survey indicated that employees often did not know who to contact with questions related to various approval processes. To help address this challenge in subsequent years, the BB workstream was established. The BBs collaborated with a specific Operations sub-team to develop education outreach to effectively provide relevant information. Ongoing round-table sessions allowed the community to interact with subject matter experts (SMEs) in business control, export, legal, pricing, privacy, source code and data security, tax, trademark, trust and compliance, finance & operations. The BBs subsequently worked with the legal team to capture information provided during these virtual round tables. As a result, an updated legal information webpage was created containing a detailed list of legal specialists and the critical contact points for geographic location or interest areas. In addition, few processes were streamlined (inducing publication process) and new updates are continuously posted. Similarly, as the pandemic shutdown waned employees also needed additional clarity on processes related to host external visitors to the site (processes for short in-person visits). The BBs worked with multiple administrative teams to update related process and continue to provide the most up-to-date guidance applicable to the organization.

Focus on Focus

The modern workplace is filled with distractions and interruptions that hinder productivity and impair our ability to focus. Drawing from the collective wisdom of the team, in this series of bi-weekly sessions, we share experiences and techniques for managing focus, interruptions, workload prioritization, and distractions in the workplace.

Cal Newport (Newport, 2016) points out that remaining focused at the workplace is not easy. Newport argues that deeply focusing on one task at a time is the key to truly being productive, but our attention is constantly being diverted by the distractions from coworkers, emails, and message notifications. Benefits for companies to provide help with increasing focus for their employees include increased creativity and innovation, higher quality of work, employee satisfaction, retention, stress reduction, well-being, adaptability and continuous learning, effective decision-making, and competitive advantage.

“On Not Knowing” Podcast Series

This was the very first Growth Mindset group activity. Shortly after the director of our organization announced the growth mindset mission for the organization, an employee, who would later become the podcast series host, wrote an essay about his experience working closely with one of the company’s most renowned scientists and a company Fellow, and how he viewed the experience as a unique, late-career apprenticeship opportunity. The essay, which the employee intended to release as an internal blog, made its way to the organization executive’s desk, who liked it, but thought that it was not the right medium. The employee was encouraged to start a podcast series, and so the “On Not Knowing” podcast series came to be, with the name stemming both from the “beginner’s mind” theme from the original essay and the tie in with growth mindedness. The 1st episode aired at the end of 2020, generating a large following through interesting guests and publicity. The podcast series has evolved over the three years of its existence to feature conversations with company employees from around the world as well as non-employees who are widely seen as embodying different aspects of growth mindedness with respect to their lives and careers. To date there have been 12 episodes, most of which are available externally on the various podcasting platforms. One external speaker was chosen for his ability to moderate debates and intent listening and questioning skills. Another external speaker was chosen for her expertise in collaboration. Just like there is openness and generosity of spirit in not needing to be a know-it-all, there is a kindred openness and generosity in being a good collaborator – and these connections were explored in the latter case.

Palaver Talks

Palaver Talks are a series of discussions where employees gather to share their personal experiences, hobbies, and passions. This initiative was born out of the need to foster better connections among employees working in silos within the same location or organization. The word “palaver” is defined as follows: Palaver (noun) [p-la-vr, -lä-]: 1. Talk that is not important or meaningful. 2. Excitement and activity caused by something that is not important. Now, let’s explore how these seemingly insignificant discussions have had a profound impact on the organization’s social dynamics. In a large organization employees may work in close proximity yet remain disconnected on a personal level. They may only exchange passing glances in long building

hallways, brief encounters in the cafeteria, or while waiting in line to pay for lunch at the registry. Interactions between departments are often limited to project requirements, leaving little room for deeper connections to form.

Several years ago, an idea emerged to bridge these gaps and bring together members of various teams and organizations to facilitate interactions and help employees get to know one another beyond their professional roles. Since our work often revolves around specialized aspects of science and/or technology, finding common interests at a professional level can be challenging, especially among teams with different focuses. However, we believed that connecting on a personal level, through shared hobbies and activities, would enable new work-related connections and collaboration.

The solution was to initiate a series of talks where employees could share their personal interests and passions. By focusing on individual hobbies and activities, we aimed to create common ground among colleagues who might not have much in common professionally. The hope was that once people got to know each other personally, it would positively impact their professional relationships as well. The subjects for these talks were hand-picked and ranged from gardening and cultivating exotic plants like Venus Fly Traps to overviews of exciting overseas trips such as those to Egypt. These talks quickly gained popularity, necessitating the reservation of larger conference rooms due to capacity issues. The sessions adopted a “show and tell” format, with presenters using slides, pictures, movies, or physical props related to their topic. These props included rare historical coins, 3D printed objects, or musical instruments. To ensure minimal disruption to work, these sessions were scheduled during lunch hours, and the location was conveniently close to the cafeteria, allowing attendees to bring their lunches.

Employee-Led and Group Learning Offerings

For the last couple of years, we have spearheaded employee-led and group learning activities in several areas deemed key by our community. With our organizational focus on emerging technical areas including quantum computing and deep learning, many employees have found themselves needing to build additional knowledge. They were clamouring for courses in the mathematical foundations of these two subjects. These were the first two courses offered, using a pedagogical formula that was a combination of team teaching and group learning. We found employees in our community with expertise in the various mathematical foundation areas who were also interested in learning. We also had worked problem sessions every week. Responsibility for teaching and leading problem sessions rotated among the people enrolled in the class, with everyone encouraged to participate. These first two courses got rave reviews, and each has been repeated. And over the course of time, the course offerings have expanded in response to changing business directions and employee suggestions.

Deployment of a recommended learning webpage was an early strategy. Through word of mouth, news of the employee-led and group learning courses reached enough employees that the courses always had high levels of enrolment, but we received complaints that not everyone heard about them,

or heard about them in a timely fashion, and that we needed to add more sections. To respond to this feedback, we created an internal web site advertising the various employee-led and group learning opportunities, both inside and outside of the company. In coming months, we plan to add the ability to rate courses, provide feedback and comments on courses, and have an area where new classes can be proposed, either by prospective students or prospective teachers.

A growth mindset “BuzzBoard” is another very innovative idea implemented by one of the newest Growth Mindset team members. This is an interactive poster with three underlying objectives: (i) to encourage spontaneous, fun interaction with colleagues, (ii) to encourage various growth mindset themed habits, and (iii) notify passers-by of growth mindset themed activities, such as the employee-led and group study courses, the web page cataloguing these courses, the Palaver talks, and so on. The content and prompts change often, and part of the purpose of the interactivity is to get ideas for new growth-related initiatives. The first such “BuzzBoard” has been live in one of our locations for many months, and if deemed successful, it will be replicated to other geographic locations.

Promoting Engineering Excellence through dedicated sessions is a third employee-led learning strategy. This approach encourages knowledge-sharing, collaborative problem-solving, and continuous improvements. These regular sessions ensure consistency and encourage teams to share their successes, challenges, and innovative solutions, as well as best practices validated by the industry. Teams present methodologies, tools, and approaches contributing to project success, offering valuable insights for adoption by others. The experience is interactive, featuring hands-on demonstrations, Q&A sessions, and panel discussions. Participants are encouraged to ask questions or bring their own challenges for collaborative solutions and feedback. Specific engineering practice sessions cover agile principles, code reviews, collaborative use of Github, and suggestions for building continuous integration and development pipelines. External guest speakers and industry experts occasionally provide insights, best practices, and fresh ideas, offering an external perspective.

OUTCOMES

While many of the impacts of these initiatives cannot be isolated for measurement, we note here a set of measurable outcomes. Early 2023 results show a year-over-year attributed revenue growth of 20% for our organization. Although we have no data directly linking engagement to revenue growth it is likely that a more engaged workforce has a magnifying impact on revenue and not the reverse. Positive impacts of the greater ECs community (>100 people) and smaller Growth Mindset group (~10 people) are evident in the stable community sizes over time and in sustainable outcomes. The Annual Engagement Survey results show a significant improvement over the past three years, and the Engagement Index (Table 2) grew each year to an all-time high and the highest across business units. The Advocacy Index (based on a Net Promoter Score® (NPS)) grew 4.7 points in 2022. In 2023

the engagement and inclusion index were again very strong (85% and above). While the EC community cannot take all the credit since engagement is influenced by many factors, our leaders agree that the ECs Community is the secret sauce that made a tangible difference.

Table 2. Positive trend of engagement metrics from 2019-2022.

Index of Engagement Survey	Delta
Engagement Index 2020	+ 1.4
Engagement Index 2021	+ 0.6
Engagement Index 2022	+ 3.3
Engagement Index 2019–2022	+ 5.3
Advocacy Index 2022	+ 4.7

Outcomes from the bureaucracy busting (BBs) include increased transparency and grass-roots participation in shaping procedures and awareness. Before the BB work started, many believed that the governing procedures could not be changed. The continuous need to adapt to new situations around the pandemic helped transform the culture and create an environment in which a growth mindset is valued. The work of each group was amplified via internal blogs, focusing strongly on individual volunteer recognition, reuse of best practices, and deployment of enhancements. Palaver Talks have strengthened teamwork, removed organizational barriers, showcased diverse talents and interests, and inspired connections beyond traditional professional boundaries. These are summarized in Table 3. Employee-led learning has shown many of the same benefits. In addition to more effective learning experiences compared to traditional learning, employees commented on how they developed enduring bonds with fellow learners that were especially rewarding when the fellow learners came from disparate parts of the organization and were not previously acquainted. We also saw that employees who knew each other from prior work often rekindled a collaboration through a group learning experience. Table 4 summarizes the Engineering Excellence outcomes.

Table 3. Palaver talks outcomes and benefits.

Area of Impact	Benefit
Employee Well-Being	Prioritization of personal development and fulfilment enables mentally and emotionally investment in organizational success.
Diversity and Inclusion	Sharing personal interests contributes to a more inclusive workplace by allowing individuals to express their unique identities.

(Continued)

Table 3. Continued

Area of Impact	Benefit
Retention and Loyalty	Employees feel a stronger sense of loyalty to a workplace that recognizes and appreciates their individuality, leading to increased retention rates.
Team Morale & Relations	Employees feel seen and appreciated, increasing job satisfaction. contributing to more cohesive peer bonds and a support network for challenging times.
Team Connections	Sharing personal interests augments professional roles, fostering a sense of belonging, shared values, improved communication, and collaboration.
Office Atmosphere	Employees feel more engaged and motivated bringing their whole self to work, leading to increased job satisfaction and a more vibrant workplace culture.
Professional Development	Employees build presentation skills in a supportive environment, practicing idea expression, refining communication techniques, and gaining confidence.
New Team Members	An ideal icebreaker to provide an informal introduction and welcome new employees into the team, building an early sense of belonging.
Knowledge Transfer	The organization benefits from a wealth of diverse knowledge. This informal knowledge transfer enhances the collective intelligence of the team.

Table 4. Engineering excellence outcomes and benefits.

Area of Impact	Benefit
Work Quality & Collaboration	Builds consistency across the organization. Learn from successes, avoid pitfalls, enhance solution robustness, share best practices, and unify development processes.
Project Security	Discussions about proactive security measures, best methods, and problematic attacks benefit individual projects and activate collective insights.
Seamless Onboarding	A centralized knowledge repository of session recordings, code examples, and best practices provides a comprehensive guide to established practices and standards
Knowledge transfer	Fosters project agility by simplifying movement of people between projects, facilitates more adaptive development methods and unified processes.
Enabling immediate results	Shared practices for improved efficiency, reduced cycle times, continuous improvement & identification of focus areas, and collective adaptive work practices.

CONCLUSION

We see many benefits of employee engagement activities that emphasize growth-mindedness and learning in a technical organization. Benefits are realized individually by employees and the overall organization, with quantifiable outcomes coupled with many “soft” benefits. Positive impact is

evident in the workplace culture, employee growth and initiative, learning, enhanced working relationships, and in an augmented organizational capability. We have found that a growth mindset is evident when you see volunteers and their novel approaches.

ACKNOWLEDGMENT

We are grateful to our many talented Engagement Catalyst colleagues who enrich our working environment and culture in so many positive ways.

REFERENCES

- Anderson, L. C., Jacovi, M., Lenchner, J., & Strattner, J. N. (2021). The Engagement Catalyst Initiative: How One Global Organization Activates and Energizes Employee Engagement. In *International Conference on Applied Human Factors and Ergonomics* (pp. 45–53). Cham: Springer International Publishing.
- Baldini, J., Employee Engagement Does More than Boost Productivity, *Harvard Business Review*, (2013).
- Bennett, Paul W. (2022). Overhyped Psychological Theory: What does the “Growth Mindset” Controversy Teach US?. *Educhatter: Lively Commentary on Canadian Education*.
- Boccoli, G., Gastaldi, L., & Corso, M. (2023). The evolution of employee engagement: Towards a social and contextual construct for balancing individual performance & wellbeing dynamically. *International J. of Management Reviews*, 25(1), 75–98.
- Brodie, M., Lai, J., Lenchner, J, Luken, W, Ranganathan K, Tang, J-M, & Vukovic, M. (2007). Support Services: Persuading Employees and Customers to Do what is in the Community’s Best Interest. *International Conference on Persuasive Technologies PERSUASIVE 2007*: 121–124.
- Caniëls, M. C., Semeijn, J. H., & Renders, I. H. (2018). Mind the mindset! The interaction of proactive personality, transformational leadership and growth mindset for engagement at work. *Career development international*, 23(1), 48–66.
- Cutler, S., Xia, Y., & Beddoes, K. (2022). A Growth Mindset for Peer Review: Guidelines for writing constructive peer reviews. *Conference Proceedings Hawaii International Conference on Education*. <https://par.nsf.gov/biblio/10378438>
- Dweck, C. S. (2019). The Choice to Make a Difference. *Perspectives on Psychological Science*, 14(1), 21–25. <https://doi.org/10.1177/1745691618804180>
- Dweck, C. S (2016). *Mindset: The New Psychology of Success. How We Can Learn to Fulfill Our Potential*. Ballentine Books, New York.
- Dweck, C. (2014). Talent: How companies can profit from a “growth mindset”. *Harvard Business Review*, 92(11), 7.
- Dweck, C. S., & Hogan, K. (2016). How Microsoft uses a growth mindset to develop leaders. *Harvard Business Review*, 1–4.
- Fulmore, J. A., Fulmore, A. L., Mull, M., & Cooper, J. N. (2023). Reducing employee turnover intentions in the service sector: The connection between human resource development practices and employee engagement. *Human Resource Development Quarterly*, 34(2), 127–153.
- Han, S. J., & Stieha, V. (2020). Growth Mindset for Human Resource Development: A Scoping Review of the Literature with Recommended Interventions. *Human Resource Development Review*, 19(3), 309–331.

- Hassan, K. (2023). Leveling up employee engagement: Uncovering the new pillars of an employee retention blueprint. *Strategic HR Review, ahead-of-print*(ahead-of-print).
- Iddagoda, A., Dissanayake, H., & Bagienska, A. (2023). Leadership, trustworthiness and employee engagement: An insight during the COVID-19. *Journal of Economic and Administrative Sciences, ahead-of-print*(ahead-of-print).
- Kahn, W. A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. *Academy of Management Journal*, 33(4), 692–724.
- Kral, P., Janoskova, K., & Dawson, A. (2022). Virtual skill acquisition, remote working tools & employee engagement and retention on blockchain-based metaverse platforms. *Psychosociological Issues in Human Resource Management*, 10(1), 92–105.
- Newport, C. (2016). *Deep work: rules for focused success in a distracted world*. First edition. New York, Grand Central Publishing; Newport, Cal. 2016.
- Sorenson, S. (January 7, 2023). The Benefits of Employee Engagement. *Gallup*, <https://www.gallup.com/workplace/236927/employee-engagement-drives-growth.aspx>.
- Tao, W., Lee, Y., Sun, R., Li, J.-Y., & He, M. (2022). Enhancing Employee Engagement via Leaders' Motivational Language in times of crisis: Perspectives from the COVID-19 outbreak. *Public Relations Review*, 48(1), 102133.
- Westrum, R., A. (2004) Typology of organisational cultures, *Qual Saf Health Care*; 13 (Suppl 2): ii22–ii27.