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**Building Self-leadership in Gig workers through Self-Determination
and Neuroscience of Play.**

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Introduction

Self-leadership is a crucial skill for enhancing employee performance and job satisfaction in modern organizations. Research has shown that self-leadership has a positive and significant effect on job satisfaction and performance improvement (Faranak Safari Shad et al., 2014). It is also associated with effective work relationships, enhanced communication, and reduced work stress (Manshi & S. Mishra, 2019). Studies have demonstrated a positive relationship between self-leadership skills and innovative behaviours at work, as rated by both employees and supervisors (A. Carmeli et al., 2006). Enhancing self-leadership among employees can contribute to their job satisfaction and performance improvement (Shad et al., 2024).

Self-leadership is a critical factor in a country like India, where the gig economy is witnessing rapid growth and transformation. With the number of gig workers increasing significantly—from 2.52 million in 2011-12 to 6.8 million in 2019-20 (Sood & Singh, 2023)—India has become a hub for flexible, short-term work arrangements. However, the decentralized nature of gig work, coupled with limited traditional supervision and leadership structures, places a significant responsibility on individuals to self-manage, stay motivated, and align their goals with broader organizational objectives.

In such an environment, self-leadership emerges as a pivotal skill that enables gig workers to navigate challenges, maintain productivity, and achieve consistent performance. By fostering autonomy, self-motivation, and goal-setting capabilities, self-leadership not only empowers gig workers to excel in their roles but also helps businesses address productivity gaps and sustain long-term growth in a highly competitive market.

However, the question on how they can develop their self-leadership remains unanswered. Gig works are typically temporary, compensated based on projects, have flexible work models, and non-

organizational membership (Wu & Huang, 2024). The nature of the workforce has led to a new psychological contract between workers and organizations which involves work identity management, and self-development (Cropanzano et al., 2022).

Given the separated structure of the gig worker economy from the traditional employee-employer framework, a critical gap exists in fostering a sense of ownership, belonging, and relatedness from both sides. Gig workers often operate as independent contractors, emphasizing autonomy and flexibility over formal organizational affiliation. This structure inherently limits opportunities for developing strong relational ties with employers, teams, or the organization at large. (Kost, D., Fieseler, C., & Wong, S. I. (2020))

Gig workers may feel excluded from a shared sense of purpose or identity within the organization, impacting their motivation, loyalty, and alignment with organizational goals. (Shukla, A., & Shaheen, M. (2023). Bridging this gap is essential for creating a mutually beneficial dynamic that fosters engagement, shared ownership, and relational connectedness in the evolving gig economy.

While there are sufficient studies highlighting the importance and impact of self-leadership on the gig workforce—emphasizing its role in enhancing engagement, performance, and well-being—not enough research exists on practical, actionable, and tangible strategies to address the challenges of developing self-leadership in this segment. The decentralized nature of gig work, combined with its lack of structured leadership or consistent behavioral training frameworks, leaves a significant gap in equipping gig workers with the tools and methods needed to cultivate self-leadership effectively.

This lack of actionable strategies creates barriers for both gig workers, who struggle to self-motivate and align with organizational goals, and organizations, which face productivity gaps and inconsistent performance. Addressing this gap through well-researched, scalable solutions is crucial for empowering gig workers and ensuring the sustainable growth of the gig economy and delivering sustained value for customers and stakeholders in the evolving Indian labor market.

Objective of this Study

In recent years, Gamification has emerged as one of the most effective strategies to create engaging and impactful learning experiences for employees. It not only enhances motivation but also fosters active engagement, leading to meaningful behavioral transformation (Gupta & Gomathi, 2017). Within the realm of web-based employee training, gamification has demonstrated its potential to achieve significantly higher learning outcomes by immersing learners in interactive and compelling experiences (Armstrong & Landers, 2018). While its application in structured, traditional employee environments is well-established, there remains a critical need for a framework tailored to training gig workers. Such a framework could enable organizations to better engage this dynamic workforce segment, characterized by flexibility and autonomy (Zhang et al., 2024).

To address this, we propose a framework that integrates traditional instructional design methodologies, such as the ADDIE model, with behavioral frameworks like the ‘BE DO HAVE’ model. This approach not only enhances training outcomes but also aims to empower gig workers by fostering self-motivation, engagement, and self-leadership. By aligning training content with the unique needs of gig workers, the framework ensures that individuals are not just passively trained but are actively driven to apply the learning to their work, thereby cultivating intrinsic motivation and ownership of outcomes.

A key theoretical underpinning of this framework is the Self-Determination Theory (SDT), which emphasizes the importance of fulfilling basic psychological needs—autonomy, competence, and relatedness—to drive motivation and sustained engagement. By incorporating gamification elements such as challenges, feedback, and rewards, the framework can help gig workers connect their personal and professional goals, strengthening their sense of purpose. Additionally, gamified training modules are designed to encourage self-reflection, build problem-solving capabilities, and nurture adaptive thinking, thereby equipping workers to navigate the complexities of the gig economy.

Ultimately, this holistic approach extends beyond training to inspire self-motivation and engagement, enabling gig workers to develop critical self-leadership skills. By leveraging gamification as a tool for both learning and behavioral influence, organizations can not only improve workforce readiness but also contribute to building a more empowered and self-reliant gig workforce.

The study aims to address the following research questions, aligning with a holistic framework that extends beyond training to encompass engagement, motivation, and self-leadership development for gig workers:

RQ1: How can gamified learning interventions be designed to cultivate self-leadership and intrinsic motivation among gig workers?

RQ2: How can the BE DO HAVE leadership approach be operationalized to enhance self-leadership, goal-setting, and adaptability in gig workers?

RQ3: What gamification elements (e.g., game mechanics, rewards, challenges, feedback) are most effective in sustaining long-term engagement and motivation among gig workers?

RQ4: How can gamified strategies bridge the gap between organizational objectives and the autonomous work styles of gig workers?

RQ5: What role do psychological frameworks like Self-Determination Theory (SDT) play in driving motivation, engagement, and performance through gamified learning in a gig economy context?

RQ6: How can HR professionals and business leaders leverage gamified frameworks to create a cohesive, empowered, and high-performing gig workforce?

By addressing these research questions and extending the scope beyond traditional training, the study contributes to developing a comprehensive strategy that encompasses learning, motivation, and engagement. It offers a pathway for organizations to bridge the gap between structured and flexible workforce management, ensuring gig workers remain motivated, aligned, and equipped to excel in their roles.

Review of Literature

Self-leadership

Increasing competition for talent requires a shift from command driven leadership to shared leadership. Employees who are motivated by the need to autonomy and general self-efficacy are likely to practice self-leadership (Norris, 2008). Tenschert et al., 2024 defined Self-leadership as a “personal responsibility and initiative, setting and monitoring one’s goals, and effectively employing strategies to improve performance or well-being” (pp. 1) Self-leadership promotes motivation,

assuming responsibility, setting goals and contributing to improvement of team performance. Reducing stress, improving job attitudes, and developing leadership competencies contribute to self-leadership (Tenschert et al., 2024)

Self-leadership is a concept that has gained significant attention in the field of organizational behavior and psychology. It refers to a self-influence process through which individuals achieve the self-direction and self-motivation necessary to perform effectively. Goldsby et al, (2021) define self-leadership as *‘as a self-influence process by which people achieve the self-direction and self-motivation necessary to perform* (pp. 01).

Andressen¹ et al., (2012) define Self-leadership “as a process that is used to improve self-motivation and to influence self-direction; both are important for effectiveness (pp. 70). It is based on theories of self-control, self-regulation and self-management. Self-leadership can also be considered as a process that determines motivation (Andressen¹ et al., 2012). It can determine career success and develop individual self-belief (Megheirkouni, 2018).

Self-leadership comprises of behavioral, natural reward and constructive strategies that impact the effectiveness of individuals. The behavioral strategies motivate individuals to increase self-awareness and setting personal goals. Behavior-focused strategies are designed to encourage positive cum desirable behaviors for positive outcomes and suppress undesirable behaviors for unsuccessful outcomes. Natural reward strategies are intended energize the employee and drive task-related to enhance performance. (Neck and Houghton, 2006). Natural reward strategies drive individuals to focus on the inherently enjoyable aspects of tasks to foster motivation and reward of their job. These strategies are intended to a feeling of being competent and determined leading to better performance. Constructive strategies focus on identifying and replacing dysfunctional beliefs and assumptions, mental images and positive self-talk. This dimension can encourage positive habits and an optimistic approach. Leaders with high self-efficacy can use their positive approach and equip themselves to handle organizational challenges more effectively (Norris, 2008)

Self-leadership involves rethinking beliefs, using imagination to solve problems, and engaging in self-dialogue to reach goals. Self-leadership encourages individuals to display innovative behaviours and lead themselves and others. Self-leadership builds cohesive teams particularly among self-managed teams without formal leadership (Neck and Houghton, 2006).

Transformational leadership supports self-leadership. Such leaders play the part of a role model and encourage their teams to create new and constructive thought patterns and develop innovative ideas. Such an approach positively influences self-leadership qualities in an individual.

Importance of developing Self-leadership

Manz (1986) equated self-leadership to double loop learning in which individuals make adjustments based on their performance feedback. Individuals compare the feedback with their underlying standards and make adjustments in future. This approach of learning encourages individuals to reflect on the feedback and plan self-regulation (Williams, 1997). Self-leadership motivate and navigate themselves to attain desired behaviours and goals. To improve performance organisations, need to invest developing self-leaders. With increasing emphasis on innovation in in a knowledge-based society, this shared approach of leadership can help organizations develop a

competitive advantage (Carmeli et al., 2006). Training programs can help individuals develop their self-leadership skill. Such training increases mental performance (PP. 76), creates enthusiasm and improves job satisfaction. It may not be a personality trait but can be developed through training (Neck and Houghton, 2006).

Growth of the Gig Economy

The gig economy, characterized by short-term, flexible work arrangements, has experienced significant growth globally. In India, the number of gig workers increased from 2.52 million in 2011-12 to 6.8 million in 2019-20, with a CAGR of 16.78%. Gig workers often have the flexibility to choose projects working house and to a certain extent, control on their work-life balance. The growth of the fourth industrial revolution and availability of multi-generational workforces has resulted in the growth of gig workers. Technology advancement, need for flexible work hours and increasing unemployment have contributed to the gig economy in India. It has created a new labour market for flexible workforce and labour commodification. (Sood & Singh, 2023). This trend has been accelerated by digitalization and the COVID-19 pandemic, which led to increased layoffs and a shift towards freelance and temporary work (Joo & Shawl, 2021). Task assignment and performance management typically carried out by traditional managerial functions are performed using algorithm management. Algorithm management (AM) has the empower gig employees, provide flexible work opportunities and offer autonomy in selection of when and with whom to work. AM create power imbalance motivating employees to adapt their behaviours

Self-leadership and Gig Workers

Recent research highlights the importance of self-leadership among gig workers in the evolving work landscape. Self-leadership strategies positively influence gig workers' performance and work engagement, with perceived organizational support moderating this relationship (Shukla & Shaheen, 2023). While self-leadership generally benefits rideshare drivers by increasing well-being and intentions to seek non-gig work, its effects vary based on job satisfaction and financial stress levels (Crayne & Newlin, 2023). Gig workers engage in self-tracking to manage accountability across multiple identities, mitigating information asymmetries in platform-based work (Hernandez et al., 2024). Additionally, emotional intelligence plays a crucial role in leadership transformation within the gig economy, contributing to a positive work environment (Prakash & Stephen, 2020). These studies collectively emphasize the significance of self-management skills for gig workers' success and well-being, highlighting the need for further research on leadership dynamics in algorithmically managed work environments. However, one of the biggest challenges faced by Gig workers is lack of traditional leadership through and direct supervision. This also hampers their ability to advance their careers or receive feedback on their performance. They experience stagnancy in their growth and the only way they can develop their career is by switching between platforms or gigs. Lack of training and career advancement opportunities act as a key barrier to gig workers. (Kost et al., 2020). Self-leadership operates as a control mechanism to engage in productive activities and benefit workers under optimal conditions. It would contribute to overall well-being only under conditions of lower financial stress or high job satisfaction (Craynea and Newlin, 2023)

Training for gig workers primarily focuses on competency and economic rationales, with relationship-based training notably absent (Zhang, 2024). Gig work alters traditional

psychological contracts between workers and organizations, leading to adaptations in job crafting, work identity management, and self-development (Cropanzano et al., 2022). Organizations manage gig workers through nontraditional practices, including algorithmic management, while gig workers balance autonomy and dependence. The limited organizational training for gig workers necessitates self-directed learning and development to navigate the unique challenges of gig work (Cropanzano et al., 2022; Zhang, 2024). For rideshare drivers, self-leadership can increase well-being and intentions to seek non-gig work, though outcomes vary based on job satisfaction and financial stress (Crayne & Newlin, 2023). For such employees, while some employees succeed through self-management (Self-leadership) there are many who are forced to leave due to high job demands and lack of support (Pilatti et al., 2024)

Gamification

Gamification refers to the use of game mechanics and create digital design experiences to engage and motivate employee to help them achieve their goals (Mohanty and Christopher, 2023). Its potential is contingent on way the tasks and activities are restructured with gaming components with motivational support and elements to invoke flow experiences. This can be achieved by breaking activities into sub-tasks, providing direct feedback for achievements and providing meaningful narratives (Bend, 2023).

Gamification has attracted keen interest by academicians and industry professionals. It involves application of game design to non-game contexts and foster learner engagement. Behl et al., 2022 defined gamification “as a set of activities and processes used to solve problems by utilising or applying game element characteristics”. (pp. 1379) While there are studies who have explored gamification from a motivational and engagement perspective there are limited studies that have explored the impact of gamification team dynamics of gig workers in India (Behl et al., 2022). In an employee training and development context, gamification can engage and motivate employees to achieve their learning goals. This could be achieved by creating a competitive environment and game-based learning components. It stimulates the learning environment and helps in making the training interventions efficient and effective (Mohanty and Christopher, 2023).

Self-Determination theory

The Self-Determination theory (SDT) (Deci et al., 1999) provides a strong theoretical foundation for use of gamification. Self-Determination Theory (SDT) is a comprehensive framework for understanding human motivation, development, and well-being (Deci & Ryan, 2008). It explains how individuals act based on intrinsic and extrinsic motivation of individuals to achieve their psychological needs of competence, autonomy and relatedness. It further explains how intrinsic goals are strongly associated with extrinsic life goals. Satisfaction of the need for competence and autonomy influences behaviour and attitudes. Gamification enables learners to be more connected, challenge learners and bring about transformative change. The social context and individual difference that support the need of competence, autonomy and relatedness lead to intrinsic motivation and well-being. SDT proposes that intrinsic motivation acts as a natural process to influence values and self-regulation. Game-based elements can fulfil an individual's psychological requirements of competence, autonomy and relatedness. Gamification elements such as

experience point (points or badges earned on completion a particular amount of work on their job and progress bars positively influence the employee's EM and IM and contribute to the overall performance of the employee (Deci and Ryan, 2000; Deci and Ryan, 2008; Mohanty and Christopher, 2023; Mohanty and Christopher, 2024). Gamification serves as a mechanism to modify behavior and through training influence attitudes and feelings, hence can be effectively used for designing gamified on-the-job training to influence employee motivation and achieve learning outcomes (Bend, 2023).

The Octalysis framework

The Octalysis Framework, developed by Yu-kai Chou, is a widely used gamification tool for designing and evaluating human-focused systems. By categorizing motivation into eight core drives—epic meaning, accomplishment, creativity, ownership, social influence, scarcity, unpredictability, and loss avoidance—it offers a structured approach to enhancing engagement and promoting desired behaviors across diverse domains. Its application spans education, healthcare, corporate training, sustainability initiatives, and customer engagement, effectively aligning tasks with intrinsic and extrinsic motivators to drive performance.

Application in Education : Study by Weber et al. (2022): The Octalysis Framework was used to design gamified e-learning platforms for higher education. The study found that incorporating Octalysis-driven elements such as badges, progress tracking, and social sharing significantly increased students' motivation, engagement, and course completion rates.

Key Metrics: Engagement levels improved by 23%, and course completion rates increased by 18% compared to non-gamified platforms.

Conclusion: Octalysis effectively aligned learning objectives with intrinsic motivators, fostering deeper engagement.

Impact on Healthcare - Study by Chen et al. (2023): The Octalysis Framework was utilized to design a gamified app for diabetes management. Features such as achievement badges (development and accomplishment), patient stories (social influence and relatedness), and reminders (scarcity and impatience) were integrated.

Key Metrics: The app led to a 30% increase in patients adhering to their glucose-monitoring schedules and a 25% reduction in missed appointments.

Conclusion: The framework effectively motivated users to engage in positive health behaviors by aligning tasks with their intrinsic and extrinsic motivators.

Enhancing Employee Engagement - Research by Mohanty and Christopher (2023): A gamified employee training platform based on the Octalysis Framework was implemented in a corporate setting. Core drives such as ownership and possession (personalized avatars) and empowerment of creativity and feedback (interactive scenarios) were emphasized.

Key Metrics: Employee satisfaction with training increased by 32%, and knowledge retention improved by 27%.

Conclusion: The framework demonstrated its capability to enhance training outcomes by making learning engaging and relevant.

Use in Customer Engagement - Case Study: E-commerce Loyalty Program (Putranti et al., 2024): An online marketplace used the Octalysis Framework to gamify its loyalty program, incorporating elements like unpredictability (random discounts) and epic meaning (charity donations tied to purchases).

Key Metrics: Customer retention increased by 15%, and purchase frequency rose by 12% within six months.

Conclusion: The framework helped create an emotionally engaging experience that strengthened customer loyalty.

Behavioral Change in Sustainability Initiatives - Study by Haque and Panda (2024): The Octalysis Framework was applied to a gamified platform promoting eco-friendly behaviors in a corporate setting. Drives like epic meaning and calling (participation in sustainability campaigns) and social influence (leaderboards) were used.

Key Metrics: Participation in sustainability initiatives increased by 40%, and overall waste reduction in the workplace improved by 18%.

Conclusion: Octalysis motivated employees to align personal actions with organizational sustainability goals.

Employee Motivation in Online Transportation Services - Research by Prasetyo et al. (2023): Online ride-hailing services applied the Octalysis Framework to engage drivers with gamified dashboards featuring progress bars (development and accomplishment), rewards (ownership and possession), and social competition (leaderboards).

Key Metrics: Driver productivity improved by 20%, and retention rates increased by 15%.

Conclusion: The framework effectively addressed the drivers' motivational needs, enhancing their commitment to the platform.

Summary of Effectiveness: Empirical studies highlight the Octalysis Framework's ability to:

Enhance **engagement** by aligning tasks with intrinsic motivators.

Increase **motivation** through personalized and meaningful gamified elements.

Drive **behavioral change** by leveraging core psychological drives.

Improve **outcomes** in diverse domains, from education to employee and customer engagement.

The framework also categorizes motivational drivers into actionable components, enabling targeted design for training, employee engagement, and organizational goals. For example, **Social Influence & Relatedness** fulfills individuals' natural need to connect and collaborate, while **Epic Meaning & Calling** inspires them to seek purpose beyond personal goals (Mohanty & Christopher, 2023).

6-step framework

Werbach and Hunter (2012) introduced a 6-step framework for implementing different phases in gamification of activities to improve employee motivation, customer engagement and foster innovation (Werbach and Hunter, 2012). The framework consists of six steps namely Establish business goals, Outline targeted actions, define personas, refine the activity sequence, ensure a fun system and selection of the right game elements. Building on this, Alfaqiri et al. (2020) proposed a framework

specifically for online training, incorporating common game elements such as points, levels, and leaderboards. In a more recent study, Alfaqiri et al. (2022) identified and evaluated nine game elements suitable for corporate online training platforms, which experts deemed effective in improving employee engagement. These studies collectively demonstrate the potential of gamification to address engagement issues in online corporate training, particularly in the context of remote work and learning (Alfaqiri et al., 2020; Alfaqiri et al., 2022)

The BE-DO-HAVE model

The BE-DO-HAVE model is a framework based on systems thinking in which the outcomes are clearly defined prior to implementation of any change (Franklin, 2004). A concept associated with personal development, the Be-Do-Have represents a simple approach of changing the way one thinks which is critical to achieve different results. While individuals have to desire to achieve something different or better in terms of results, but they don't take the required actions. This approach focusses on the way individuals think to achieve results (Nischwitz, 2007). The verbs "be," "do," and "have" also function as lexical verbs, enabling learners to express ideas in various situations with minimal grammar rules (Gohil, 2017). In adult education for those with learning difficulties, a person-centred approach conceptualizes learning purposes through being, having, and doing (Dee et al., 2006). Based on Seven Habits of Effective People (Covey 2005) Be-Do-Have is a practical approach adopted by many practitioners aimed at improving performance and achieve lasting change. To achieve goals, this approach used a three part system. The 'Be' encourages the individual to encompass the real personality that aligns with the behaviors required to achieve goals. The 'Do' focusses on the actions required to achieve the goal. Finally the 'Have', is the conclusion or outcome of behaviours and action (Djavid, 2023). The Coach Foundation suggests that adopting such an approach helps in creating a shift in perspective, encourages individuals to avoid making excuses and finally to become competent. The **Be-Do-Have model** enables inquiry on how we can approach our teaching (Stearns, 2011). The Be-Do-Have is about changing how individuals think. The study demonstrates practical application of the BE-DO-HAVE model in developing self-leadership among gig workers.

Proposed Model for Building Self-Leadership

This model is designed to develop self-leadership among gig economy stakeholders by combining the Be-Do-Have framework with insights from Self-Determination Theory (SDT), the Octalysis Framework, and the 6-Step Gamification Model. The model integrates the Neuroscience of Play and Behavioral Sciences to ensure engagement, motivation, and sustained behavioral change.

The BE Level: Aligning Beliefs

The "BE" stage focuses on shaping intrinsic motivation and building a self-leadership mindset, which is essential for gig workers who often operate independently without traditional structures of supervision and feedback. At this stage the Self-Determination Theory (SDT) addresses the psychological needs of autonomy, competence, and relatedness, which are critical for gig workers. These elements foster intrinsic motivation, ensuring sustainable engagement and reducing reliance on external rewards. Gig workers often face challenges like financial stress and lack of feedback. Intrinsic goal setting helps align their work with personal values, giving them a sense of purpose. Reflective practices enhance self-awareness, enabling them to identify and overcome limiting beliefs. Behavioral nudges such as positive reinforcement and habit

formation encourage gig workers to develop resilience and adaptability, helping them navigate the uncertainty of gig work.

This stage builds the psychological foundation for self-leadership, fostering a sense of ownership, intrinsic motivation, and belief in one's ability to succeed.

Framework Used: Self-Determination Theory (SDT)

Key Focus Areas:

Autonomy: Encouraging gig workers to feel ownership over their goals and tasks.

Competence: Building confidence in their ability to achieve goals.

Relatedness: Creating opportunities for connection and community in the gig ecosystem.

Approaches

Intrinsic Goal Alignment

Encourage workers to reflect on their personal values and align their tasks with intrinsic motivations.

Activities like journaling or vision boards help articulate long-term aspirations.

Behavioral Interventions

Use positive reinforcement techniques to replace limiting beliefs with empowering ones.

Highlight success stories of peers or mentors as role models to inspire belief shifts.

Reflective Practices

Incorporate mindfulness and self-dialogue exercises to help gig workers rethink negative self-perceptions and develop a growth mindset.

Gig workers often lack traditional supervision and organizational support, which can lead to feelings of isolation and uncertainty. By addressing their intrinsic motivations through SDT, this stage lays the foundation for sustainable self-leadership.

The DO Level: Developing Tangible Strategies

The "DO" stage emphasizes actionable strategies to translate self-leadership principles into everyday behaviors. This stage is crucial for gig workers, as it bridges the gap between abstract concepts and practical application.

The Octalysis Framework identifies **eight core motivational drivers**, allowing for targeted interventions that resonate with gig workers' intrinsic and extrinsic motivators. For example:

- **Accomplishment:** Celebrating milestones with badges or rewards reinforces positive behaviors.

Creativity and Feedback: Encouraging innovative problem-solving keeps workers engaged.

- **Social Influence:** Peer-based challenges and collaboration reduce the isolation often

experienced by gig workers.

Gamification breaks complex tasks into manageable milestones, providing immediate feedback and fostering a sense of progress. For gig workers, this structure mimics the traditional support systems found in full-time employment. Gig workers often lack a sense of community. Peer networks and team-based challenges foster collaboration, building a sense of relatedness and reducing isolation. This stage equips gig workers with tools and strategies to practice self-leadership effectively, increasing engagement, productivity, and goal alignment.

Application of Octalysis Framework

To Equip gig workers with actionable strategies and to translate beliefs into behaviors the Octalysis Framework can be implemented in the following manner:

Key Focus Areas:

Accomplishment: Recognizing and rewarding achievements.

Creativity and Feedback: Encouraging innovation and iterative learning.

Social Influence: Promoting collaboration and peer motivation.

Approaches:

Gamified Learning Modules

Develop bite-sized, game-based learning modules to teach strategies like goal-setting, self-monitoring, and constructive self-dialogue.

Example: Modules for rideshare drivers focusing on reducing stress through mindfulness or improving ratings through customer interaction techniques.

Goal-Oriented Action Plans:

Design clear, measurable goals broken into milestones.

Introduce progress tracking tools like badges, points, or progress bars to visualize growth.

Collaborative Platforms:

Create peer networks for shared challenges, team-based competitions, or mentoring opportunities.

Example: Leaderboards showcasing the top performers in a task category.

This stage provides practical tools and methods for gig workers to implement self-leadership.

The Octalysis Framework ensures that interventions are tailored to motivational drivers, increasing the likelihood of sustained engagement.

The HAVE Level: Practical and Applicable Solutions

The "HAVE" stage focuses on embedding sustainable solutions into gig workers' routines, ensuring long-term impact and scalability.

Application of the 6-Step Gamification Model:

This framework ensures that the gamified solutions are both engaging and practical:

Establish Goals: Align gig workers' objectives with organizational outcomes, such as task completion or customer satisfaction.

Outline Actions: Define clear, actionable behaviors (e.g., self-monitoring, feedback seeking) to achieve these goals.

Define Personas: Tailoring interventions for diverse gig worker archetypes ensures relevance and effectiveness.

Refine Activities and Ensure Fun: Engaging workflows and game-like systems reduce monotony, encouraging consistent participation.

Personalized Learning Pathways: Gig workers often juggle multiple platforms and roles. Personalized pathways ensure that training aligns with individual needs and performance metrics, enhancing relevance and effectiveness.

Feedback Loops and Gamified Platforms: Regular feedback through leaderboards, goal trackers, and peer recognition sustains motivation and provides measurable indicators of progress.

This stage ensures that self-leadership strategies become an integral part of gig workers' daily routines, leading to sustained behavioral change, improved well-being, and career growth.

6-Step Gamification Model

To Embed self-leadership practices into daily routines for long-term impact the 6-Step Gamification Model can be used.

Key Steps:

Establish Goals: Align gig workers' aspirations with organizational objectives, such as task completion, customer satisfaction, or skill acquisition.

Outline Actions: Define specific behaviors like goal-setting, seeking feedback, or managing stress.

Define Personas: Tailor interventions for diverse gig worker archetypes (e.g., task-driven, career-oriented).

Refine Activities: Ensure engaging workflows with clear sequences and gamified interventions.

Ensure Fun: Integrate playful elements to maintain interest and reduce monotony.

Select Game Elements: Use leaderboards, narratives, rewards, and progress tracking for motivation.

Approaches:**Personalized Learning Pathways:**

Utilize AI to suggest tailored learning and development pathways based on individual performance metrics and preferences.

Example: If a worker struggles with time management, provide specific gamified learning modules targeting this skill.

Feedback Loops:

Regular feedback using both algorithmic tools (e.g., performance dashboards) and peer recognition.

Example: A gig worker receives weekly summaries of their progress with suggestions for improvement.

Gamified Platforms:

Introduce tools that incorporate leaderboards, goal trackers, and challenges.

Example: Drivers earn points for completing tasks on time or improving customer ratings, redeemable for tangible rewards.

The HAVE stage ensures that self-leadership practices are seamlessly integrated into daily workflows. The 6-Step Gamification Model ensures that these practices remain engaging, measurable, and impactful.

4.4 Integration of Neuroscience of Play

To enhance engagement and emotional connection through playful elements the integration of Neuroscience of Play is very helpful.

Approaches:

Play-Based Interactions:

Use role-playing scenarios or storytelling to teach problem-solving and decision-making.

Flow States:

Design tasks to balance challenge and skill, promoting a state of flow that boosts motivation and performance.

Behavioral Nudges:

Subtly encourage desired behaviors using gamified nudges like reminders, achievements, and narratives.

Rationale:

Play activates the brain's reward system, making learning enjoyable and reinforcing positive behaviors. This approach fosters creativity, reduces stress, and enhances problem-solving skills.

By adopting the BE-DO-Have, the following benefits can be predicted :

BE Level:

Increased intrinsic motivation and belief in personal responsibility.

Enhanced alignment of personal values with professional goals.

DO Level:

Adoption of actionable self-leadership strategies.

Improved engagement, productivity, and goal alignment.

HAVE Level:

Sustained behavioral change through practical applications.

Enhanced well-being, career advancement, and job satisfaction.

The proposed model combines insights from **Neuroscience of Play**, **Behavioral Sciences**, and **Gamification Principles** within the **Be-Do-Have** framework to address the unique challenges faced by gig workers. It emphasizes intrinsic motivation, actionable strategies, and scalable solutions, creating a comprehensive approach to self-leadership development that benefits both individuals and organizations in the gig economy.

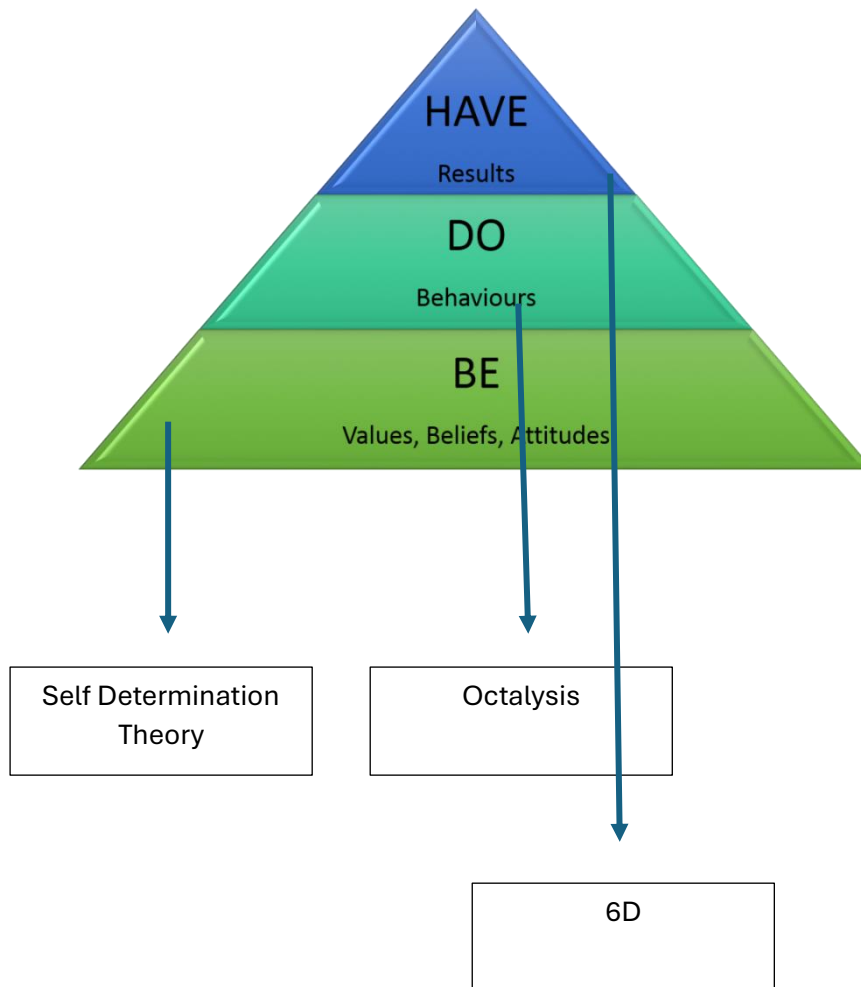


Figure 1 : The theoretical foundation of developing self-leadership through gamification

Discussion

The proposed model for developing self-leadership among gig employees leverages the **neuroscience of play, behavioral sciences, and gamification principles** to create a transformative approach to leadership development. It seeks to motivate gig employees to become leaders by inspiring them to exercise leadership as a natural expression of their identity and abilities. By fostering an environment of engagement through gamified experiences, the model enables gig workers to act in alignment with both intrinsic and extrinsic motivations, meeting their psychological needs for **competence, autonomy, and relatedness**. This, in turn, positively influences their behavior and encourages them to seek a higher purpose or meaning that extends beyond their immediate individual goals.

Motivational Dynamics

The gamified approach integrates a variety of **incentives and rewards**—ranging from badges and leaderboards to personalized recognition and tangible benefits—that not only enhance the learning process but also create a compelling environment where gig employees feel valued and driven. These carefully designed rewards systems stimulate engagement and motivation, fostering the development of critical self-leadership skills such as goal-setting, decision-making, and adaptive thinking. As gig workers experience the fulfillment of their psychological needs, they become more resilient and capable of taking on leadership roles, effectively navigating the challenges of their flexible work environments.

Structured Frameworks for Outcomes

Through the application of the **6D model** (Define, Design, Deliver, Deploy, Determine, and Document), the outcomes set for the training program can be systematically achieved. This model ensures that all stages of the training—starting from the definition of learning objectives to the documentation of measurable outcomes—are aligned with the overarching goal of cultivating self-leadership.

The Be-Do-Have model serves as the foundational framework, helping gig workers understand the transformational process of becoming a leader (Be), practicing leadership behaviors (Do), and achieving the outcomes that align with their aspirations and organizational objectives (Have). This model emphasizes a system-wide approach, integrating personal development with organizational alignment.

Limitations and Critiques of Frameworks Mentioned in the Document

While frameworks such as Octalysis, Self-Determination Theory (SDT), BE-DO-HAVE, and others provide robust foundations for understanding motivation, engagement, and behavior change, they are not without limitations. Below are research-based insights on potential critiques and limitations associated with these frameworks:

Octalysis framework

Critics argue that the framework oversimplifies the complexity of human motivations by categorizing them into eight core drives (Nicholson, 2015). Human motivation is dynamic and multi-layered, and some drives may overlap or conflict, making it difficult to predict behaviors accurately. While Octalysis incorporates intrinsic motivators, it leans heavily on external rewards (e.g., points, badges, leaderboards). Research suggests that over-reliance on extrinsic motivators can diminish intrinsic motivation over time (Deci et al., 2001). Studies like Weber et al. (2022) highlight that Octalysis may not adapt well across cultures or contexts, as the importance of specific core drives can vary significantly. For example, social influence may hold more weight in collectivist cultures than individualistic ones. Implementing all eight drives in a gamified system can overwhelm both designers and users. It risks creating systems that are too complex, leading to reduced engagement and adoption (Werbach & Hunter, 2012).

Self-Determination Theory (SDT)

While SDT emphasizes intrinsic motivation, some environments (e.g., gig work) rely heavily on extrinsic rewards due to their transactional nature (Gagné & Deci, 2005). This misalignment can reduce the effectiveness of SDT-based interventions. Critics like Ryan and Connell (2018) argue that SDT does not adequately address external constraints such as organizational policies or societal norms, which can significantly impact motivation. Measurement Challenges: Assessing psychological needs like autonomy, competence, and relatedness often relies on self-reporting, which may introduce bias and limit the reliability of findings (Van den Broeck et al., 2010). SDT tends to focus on individual psychological processes and may overlook broader systemic factors like power dynamics and economic conditions (Chirkov, 2011).

BE-DO-HAVE Model

The BE-DO-HAVE model, while popular in personal development literature, lacks a strong empirical foundation compared to SDT or gamification frameworks (Franklin, 2004). Most evidence supporting it is anecdotal or practitioner-driven. Critics argue that the model oversimplifies complex processes of behavior change and goal achievement by focusing on linear progression (Nischwitz, 2007). Real-world scenarios often involve iterative, non-linear change. The framework does not provide specific strategies for adapting to different organizational or cultural contexts, which limits its practical utility (Djavid, 2023). While the model emphasizes mindset shifts, it does not adequately address motivational barriers that may prevent individuals from taking the "DO" actions necessary for achieving outcomes.

6D Gamification Framework (Werbach and Hunter)

The 6D model focuses heavily on structuring gamification systems but lacks emphasis on understanding the psychological underpinnings of user engagement (Nicholson, 2015). The stepwise nature of the framework may not align with agile or iterative design processes often used in modern gamified systems (Alfaqiri et al., 2022). The framework prioritizes gamification mechanics over broader organizational factors like culture and leadership, which are critical for sustaining engagement (Werbach & Hunter, 2012). The framework assumes uniform application across

different user groups, but gamification effectiveness varies based on demographics, preferences, and task complexity (Hamari et al., 2014).

General Critiques of Gamification

Gamification often struggles to sustain engagement beyond the novelty phase. Users may experience fatigue with repetitive game elements like points and leaderboards (Basten, 2017). Critics argue that gamification can be manipulative, exploiting users' psychological tendencies to drive behaviors that may not align with their interests (Zichermann & Linder, 2013). Quantifying the ROI of gamification remains challenging, particularly in contexts where the outcomes are intangible (Hamari et al., 2014).

Practical Implications of This Research

For Facilitators

The study will provide a robust and practical framework to design gamified interventions that go beyond skill-building to actively engage gig workers. Facilitators can leverage this framework to deliver programs that foster critical self-leadership skills, encourage goal-setting, and sustain motivation in the absence of a structured environment.

For HR Professionals:

HR teams can apply the research insights to design policies and initiatives that align gamified engagement with broader organizational objectives. These could include gamified performance management systems, recognition programs, and platforms for continuous learning and development that cater specifically to the needs of gig workers. By doing so, HR professionals can drive a culture of inclusivity and empowerment within the gig workforce.

For Business Heads:

Business leaders can use the findings to build a strategic approach for managing and engaging gig workers effectively. The research offers tools to align gig workers' personal goals with organizational objectives, fostering a motivated, productive, and loyal workforce. Gamified engagement strategies can also help in creating a sense of community and belonging, crucial for retaining gig talent in competitive markets.

Conclusion

While frameworks like Octalysis, SDT, BE-DO-HAVE, and the 6D model offer valuable insights, their limitations highlight the importance of contextual adaptation, empirical validation, and a balance between structure and flexibility. Addressing these critiques can enhance their effectiveness and applicability in diverse contexts, such as gig workforce management. The next stage of the paper will should focus on integrating these frameworks with more dynamic, user-centric approaches to overcome existing gaps and challenges.

The proposed model for developing self-leadership among gig workers is built on a foundation of secondary data research, drawing insights from academic journals, industry whitepapers, and tacit knowledge from industry practices. This approach has enabled the development of a comprehensive hypothesis that integrates theories such as the Be-Do-Have model, Self-Determination Theory (SDT),

and gamification principles, offering a strategic framework for engaging and motivating gig employees. The current stage has focused on conceptualizing the model and mapping potential implementation pathways based on existing literature and observed best practices.

Future research by the authors would INVOLVE Primary Data Research to validate and refine the hypotheses developed in the initial stage. This will include quantitative data from gig workers, HR professionals, business heads, and other stakeholders. It would explore Motivation, engagement, leadership potential, and the perceived impact of gamified approaches.

By combining secondary and primary research, the study will achieve a robust, evidence-based framework that delivers meaningful outcomes for gig workers and the organizations that engage them. This iterative process will ensure the final model is both relevant and effective in addressing the challenges and opportunities within the gig economy.

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