



TECHNIUM
SOCIAL SCIENCES JOURNAL

Vol. 21, 2021

**A new decade
for social changes**

www.techniumscience.com

ISSN 2668-7798



9 772668 779000

Theories of change in Agile Psychology

Dana Rad¹, Gavril Rad²

^{1,2}Aurel Vlaicu University of Arad, Faculty of Educational Sciences, Psychology and Social Work, Center of Research Development and Innovation in Psychology

dana@xhouse.ro¹

Abstract. Theory of Change is essentially a detailed illustration and exemplification of how and why a desired change is expected to occur in a certain setting. It is particularly concerned with mapping out or what has been termed as the missing gap between what an intervention or change effort performs and how they contribute to the achievement of desired outcomes. It accomplishes this by first defining the intended long-term objectives and then working backwards from these to determine all of the circumstances (outcomes) that must exist (and how they are causally connected to one another) for the objectives to occur. All of this is stated out in an Outcomes Framework. The Outcomes Framework then serves as the foundation for determining what form of activity or intervention will result in the outcomes listed as prerequisites for reaching the long-term objective. The precise relation between activities and the attainment of long-term goals is better understood using this technique. This results in improved planning since actions are related to a full grasp of how change occurs. It also leads to improved assessment since it allows for the measurement of progress toward the attainment of longer-term goals that extend beyond the identification of program outcomes. For modern managers, working with agile development necessitates the adoption of a new philosophy or psychology. While method is vital to guarantee that the team produces high-quality interventions that fulfill clients' needs, it's also crucial to remember that the Agile Method emphasizes flexibility, collaboration, and transparency among team members as well as between the team and management. It creates a management climate in which managers exert less control and more facilitation. The manager's responsibility shifts to one of removing bottlenecks, fostering openness and communication, and monitoring the change-driven environment to ensure that the results satisfy goals and criteria but not exerting too much control on the flow of the process of agile development. Change is no longer incorrect; rather, the inability to change is incorrect. Thus, the emphasis of this paper is to raise awareness of the importance of approaching agile psychology with theories of change methodologies.

Keywords. theory of change, agile psychology

1. Theories of change in intervention evaluation

Theory of Change is essentially a detailed illustration and exemplification of how and why a desired change is expected to occur in a certain setting. It is particularly concerned with mapping out or what has been termed as the missing gap between what an intervention or change effort performs and how they contribute to the achievement of desired outcomes. It accomplishes this by first defining the intended long-term objectives and then working backwards from these to determine all of the circumstances (outcomes) that must exist (and how they are causally connected to one another) for the objectives to occur. All of this is stated out in an Outcomes Framework. The Outcomes Framework then serves as the foundation for

determining what form of activity or intervention will result in the outcomes listed as prerequisites for reaching the long-term objective. The precise relation between activities and the attainment of long-term goals is better understood using this technique. This results in improved planning since actions are related to a full grasp of how change occurs. It also leads to improved assessment since it allows for the measurement of progress toward the attainment of longer-term goals that extend beyond the identification of program outcomes.

In the assessment of comprehensive community projects, theory-based evaluation methodologies are becoming increasingly prevalent. The paper by Davies (2004) examines a variety of different forms of change processes and how they might be represented. It starts with linear processes and concludes with network processes, which are generally described using the Logical Framework. Three linked cross-disciplinary theoretical views explain the suggested solutions: evolutionary theory, complex adaptive systems, and social network analysis.

The paper by Mackenzie and Blamey (2005) provides an experimentally based study of the challenges that arise when articulating a project's ToC. The approach's worth is then evaluated in terms of refining planning, giving formative feedback, enhancing performance management, directing internal and external assessment, assessing impact, and decreasing attribution issues. While such techniques are far from perfect, they can provide a helpful framework within which to tackle a variety of evaluation questions.

Theories of Change (ToC) assessments have proven to be a popular strategy for evaluators of complex social policies and interventions, although there is substantial variance in how ToC evaluations have been handled. According to Mason and Barnes (2007), the literature on the ToC method has ignored the process through which stakeholders form theories of change, while constantly identifying such ideas as immature. According to the authors, program theory assessments have focused on a method that emphasizes the necessity of gaining clarity at the start, but that the details of such theories and their implementation can only be achieved through time. An alternate methodology is presented, according to the authors, which allows for a better comprehension of program theory and, as a result, knowledge and learning.

While there is broad agreement on the overall picture of theories of change, models depicting how interventions are designed to behave, various interpretations of what a theory of change entails in practice, how to build one, and how to apply one are pervasive, according to Rogers (2011), Mayne (2015), and Stein and Valters (2012). Mayne's (2015) research proposes and explores a sound and practical paradigm for theories of change in both simple and complex interventions. It starts with an outline of a basic generic theory of change before moving on to a discussion of causality in relation to theories of change. Authors discuss of layered theories of change, as well as models for more intricate multiple interventions (Mayne, 2015). The article discusses three potentially useful variations of a theory of change, simplifies the models, and offers some perspectives on how theories of change are evolving.

Models for theories of change come in a variety of shapes and sizes, as do the ways in which they are used. What makes a good or resilient theory of change hasn't gotten much attention. The paper by Mayne (2017) lays out and explores the requirements for robust theories of change. It also goes through how these criteria may be utilized to conduct a thorough examination of a theory of change. A good study of a theory of change may be immensely beneficial for both planning and analyzing intervention designs, as well as developing monitoring and evaluation regimes.

Thus, in relation to intervention assessment, we will further present several change theories and understanding of the change process. For long-term success, successful transformation may be promoted and fostered., starting with Lewin's Three-Step Change Theory (Lewin, 1951), Lippitt's Phases of Change Theory (Lippitt, Watson, Westley, 1958),

Prochaska and DiClemente's Change Theory (Prochaska, DiClemente, 1983), Social Cognitive Theory (Bandura, 1986), the Theory of Reasoned Action and Planned Behavior (Fishbein et al., 1992, Fishbein and Ajzen's, 1975; Ajzen, Fishbein, 1980) and Emergent Digital Misbehavior (EDM) (Rad, Rad, 2021).

The three-step change paradigm was developed by Kurt Lewin in 1951. Behavior, according to this social scientist, is a dynamic equilibrium of forces acting in opposite directions. Because they drive personnel in the desired direction, driving forces help to enable change. Employees are pushed in the other direction by restraining factors, which stifle change. As a result, these factors must be investigated, and Lewin's three-step approach can help move the balance in the right way. As a consequence, Lewin's model illustrates the effects of variables that promote or inhibit transformation. Change is aided by driving forces, but change is hampered by restraining elements.

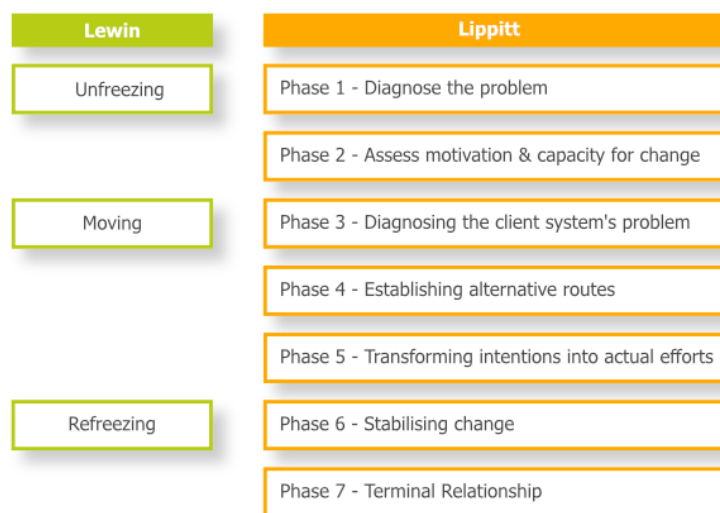


Figure 1 - Kurt Lewin (1951) three-step change model versus seven phases Lippitt model

The Three Step Change Theory proposed by Lewin is extended by the model proposed by Lippitt and collaborators (1958). Lippitt and collaborators developed a seven phases approach that emphasizes the responsibilities of the transformative agent. Throughout the procedure, data is continuously distributed. Changes that propagate to nearby systems or subparts of the system directly impacted are more likely to be stable, according to Lippitt, Watson, and Westley. Changes are more firmly established. The more widely imitated a behavior gets, the more it is seen as normal (Lippitt, Watson and Westley, 1958).

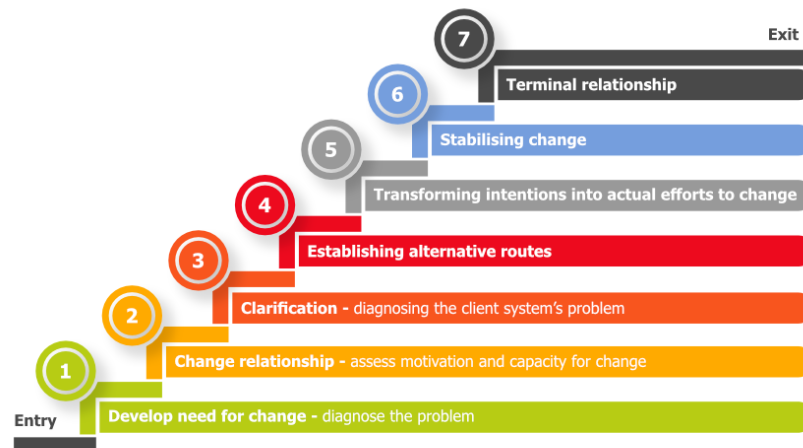


Figure 2. The dynamics of planned change (Lippitt, Watson, & Westley, 1958).

To reflect the many stages of their approach, Prochaska and DiClemente (1983) constructed a spiral model. The model's first element depicts the progression of deliberate change from pre-contemplation phase to contemplation phase. If a person is oblivious of or refuses to admit difficulties without engaging in any change process activation, they are said to be pre-contemplating. Individuals in this stage are steadfast in their refusal to change their behavior and may even feel it is normal. When a person becomes aware of an issue, they begin to think about it. Individuals are thinking about improving their behavior but aren't ready to commit to the process just yet. The next phase is the preparation stage of Prochaska and DiClemente's change theory. A person is prepared if they are ready to change their behavior and plan to do so within the next period. These individuals will require treatment, social support, and problem-solving assistance throughout this transition phase. The action stage begins shortly after that. It is distinguished by an increase in the individual's ability to deal with behavioral change as well as engagement in change activities. Finally, maintenance is the final phase in Prochaska and DiClemente's change theory. The last step involves actions to reinforce the change, as well as establishing the new behavioral shift in the individual's lifestyle and norms. Such period might continue anywhere from six months to the rest of the person's life. To establish a successful long-term improvement, counseling is required to avoid relapses. People in this spiral model can leave at any time if they do not wish to change. The model considers behavioral relapses, or the return to a previous state of behavior. Many people refuse to give up when it comes to relapses. They might return to the contemplation stage and plan their next steps. The spiral shape of the model indicates that many individuals learn from it.

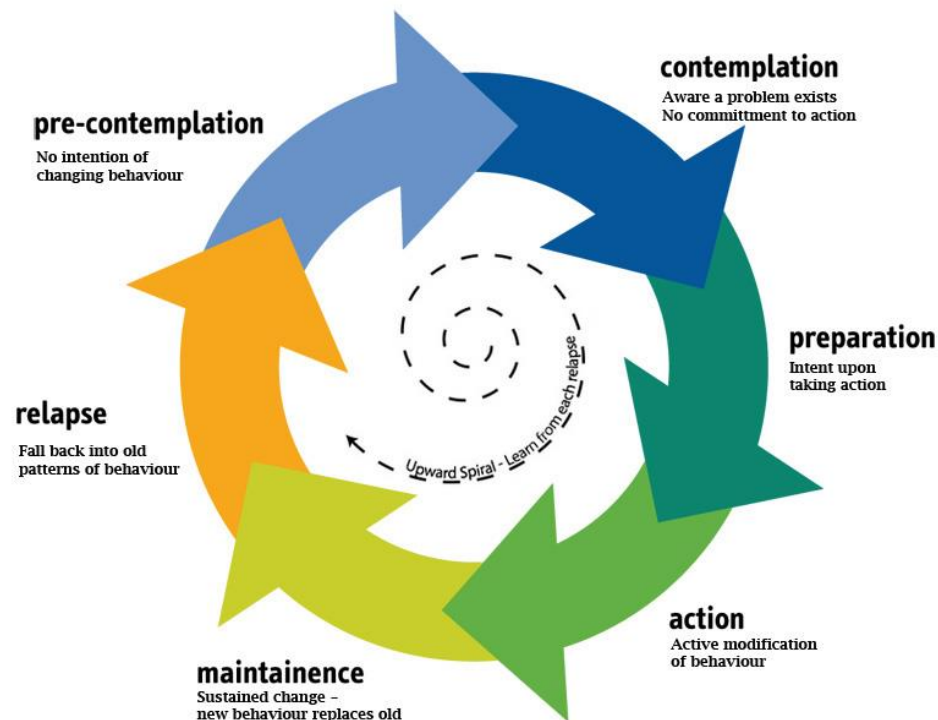


Figure 3 - Stages-of-Change Model developed by James Prochaska and Carlo DiClemente (1983)

James Prochaska and Carlo DiClemente created the Stages-of-Change Model to describe the five stages that people go through while changing their health-related behaviors (Prochaska & DiClemente, 1983). It's part of their larger Transtheoretical Model, which not only evaluates a person's willingness to act to stop a problem behavior, but also contains solutions and change procedures to help the person progress through the phases. The Stages-of-Change Model arose from studies on psychotherapy and the cessation of addictive behaviors including smoking, drinking, and substance misuse, as well as weight management difficulties (Buxton, Wyse, & Mercer, 1996). Although Prochaska and DiClemente predicted that people change in a linear fashion through a succession of distinct stages, experts today feel that a cyclical or "spiral" pattern better describes how most people modify bad behavior over time (Shaffer, J.A., 2013).

Direct experiences, human discourse and connection, and observation may all help people learn. Environmental effects, personal variables, and behavior characteristics all impact behavior change, according to social cognitive theory. Self-efficacy is required of the individual. They must trust in their abilities to accomplish the activity and feel that there is a financial incentive for them to do so. Operant conditioning is extended into social learning theory. To put it another way, conduct is a product of consequences. Individuals react to their perceptions of the repercussions of their actions. As a result, in order for social learning to occur, an individual's positive expectations of the behavior must exceed their negative expectations. There are two sorts of consequences or outcomes: immediate benefits, such as feeling more energized, and long-term benefits, such as better cardiovascular health. Because these projected effects are filtered via a person's expectations or views of being able to undertake the action in the first place, self-efficacy is regarded as the most important factor influencing a person's

behavioral change. Self-efficacy may be increased in a number of ways. Giving explicit directions, allowing for skill growth or training, and modeling the desired behavior. Because these projected effects are filtered via a person's expectations or views of being able to undertake the action in the first place, self-efficacy is regarded as the most important factor influencing a person's behavioral change. Self-efficacy may be increased in a number of ways. Giving explicit directions, allowing for skill growth or training, and modeling the desired behavior. When the model is tidy, appealing, captivating, attention-getting, and applies to so many people, it is easier to persuade them. The degree to which a person can recall the model and its attributes is considered in retention procedures. The motor reproduction process depicts a person translating what they see (observation) into what they do. When a person alters their behavior as a result of positive incentives and rewards, reinforcement procedures are applied. The intended modified behaviors will receive more attention, higher incentives, and will be performed more frequently. To be effective, models must inspire the observer's trust, admiration, and respect. Models, on the other hand, should not appear to depict a degree of activity that the observer is unable to imagine.

Individual execution of a particular activity is essentially governed by a person's intention to do that activity, according to the Theory of Reasoned Action and Planned Behavior (Fishbein et al., 1992; Fishbein and Ajzen's, 1975; Ajzen, Fishbein, 1980). There are two key aspects that influence a person's attention. For change to occur, the individual's attitude toward the desired action must first be favorable. Second, the impact of a person's social environment or subjective norm is another factor that determines how much attention they pay. This comprises their peers' opinions and what they believe the individual should achieve, as well as the individual's motivation to finish the assignment. The idea of perceived control over the opportunity, resources, and abilities required to achieve the intended activity is included in the idea of planned behavior. Self-efficacy and perceived behavioral control are two concepts that are comparable. Perceived behavioral control over opportunities, resources, and skill is an important part of the behavioral change process.

One of the last models was designed by our team (Rad, Rad, 2021), namely Model of Emergent Digital Misbehavior (EDM), based on previous work and with a direct application in Digital Behavior Change Interventions (DBCI).

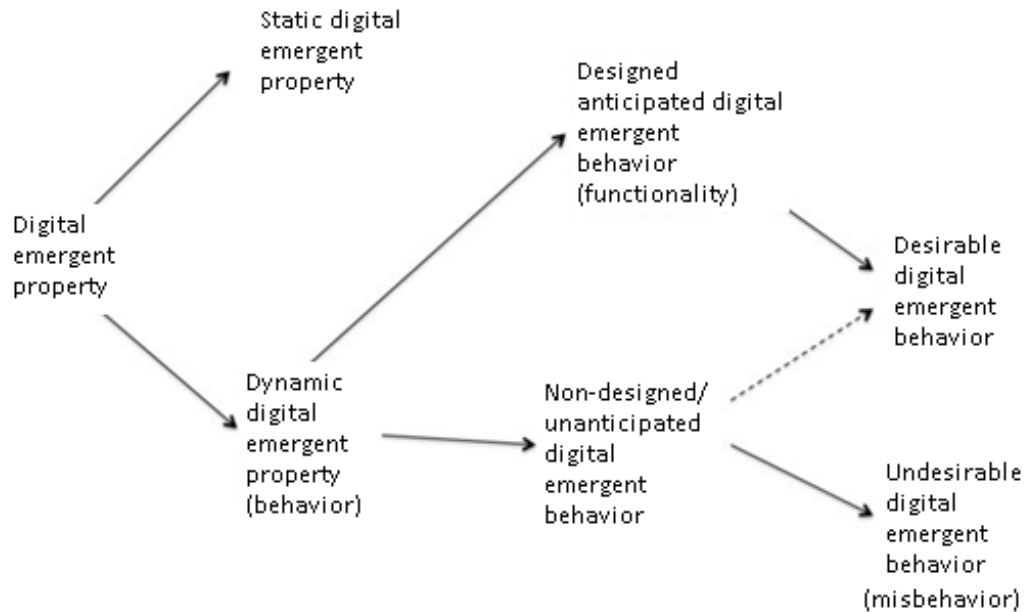


Figure 4 - Model of Emergent Digital Misbehavior (EDM) (Rad, Rad, 2021)

Leading industry specialists will need to analyze and share raw data on the transition process as well as our changing society and culture on a regular basis.

2. Agile Psychology

For modern managers, working with agile development necessitates the adoption of a new philosophy or psychology. While method is vital to guarantee that the team produces high-quality interventions that fulfill clients' needs, it's also crucial to remember that the Agile Method emphasizes flexibility, collaboration, and transparency among team members as well as between the team and management. It creates a management climate in which managers exert less control and more facilitation. The manager's responsibility shifts to one of removing bottlenecks, fostering openness and communication, and monitoring the change-driven environment to ensure that the results satisfy goals and criteria but not exerting too much control on the flow of the process of agile development (Rad, Rad, 2021). Change is no longer incorrect; rather, the inability to change is incorrect.

The creation of adequate measurement instruments for future quantitative investigations is necessitated by the growing interest in the social-psychological impact of agile methods. This research developed instruments for eight agile techniques, including iteration planning, iterative development, continuous integration and testing, stand-up meetings and other (So, Scholl, 2009). The psychometric quality of all newly developed measures was found to be good in both qualitative and quantitative studies. The measuring tools developed as a consequence are accessible in questionnaire form and are ready to be employed in future scientific research for quantitative evaluations of agile practices' social-psychological consequences (So, Scholl, 2009).

Psychological empowerment was proposed and empirically evaluated as an explanatory mechanism for the link between agile practices and performance in Malik, Sarwar, and Orr's (2021) study. The psychological empowerment mediated links between team autonomy and creative behavior, as well as agile communication and creative behavior, were shown to have

empirical evidence. The success of a project was also influenced by innovative behavior. There was no evidence of a link between psychological empowerment and agile approaches such as team diversity and incremental and iterative development. The empirical confirmation of agile techniques as a source of empowerment and motivation for agile teams is a novel finding in the literature with significant implications for theory and practice. The communication and team autonomy components are also shown to be the difference between motivated and amotivated project teams in this study (Malik, Sarwar, Orr, 2021).

For modern managers, engaging with agile development teams necessitates the adoption of a new mindset, or psychology. While method is vital for ensuring that the team provides high-quality results and services that fulfill customer needs, it's crucial to remember that the Agile Method emphasizes flexibility, collaboration, and transparency among team members as well as between the team and management. It creates a management climate in which managers exert less control and more facilitation. The manager's responsibility shifts to one of removing bottlenecks, fostering openness and communication, and monitoring the change-driven environment to ensure that the total product satisfies goals and criteria but not exerting too much control on the process of agile development.

Psychological safety is required for high-performing teams. As a result, Agile teams must feel free to speak up without fear of retaliation. While this may appear to be a minor point, many Agile teams are forced to avoid uncomfortable talks and skirt around the facts. It is the Agile leaders' obligation to ensure psychological safety. Agile leaders do not need to be in a management position; anybody may take on the job of Agile leader. Furthermore, only these leaders have the ability to foster a climate that allows high-performing Agile teams to thrive and add value. As a result, leaders must internalize and demonstrate leaner methods of thinking and acting so that their teams may benefit from their guidance, mentoring, and support. With that stated, Agile leaders in businesses must recognize that they have a significant role to play and must assist their teams. They can aid in the induction of high psychological safety by reinforcing psychological safety, having uncomfortable talks, participating in conflict resolution, and removing staff members who pose a threat to psychological safety. When interviewing new team members, questions on psychological safety may be asked (Do you usually feel comfortable speaking up?). For Agile teams aiming to strengthen and establish psychological safety, the hiring process might be an excellent place to start.

To put it another way, leaders must lead. In many circumstances, this entails setting a good example. This is only achievable, however, if leaders recognize that there is an issue. People are frequently offended by a specific problem(s) and neglect to alert anybody. When Agile teams encounter insecurity, it's a good idea to see if other teams are experiencing comparable levels of psychological safety. If there is a trend, the problem may need to be escalated. Scrum and Agile trainers are well-equipped to deal with this, but they may need to join forces to promote awareness.

Too frequently, individuals are afraid of being labeled as uninformed, inept, negative, or disruptive if they speak up (Edmondson, 2012). Agile teams must be able to speak up without fear of being judged. While being silent may keep us safe personally, it may endanger the organization (Edmondson, 2019). When the team feels protected, they can express their issues without feeling distressed. When a person feels psychologically comfortable, they express themselves without reservations. The remainder of the team may disagree, and the group may eventually choose to go with its own judgment. The idea is that the person was heard and that a debate had place. Furthermore, the person is likely to continue speaking up and to urge others to do so as well. Psychological insecurity may appear similar to groupthink. When there is psychological safety in a group, groupthink can arise. Groupthink can also be tolerated in psychologically secure circumstances. The primary distinction is that groupthink is not motivated by fear. Focusing only on the task at hand rarely yields the greatest results. Unsafe settings stifle free-flowing thought.

There will be intra-team and inter-team conflict. This disagreement can become aggressive in risky environments, and it may occasionally develop to a "win at any costs" mindset. Agile teams require a particular form of conflict. They need a decent amount of conflict. Psychological safety enables teams to communicate their diverse viewpoints in a way that leads to better decision-making. When a team member feels protected, they will not try to operate behind the scenes. Instead, they'll have a conversation with another person or the entire team. They'll likely discuss method or protocols for when the problem arises again in the future, in addition to working collaboratively to tackle the situation at hand.

Failure is a term with a negative meaning. Most of us have been taught since childhood that failure is terrible and must be avoided at all costs. We all make errors at some point in our lives, whether it's in our personal or professional life. Pretending to be flawless, on the other hand, puts us at a disadvantage. A lack of psychological safety can produce the appearance of success, which can lead to disappointment (Edmondson, 2019). Psychological safety allows people to make mistakes while also allowing them to confess their faults. That isn't to imply we don't want to achieve, or that psychological security fosters failure. Instead, than penalizing individuals when things don't go as planned, the objective is to attempt to learn from the situation (Edmondson, 2012). When it comes to reporting failures, Agile teams should have minimal to no fear. In an unsafe environment, the team member (and others) would presumably ignore the faulty build and the fact that it was caused by a faulty code merge, hoping that it would go unnoticed. If these methods persist, they will inevitably cause frustration and worse quality.

Amazing things may happen when individuals feel secure to offer new ideas and possibilities (Edmondson, 2012). Organizations with this sense of security are able to provide goods and services that they could never have envisioned before. To make suggestions, agile teams require psychological safety. That isn't to mean that all of the suggestions will be put to the queue and implemented at some point. However, there are occasions when a team member comes up with a brilliant concept that may completely transform a product or service. Without psychological safety, invention is impossible, and without innovation, businesses' options are severely constrained, making it difficult to compete.

Unsafe workplaces might provide impediments to obtaining peak performance. While most Agile teams desire to provide as many story points as possible, the fear of backlash may prevent them from doing so. When psychological safety is lacking, the team not only chooses to live with the toxicity, but they also find it difficult to work at their best. The integration efforts will not only take longer than they should, but they will also be of lower quality. As trust erodes, the connection with the customer may begin to disintegrate. This has a negative impact on morale and leads to frustration. Expertise and resourcefulness are difficult to put to good use without psychological safety (Edmondson, 2019).

Organizations with strong psychological safety and responsibility are ideal (Edmondson, 2012). When both are present, learning and cooperation may take place without interruption. People often put in minimum effort and accomplish just enough to get by when neither is available. Agile teams require a significant amount of both. When they become stuck, they can seek out to other team members. In fact, some Agile teams have a rule that if they get stuck after a certain amount of time, they must seek for help. In this situation, increasing responsibility is a beneficial move. When Agile teams lack psychological safety, they may be hesitant to seek assistance. As a result, they frequently deliver their job late or never, this damaging team reputation.

Agile is more of an assumption to be accepted than a theorem to be demonstrated. Agile is, in reality, both scientific and creative. When science and art come together, we'll be on the verge of truly understanding and creativity when it comes to Agile. We also capitalize on the fact that Agile represents a quantum leap in the field of professional, industrial work,

necessitating a considerable shift in project management. Agile emphasizes leadership, mentoring, and collaboration. Successful initiatives and organizations place a high value on the subjectivity of individuals, making leadership essential.

3. Conclusions and discussion

Agile's key principles create a solid basis for success. "Fail quickly and often" is one of the tenets that teams are encouraged to follow. This mindset is essential for quick development and release cycles. It aids in the speedier identification of areas of success and failure. This enables a team to make tiny continual course changes during a project, reducing the risk of severe delays or errors. The notion is carried out all the way to the external customer. Smaller, faster releases provide for more immediate feedback. This improves feature accuracy while saving development time. "Don't compare teams," is another Agile premise. Under the Agile framework, teams self-organize. In Scrum, for example, each team creates their own estimating method. Teams create their own flow and maximize work-in-process using Kanban. Trying to compare teams is like to comparing apples to oranges.

In Agile, failing quickly and frequently is a difficult notion to embrace. It's much simpler to say than it is to do. The majority of people have an inherent psychological dread of failing. Atychiphobia is an unreasonable fear that has a life of its own. This worry may deter some people from adopting Agile. It all comes to motivation when it comes to implementing and fostering the Agile attitude. People do not change by force, according to the facts. It is necessary to make the decision to change from inside. Knowing this, there are a few things you may do to assist speed up the process:

- Have one-on-one conversations with team members about how they feel about Agile. Encourage them to be honest and transparent, and do the same for them.
- Encourage team members to freely address issues they are concerned about and work together to find a solution.
- Encourage each team member to speak up and make them know that their voice is being heard. Allow no talk of bullying.
- Keep a running list of action items depending on discussion resolutions.
- Allow team members to control Agile process stages by giving them opportunity to do so. This may assist in their comprehension.
- Provide team members with information on frequent pitfalls.

It's also a challenging Agile idea to discourage team comparisons. Human nature includes comparison. It is not a conscious element of many people's daily lives. The human brain is designed to look for and compare patterns. This notion underpins Gestalt Principles like Similarity and Proximity. The user's ability to correlate design constructs is crucial when implementing new user experiences. Although team comparisons are discouraged, team comparisons are greatly encouraged. When determining the size of user requirements in Scrum, the estimating process depends on comparison to ensure consistency.

Although Agile teams are self-organizing, the implementation of its ideas necessitates a collaborative effort from all teams. Fear of failure and a lack of comparison serve as roadblocks, but they are surmountable. Agile isn't meant to dehumanize the development process or prevent people from talking. Its rules are in place to safeguard individuals while also securing the wider process. This foundation gives the chance to achieve greater achievement.

Most employees will be ecstatic about the switch to agile, but still change is the essential word. Not everyone will jump on board right soon, thus it is mandatory to employ all of the successful change management methods and tools to aid in the transition.

References

- [1] Ajzen, I., Fishbein, M. (1980). Understanding attitudes and predicting social behavior: Attitudes, intentions, and perceived behavioral control. Englewood Cliffs, NJ: Prentice Hall.
- [2] Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, N.J: Prentice-Hall.
- [3] Buxton, K., Wyse, J., & Mercer, T. (1996). How applicable is the stages of change model to exercise behaviour? A review. *Health Education Journal*, 55(2), 239–256.
- [4] Davies, R. (2004). Scale, Complexity and the Representation of Theories of Change. *Evaluation*, 10(1), 101–121. <https://doi.org/10.1177/1356389004043124>
- [5] Edmondson, A. C. (2012). *Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy*. John Wiley & Sons, Inc.
- [6] Edmondson, A. C. (2019). *The Fearless Organization: Creating Psychological Safety in the Workplace for Learning, Innovation, and Growth*. John Wiley & Sons, Inc.
- [7] Fishbein, M., Ajzen, A. (1975). Beliefs, attitudes, intentions, and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley.
- [8] Fishbein, M., Bandura, A., Triandis, H.C., Kanfer, F.H., Becker, M.H., Middlestadt, S.E. (1992). Factors influencing behavior and behavior change. Bethesda, MD: National Institute of Mental Health.
- [9] Lippitt, R., Watson, J., & Westley, B. (1958). *The dynamics of planned change*. New York, Harcourt, Brace and World, Inc.
- [10] Mackenzie, M., & Blamey, A. (2005). The Practice and the Theory: Lessons from the Application of a Theories of Change Approach. *Evaluation*, 11(2), 151–168. <https://doi.org/10.1177/1356389005055538>
- [11] Malik, M., Sarwar, & S., Orr, S. (2021). Agile practices and performance: Examining the role of psychological empowerment, *International Journal of Project Management*, 39(1), 10-20 <https://doi.org/10.1016/j.ijproman.2020.09.002>.
- [12] Mason, P., & Barnes, M. (2007). Constructing Theories of Change: Methods and Sources. *Evaluation*, 13(2), 151–170. <https://doi.org/10.1177/1356389007075221>.
- [13] Mayne, J. (2015). Useful Theory of Change Models. *Canadian Journal of Program Evaluation*, 30(2), 119–142 doi: 10.3138/cjpe.230
- [14] Mayne, J. (2017). Theory of Change Analysis: Building Robust Theories of Change. *Canadian Journal of Program Evaluation*, 32(2), 155–173 doi:10.3138/cjpe.31122.
- [15] Prochaska, J., & DiClemente, C. (1983). Stages and processes of self-change of smoking: toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, 51(3), 390–395.
- [16] Rad, D., & Rad, G (2021 in press). Model of Emergent Digital Misbehavior (EDM) – a novel theoretical framework under the Digital Behavior Change Interventions (DBCI) paradigm. In Rad D, Balas V, Marineanu V, & Maier R (eds) *Digital Wellbeing – Implications for Psychological Research*. Peter Lang Publishing House, Berlin.
- [17] Rad, D., & Rad, G. (2021). Theory of Change and agile community digital psychological interventions. *Technium Social Sciences Journal*, 20(1), 632–642. Retrieved from <https://techniumscience.com/index.php/socialsciences/article/view/3516>.
- [18] Rogers, P. (2011). Implications of complicated and complex characteristics for key tasks in evaluation. In K. Forss, M. Marra, & R. Schwartz (Eds.), *Evaluating the complex: Attribution, contribution and beyond* (pp.33 – 52). New Brunswick, NJ: Transaction.

- [19] Shaffer J.A. (2013) Stages-of-Change Model. In: Gellman M.D., Turner J.R. (eds) Encyclopedia of Behavioral Medicine. Springer, New York, NY. https://doi.org/10.1007/978-1-4419-1005-9_1180
- [20] Sinek, S. (2009). Start with Why: How Great Leaders Inspire Everyone to Take Action. Penguin Books.
- [21] Sinek, S. (2014). Leaders Eat Last: Why Some Teams Pull Together and Others Don't. Penguin Books.
- [22] So C., & Scholl W. (2009) Perceptive Agile Measurement: New Instruments for Quantitative Studies in the Pursuit of the Social-Psychological Effect of Agile Practices. In: Abrahamsson P., Marchesi M., Maurer F. (eds) Agile Processes in Software Engineering and Extreme Programming. XP 2009. Lecture Notes in Business Information Processing, vol 31. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-01853-4_11.
- [23] Stein, D., & Valters, C. (2012). Understanding 'theory of change' in international development: A review of existing knowledge. Asian Institute and the Justice and Security Research Programme.
- [24] Sutherland, J., & Sutherland, J. J. (2014). Scrum: The Art of Doing Twice the Work in Half the Time. Crown Publishing Group.