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Personality, Extrinsic Task Motivation, and the Use of Generative AI: A Framework for Understanding Human-AI Interaction

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Abstract

As generative AI tools become increasingly embedded in education, work, and creative practice, understanding the psychological factors that shape their use is essential. This paper proposes a novel framework that integrates the Big Five personality traits with three key extrinsic task-based motivations, (1) "It's important not to fail", (2) "The output can easily be seen to be correct", and (3) "New ideas are valued", which we use to explain how individuals interact with generative AI systems such as ChatGPT, DALL·E, and Grammarly. While prior research has explored demographic or task-type predictors of AI use, this paper proposes consideration of the individual user's personality and motivation as core variables. We argue that personality traits moderate the likelihood, style, and depth of AI engagement for different types of extrinsic task motivation. For example, individuals high in Openness are drawn to generative AI when novelty is extrinsically valued but are less motivated by situations where risk-avoidance is valued. Conversely, those high in Neuroticism engage heavily with AI when failure must be avoided, but are less comfortable with creative ambiguity. Using Weick's (1995) nascent theory approach we have developed a matrix of predicted AI use patterns across combinations of personality profiles and extrinsic task motivations. This framework contributes to a more nuanced understanding of human-AI interaction by accounting for individual differences in personality, and has practical implications for the ethical, effective, and inclusive deployment of generative AI technologies.

Keywords: Generative AI, human-AI interaction, task type, personality traits, Big Five personality traits.

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1. INTRODUCTION

Generative AI tools such as ChatGPT, DALL·E, and Grammarly are becoming extensively used in educational, business, and personal contexts. Humans, as users of Generative AI, have varying personalities and traits, and these characteristics impact how individuals utilize new technologies (Joshi et al., 2023). In addition, organizations in which Generative AI is used, including businesses and education, vary with respect to their environment - goals, motivations, internal processes, culture, management approach, and how they engage with the world. Considering the system of human-AI interaction and organizational environment, the research question for this paper is: how do the different personalities and traits of people using Generative AI interact with the ways that organizations want to complete the tasks they are most focused on? This paper uses a grounded theory approach to provide a prediction framework for the interaction between individual personalities and the task-based motivations of organizations.

2. NASCENT THEORY DEVELOPMENT

A seminal article by Karl Weick (1995) in Administrative Science Quarterly introduced the idea of Nascent Theory to describe early-stage theoretical work that is exploratory, generative, and conceptually creative, has not yet been empirically validated, but is nonetheless valuable for shaping future research. Nascent Theory focuses on novel ideas rather than confirming existing ones. It offers new constructs, mechanisms, or relationships that haven't been formally theorized before. It is usually supported by logical arguments, illustrative examples, or conceptual reasoning, not empirical testing (yet). The idea is to stimulate scholarly conversation or open a research agenda. Weick argues that the act of constructing ideas, "theorizing", is as important as testing hypotheses. Others, such as Gregor (2006) in MIS Quarterly, have referenced Weick's "What Theory is Not, Theorizing Is" as foundational to understanding theory as an evolving conceptual process, as we do here for this framework.

Existing research has shown that there are various ways that a business can organize, be managed, and operate that can shape how their employees work. Although these various ways of being organized and managed are extensive, for this framework development we use Peter Drucker's *The Theory of a Business* (1994) and propose using just three basic organizational emphases: 1) *It's important not to fail,* 2) *Output correctness*, and 3) *New ideas are valued*.

It is important to note that these are externalities to the user of Generative AI. That is, organizational environments are features of the organization or situation, not of the person. As this paper will explain, this distinction is crucial for understanding how organizational environments interact with employee behavior, including the adoption and use of Generative AI tools.

Personality traits play a critical role in shaping how individuals behave, make decisions, and interact with their environment including in organizational, technological, and learning contexts. Among the most widely accepted models in psychology is the Five-Factor Model (FFM), often referred to as the Big Five personality traits. This framework conceptualizes personality along five broad dimensions: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Costa & McCrae, 1992; John, et al., 2008). Each trait captures a spectrum of behavioral tendencies that are relatively stable across time and contexts, making the Big Five particularly useful for research into enduring psychological differences across populations. As a result, the model has been extensively applied in fields ranging from organizational behavior and education to technology adoption and consumer behavior (McCrae & Costa, 1999; Judge et al., 2002).

In recent years the Big Five framework has gained renewed attention for its explanatory power in studies of individual engagement with new technologies, especially under conditions of uncertainty or innovation. For example, research has shown that individuals high in openness to experience are more inclined to explore novel tools and adapt to emerging technologies, while

those high in conscientiousness may be more structured and deliberate in their technology use (Devaraj et al., 2008; Svendsen et al., 2013). Similarly, neuroticism has been associated with anxiety about new systems, while extraversion and agreeableness often influence collaborative and communicative behaviors in digital environments.

Next, we discuss the three types of organizations. Following that we discuss the Big Five personality traits in more detail.

3. ORGANIZATIONAL ENVIRONMENTS & EXTRINSIC TASK MOTIVATION

As we build our basic framework, in order to be workable we decided to limit the types of organizations in the framework to just three. We used Drucker's The Theory of Business (1994) to select three organization types that are largely mutually exclusive: "It is important not to fail", "New ideas are valued", and "Output correctness is most important". We recognize that other choices could be made, and that this this is indeed a gross simplification of the myriad types of business, but it does provide a starting point.

Drucker's The Theory of Business (1994) is built around three core assumptions that define how an organization operates: 1) Assumptions about the environment, what the organization believes about the world it operates in, 2) Assumptions about the mission, what the organization believes it is there to do, and 3) Assumptions about core competencies, what the organization believes it does well. The three types of organization that we use for our framework have largely different assumptions for these three, and so represent a broad range of business types, as shown by the examples below.

1. "It is important not to fail"

Drucker's The Theory of Business (1994) Environment Assumption: The external world is high-risk or highly regulated; failure has significant consequences (e.g., legal, safety, reputational).

Drucker's The Theory of Business (1994) Mission Assumption: The organization exists to provide reliable, consistent, and safe outcomes.

Drucker's The Theory of Business (1994) Core Competency Assumption: The organization excels at risk management, compliance, and process control.

Examples: IT functions, Aerospace, healthcare, nuclear energy, financial, and auditing.

Our own experience and observation is that IT organizations are typically of the type that is "important not to fail." It is important that the IT function delivers sufficient processing power, reliability, and accessibility. Though that does not provide any strategic advantage, if it is done poorly it can have a significant negative effect, and hence the need to avoid failure. (Carr, 2003).

2. "New ideas are valued"

Environment Assumption: The external world is dynamic, competitive, and rewards innovation.

Mission Assumption: The organization exists to create value through innovation and stay ahead of change.

Core Competency Assumption: The organization excels at creativity, experimentation, and rapid adaptation.

Examples: Tech startups, R&D labs, design firms.

3. "Output correctness is most important"

Environment Assumption: The external world demands accuracy, precision, and technical excellence.

Mission Assumption: The organization exists to deliver correct, high-quality outputs that meet exacting standards.

Core Competency Assumption: The organization excels at technical expertise, quality assurance, and systematic execution.

Examples: Engineering firms, software QA teams, scientific publishing.

In order to be practical in our framework development, we have limited the number of types of organizations to the three listed here. We are aware that many other types of organizations exist, and save for future research expanding the types of organizations included in our framework.

4. THE BIG FIVE PERSONALITY TRAITS

The Big Five personality traits of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism play a significant role in influencing how individuals interact with generative AI technologies. These traits can

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v11 n6320

affect user engagement, preferences, and satisfaction with AI systems, as well as the design and functionality of AI applications. The integration of personality traits into AI systems can enhance personalization and improve user experience, as demonstrated in various studies.

- Openness: Individuals high in openness are more likely to engage with new technologies, including generative AI, due to their curiosity and willingness to explore novel experiences. This trait can lead to increased engagement and satisfaction with AI systems that offer creative and innovative solutions (Kovbasiuk et al., 2024; Arıbaş & Dağlarlı, 2024).

- Conscientiousness: This trait is associated with a preference for structured and reliable systems. AI applications that provide clear, consistent, and dependable interactions are likely to appeal to conscientious users, enhancing their engagement and satisfaction (Priyanka et al., 2024, Cabrera-Paniagua & Rubilar-Torrealba, 2022).

- Extraversion: Extraverted individuals may prefer AI systems that facilitate social interaction or provide dynamic and engaging experiences. Personalized travel recommendation systems, for example, have shown higher performance rates for extraverted users (Arıbaş & Dağlarlı, 2024).

- Agreeableness: Users with high agreeableness may favor AI systems that are perceived as friendly and supportive. This trait can influence positive attitudes towards AI, as agreeable individuals are more likely to appreciate AI's assistance and collaboration (Babiker et al., 2024).

- Neuroticism: Individuals with high neuroticism may have mixed reactions to AI, potentially experiencing anxiety or skepticism. However, AI systems that offer reassurance and support can mitigate these concerns and improve user satisfaction (Babiker et al., 2024).

This paper proceeds by theorizing (Weick, 1995) about the interaction between the Big Five Personality Traits of the person using or potentially using Generative (Gen) AI, and the three externalities, features of the organization or situation, that will be the users of the output of the person's use of Gen AI.

"New ideas are valued"

We do not discuss the impact of the Big 5 Personalities when the organizational focus is on the correctness of the output from Generative AI. If it is clear that the output of Generative AI is correct, then it makes sense for a person to use Generative AI whatever their Big 5 personality, since the user is able to know whether or not the output is correct, or not.

Openness to Experience (Big 5 Personality #1)
Includes: imagination, curiosity, aesthetic sensitivity, preference for novelty, and intellectual engagement.

"It's important not to fail"
- Interaction: People high in openness may not prioritize this construct highly — they are more comfortable with ambiguity, experimentation, and taking intellectual risks.
- Use of Gen AI: They might still use Gen AI for accuracy or completeness (e.g., fact-checking), but they're less motivated by the need to avoid failure, and more by exploration.
- Risk tolerance: High. They might be willing to "fail" as part of the creative process.

"New ideas are valued"
- Interaction: This is strongly aligned with Openness. These individuals are likely to actively seek out Gen AI as a tool for inspiration, brainstorming, divergent thinking, and pushing boundaries.
- Use of Gen AI: High engagement in tasks where novelty, creativity, or idea generation is needed. They may use Gen AI to explore possibilities, generate unique outputs, or synthesize unexpected connections.

Conscientiousness (Big 5 Personality #2)
Includes: self-discipline, organization, goal orientation, reliability, and a preference for planning over spontaneity.

"It's important not to fail"
- Interaction: Highly motivating. People high in conscientiousness place strong value on precision, correctness, and goal completion. Avoiding failure is central.
- Use of Gen AI: These users may turn to Gen AI for proofreading, planning, summarizing, or fact-checking — tasks that improve reliability and reduce the chance of error.
- Risk tolerance: Low. They'll use Gen AI cautiously, likely double-checking outputs.

- Interaction: Secondary. While not opposed to new ideas, they'll want structured, applicable innovations—ideas that can be implemented effectively.
- Use of Gen AI: They might use AI for process improvement or efficiency ideas but less likely for wild brainstorming.

Extraversion (Big 5 Personality #3)
Includes: sociability, assertiveness, high energy, and a tendency toward excitement and reward-seeking behavior.

"It's important not to fail"
- Interaction: Less dominant. Extroverts are often comfortable with risk if there's potential for reward or recognition.
- Use of Gen AI: Might use Gen AI for communicative tasks like crafting persuasive emails, social media posts, or preparing for presentations — where public performance matters.

"New ideas are valued"
- Interaction: Appealing, especially if it leads to new social opportunities, excitement, or status.
- Use of Gen AI: Likely to use AI for idea generation in outward-facing tasks (e.g., event planning, team brainstorming). Might value Gen AI as a conversational partner or co-creator.

Agreeableness (Big 5 Personality #4)
Includes: compassion, cooperation, trust, and a desire to maintain social harmony.

"It's important not to fail"
- Interaction: Relevant if failure impacts others or causes conflict. Less about personal perfectionism, more about being helpful or not letting others down.
- Use of Gen AI: May use it to support or smooth social tasks — like improving clarity in writing, resolving misunderstandings, or being tactful in responses.

"New ideas are valued"
- Interaction: Mildly appealing, especially if the new ideas benefit relationships or group wellbeing.
- Use of Gen AI: Might use AI to craft thoughtful messages, generate ideas for teamwork or cooperation, or understand diverse perspectives.

Neuroticism, a.k.a. Emotional Stability, inversely (Big 5 Personality #5)
Includes: emotional sensitivity, tendency to experience anxiety, moodiness, or vulnerability to stress.

"It's important not to fail"
- Interaction: Extremely motivating. High-neuroticism individuals may fear failure intensely, often due to fear of judgment or consequences.
- Use of Gen AI: Heavy use for reassurance, checking work, validating decisions. May lean on AI as a way to reduce anxiety or feel more confident.

"New ideas are valued"
- Interaction: Could provoke anxiety unless clearly safe or structured. Might avoid novelty unless it's framed as low-risk or personally beneficial.
- Use of Gen AI: Lower likelihood of using Gen AI for open-ended creativity. Migprefer tasks where the AI helps them feel in control.

Personality and extrinsic task motivation interact in a way that impacts the use of generative AI by a person in a particular organization or situation. For instance, the "Openness" trait is tolerant of failure, and strongly aligned with ideation and brainstorming. In an organization where it is "important not to fail", being tolerant of failure means a person with a strong personality trait of openness might possibly use Gen AI even though it might hallucinate, or have bias in training or output that leads to an incorrect output for the situation or organization.

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v11 n6320

	"Important Not to Fail"	"New Ideas Are Valued"	Likely Gen AI Use
Openness	Tolerant of failure	Strongly aligned	Brainstorming, ideation, synthesis
Conscientiousness	Strongly avoids failure	Moderately interested if applicable	Accuracy, planning, structured innovation
Extraversion	Risk-tolerant if reward is likely	Drawn to exciting or social ideas	Communication, persuasion, collaboration
Agreeableness	Avoids failure if it harms others	Interested if it improves harmony	Diplomacy, perspective-taking, social writing
Neuroticism	Strongly avoids failure (high anxiety)	Cautious or avoids novelty	Confidence-building, checking, reassurance

Table 1: Summary of the Big 5 Personalities and how they interact with the extrinsic task motivations of "Important not to fail" and "New ideas are valued" leading to likely Gen AI use

We summarize the Big 5 Personalities and their interactions with extrinsic task motivations leading to likely Gen AI use in Table 1. In order to present how personality and extrinsic task motivation interact, we use a heat map methodology. Heat maps are useful when highlighting areas of significance in data. By using color to represent varying levels of importance, heat maps allow for the quick visual identification of areas of significance within the data. When producing a heat map, how the presenter assigns a heat color is subjective. We have used just three colors: red, yellow, and green. Red means that Gen AI is not used (or should not be), yellow means Gen AI might be used, and green means that Gen AI is (or should be) used.

In the table below (see Table 2), we break each of the five personality traits into high and low. High means that a person's score is in the top 30%, and low means a person's score is in the bottom 30%. This is represented in the 10 rows of Table 1 (openness has a high and a low row, and so on for each personality trait). The table has three columns to represent each of the extrinsic task motivations. A combination of 10 rows and three columns gives 30 possible outcomes.

However, the column for "The output can easily be seen to be correct or incorrect" is colored entirely green. We believe that the use of Gen AI when the output can easily be seen to be correct or incorrect is not going to be moderated, or impacted, by a Big 5 Personality trait. For instance, even someone who is highly neurotic and strongly avoids failure can and should use Gen AI if they can easily see if the output is correct or incorrect. This entire column, for each of the 10 rows, is labelled green, meaning that a person should use Gen AI in this situation.

The remaining two columns, "Important not to fail" and "New ideas are valued" are covered by the following 20 heat map colors. The number here corresponds to the particular cell in the table:

1. Yellow. High openness to experience has a high risk tolerance, and so may be willing to "fail" as part of the process. Hence "yellow", as even though it is "important not to fail", the high risk tolerance may override this.
2. Green. High openness to experience individuals are often motivated by exploration, so are comfortable using Gen AI where "new ideas are valued."
3. Green. The fact that low openness to experience means that a person prefers routine and dislikes ambiguity can mean that they over-rely on ChatGPT and Grammarly to avoid mistakes.
4. Red. The fact that low openness to experience means that a person dislikes ambiguity can mean that they just won't use Gen AI for new ideas, which are inherently ambiguous.
5. Red. High conscientiousness means that a person places a strong value on precision, correctness, and goal completion. Avoiding failure is central.

ISSN: 2473-4901
v11 n6320

		Important not to fail	The output can easily be seen to be correct/incorrect	New ideas are valued
Openness to experience	High	1		2
Openness to experience	Low	3		4
Conscientiousness	High	5		6
Conscientiousness	Low	7		8
Extraversion	High	9		10
Extraversion	Low	11		12
Agreeableness	High	13		14
Agreeableness	Low	15		16
Neuroticism	High	17		18
Neuroticism	Low	19		20

Table 2: The High/Low of the Big 5 Personalities mapped to the three contexts of "Important not to Fail", "The output can easily be seen to be correct/incorrect", and "New ideas are valued"

6. Yellow. Whilst not opposed to new ideas, they'll want structured applicable innovations, so they will use Gen AI for improvement and efficiencies, but not for wild brainstorming.
7. Yellow. Inconsistent use. These users might not use Gen AI even when it could help them, due to lack of planning or follow-through. May forget or ignore tools.
8. Yellow. May enjoy spontaneous use. AI could appeal as a "quick hack" or shortcut for last-minute ideas, but not systematically.
9. Yellow. Extroverts are often comfortable with risk if there's potential for reward or recognition, but this is not a driving factor, so this is yellow, not green.
10. Green. The use of Gen AI for new ideas is appealing as it could lead to new social opportunities, excitement and status.
11. Green. AI helps them avoid direct communication or social discomfort. Might use AI for writing emails, discussion posts, or public speaking preparation.
12. Yellow. Might enjoy AI privately as a thought partner, especially for expressing ideas they're hesitant to share publicly.
13. Red. A person high in Agreeableness has a desire to maintain social harmony, and prefers trust. If it's important not to fail, these two factors mean that Gen AI is limited.
14. Green. If the new ideas benefit relationships and the wellbeing of the group, then it makes sense to use Gen AI for new ideas.
15. Yellow. May use Gen AI strategically, especially to outperform others — less from fear of failure, more from desire to "win."
16. Yellow. Could use Gen AI for challenging norms or generating bold arguments. Might frame novelty as a competitive edge rather than a collaborative asset.
17. Red. High-neuroticism individuals may fear failure intensely, often due to fear of judgment or consequences.
18. Yellow. Could provoke anxiety unless clearly safe or structured. Might avoid novelty unless it's framed as low-risk or personally beneficial.

ISSN: 2473-4901
v11 n6320

19. Red. People with low-neuroticism aren't overly worried about mistakes, so this might be considered green, but because they are calm, low stress, and less prone to anxiety they may use Gen AI lightly or not at all for correctness-focused tasks.
20. Yellow. Open if it's interesting, but not emotionally driven. More "cool curiosity" than passionate exploration.

An important thing to consider here is that this is a framework development paper. There has been no research that has examined the interaction between personality types and organizational tasks in Gen AI environment. The heatmap here is essentially a list of hypotheses, with our color-coding representing what we think will be the outcome of actual testing. The current, very limited extent of testing is discussed in the next section and Appendix A.

5. PUTTING IT ALL INTO PRACTICE

Putting this framework to work to understand human-AI interaction is a three-step process.

Step 1 is to take the Big Five Personality test, and to record the scores from that. A useful Big Five Personality test is available here: https://www.123test.com/personality-test/

One of the authors of this paper took the test and the scores are as follows:

1. Openness to experience: 46 = This is too close to mid-range to be a strong personality so ignore
2. Conscientiousness: 71 = "high"
3. Extraversion: 93 = "high"
4. Agreeableness: 2 = "low"
5. Neuroticism: 6 = "low"

The five personality traits of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism each now align with a particular row in Table 2.

Step 2 of the two-step process is to summarize those five rows as shown in Table 3.

Step 3 is to interpret the results for each of the extrinsic task motivation columns. If you are at a particular type of organization, as described above, then you may only need to see the results for that particular column.

As seen in Table 3, if the organization or situation is *"Important not to fail":* two reds and two yellows means that this person should not, and probably does not, use Gen AI here. Red for "conscientiousness" is because this personality trait strongly avoids failure.

High extraversion is yellow as a person with this personality trait is risk-tolerant if reward is likely. That is, Gen AI use may be tolerated by the person even in a situation where it is important not to fail provided that the reward of success is high enough. The low Agreeableness (personality trait) is assertive, skeptical, critical, independent, non-conformist, whereas the "Important Not to Fail" environment (externality) is rules-focused, risk-averse, error-intolerant, outcome-precise. As such, this is a person-environment mismatch, and the low agreeable individual may experience tension or constraint in how they use Gen AI. Low neuroticism means that you use Gen AI if it's interesting, but not it is more "cool curiosity" than passionate exploration, and so it is shown as red from Table 1. In sum, in an organization where it is important not to fail, this author would likely not use Gen AI except if the rewards for using it were high enough.

		Important not to fail	The output can easily be seen to be correct/incorrect	New ideas are valued
Openness to experience	Mid-range	Not scored	Not scored	Not scored
Conscientiousness	High			
Extraversion	High			
Agreeableness	Low			
Neuroticism	Low			

Table 3: results of one of the author's Big 5 Personality test summarized using Table 2

ISSN: 2473-4901
v11 n6320

As seen in Table 3, if the organization or situation is such that *"New ideas are valued":* three yellows and one green suggest that this person could easily be using Gen AI in this situation, but it is not a given. High "conscientiousness" means that accuracy and planning are important, so Gen AI use is limited to structured tasks that focus on this. High extraversion means that Gen AI use is likely for idea generation in outward-facing tasks (e.g., event planning, team brainstorming), and it's also likely that Gen AI might be valued as a co-creator. low agreeableness, as here, can be an asset in idea-valuing environments, especially when independent thinking is rewarded and constructive dissent is welcome, but can become a liability when collaboration or group cohesion are essential. Agreeableness is a yellow as this person probably uses Gen AI to test assumptions or debunk norms, uses Gen AI as a solo ideation partner, not as a consensus tool, but is less likely to use Gen AI for team brainstorming, shared documents, or communication polishing. Low neuroticism in this context means that the person is unafraid to experiment with new or risky prompts, and can bounce back easily from failure or poor outputs, so use is cautiously positive, and hence shown as yellow.

6. CONCLUSION

The idea of developing a framework that shows the interaction of the Big 5 Personalities with different types of extrinsic task motivation is useful in at least three meaningful ways:

1. It helps predict how people actually use Gen AI in real-world contexts. Most studies on AI use focus on features or outcomes, but this paper focuses on the psychology of the user. That matters because, a) people don't use AI the same way even when doing the same task, and b) the framework connects personality, task motivation, and tool behavior, which explains why users act differently. This finding could lead to better personalized AI training, guidance, and adoption strategies in schools, workplaces, and creative industries. A potential use case here is that a company training employees on Gen AI could tailor onboarding differently for low-Openness staff (who want clarity and structure) than for high-Openness staff (who want creative play).

2. It offers a model for predicting and shaping Gen AI adoption. The framework can be used to, predict who will use AI (and for what tasks), explain why some people avoid it, and suggest how to design interfaces, prompts, or education differently based on user traits. A potential use case is that a university could better support Gen AI in writing centers if they understood that low-Conscientiousness students might not use AI unless it's embedded into the workflow.

3. It opens the door to interventions that make AI use more equitable and effective. Right now, AI use is often haphazard: some students overuse it, some avoid it, some misuse it. This framework helps design behavioral nudges ("Try this for brainstorming!"), custom prompts based on personality, and support tools for those less likely to engage creatively or confidently. For instance, an adaptive learning tool could adjust its prompts based on the user's Big Five profile — helping low-Neuroticism users take more creative risks, or giving low-Openness users clearer scaffolding.

In short, this paper is not just saying "People use Gen AI differently." Instead, it is proposing a framework to answer the question of who uses it, how, and why based on who they are and what the organization or situation is looking to achieve. Thus, our findings have academic, practical, and design value. What is needed next is to test the framework and the "hypotheses" that the heatmap contains.

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APPENDIX A
Limited Testing of the Framework

Three colleagues took the Big 5 Personality test. We provided their results and how it fits with the framework as other examples of the practical use of the *Personality-Extrinsic Task Motivation* framework

Colleague 1

With a Big 5 Personality result of:
1. Openness to experience: 39 = This is too close to mid-range to be a strong personality
2. Conscientiousness: 83 = "High"
3. Extraversion: 83 = "High"
4. Agreeableness: 81 = "High"
5. Neuroticism: 44 = This is too close to mid-range to be a strong personality so ignore

		Important not to fail	The output can easily be seen to be correct/incorrect	New ideas are valued
Openness to experience	Mid-range	39 out of 100	39 out of 100	39 out of 100
Conscientiousness	High			
Extraversion	High			
Agreeableness	Low			
Neuroticism	Low	44 out of 100	44 out of 100	44 out of 100

Appendix Table 1: results of Colleague 1's Big 5 Personality test summarized using Table 2

If your organization or situation is "Important not to fail" then you are 1 red and 2 yellows, so you likely won't use Gen AI much at all. Even if your organization or situation is "new ideas are valued" then you are 2 yellows and 1 green, so you are not leaning into using Gen AI as much as you should. One way to push yourself is to use Gen AI as much as you can when you can easily see when the output is correct or incorrect. This way you can get used to using the Gen AI in a "safe" environment, which will likely allow you to push yourself, or know how to use Gen AI when "new ideas are valued".

Colleague 2

With a Big 5 Personality result of:
1. Openness to experience: 12 = "low"
2. Conscientiousness: 17 = "low"
3. Extraversion: 38 = This is too close to mid-range to be a strong personality so ignore
4. Agreeableness: 32 = This is too close to mid-range to be a strong personality so ignore
5. Neuroticism: 42 = This is too close to mid-range to be a strong personality so ignore

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		Important not to fail	The output can easily be seen to be correct/incorrect	New ideas are valued
Openness to experience	Low			
Conscientiousness	Low			
Extraversion	Mid-range	38 out of 100	38 out of 100	38 out of 100
Agreeableness	Mid-range	32 out of 100	32 out of 100	32 out of 100
Neuroticism	Mid-range	42 out of 100	42 out of 100	42 out of 100

Appendix Table 2: results of Colleague 2's Big 5 Personality test summarized using Table 2

If your organization or situation is "Important not to fail" then you are 2 yellows, so you likely won't use Gen AI much at all. Even if your organization or situation is "new ideas are valued" then you are 1 yellow and 1 green, so you are not leaning into using Gen AI as much as you probably should. The recommendation is the same as for Colleague 1: one way to push yourself is to use Gen AI as much as you can when you can easily see when the output is correct or incorrect. This way you can get used to using the Gen AI in a "safe" environment, which will likely allow you to push yourself, or know how to use Gen AI when "new ideas are valued"

Colleague 3

With a Big 5 Personality result of:
1. Openness to experience: 87 = "high"
2. Conscientiousness: 81 = "high"
3. Extraversion: 95 = "high"
4. Agreeableness: 46 = This is too close to mid-range to be a strong personality so ignore
5. Neuroticism: 14 = "low"

		Important not to fail	The output can easily be seen to be correct/incorrect	New ideas are valued
Openness to experience	High			
Conscientiousness	High			
Extraversion	High			
Agreeableness	Mid-range	46 out of 100	46 out of 100	46 out of 100
Neuroticism	Low			

Appendix Table 3: results of Colleague 3's Big 5 Personality test summarized using Table 2

If your organization or situation is "Important not to fail", then you are tolerant of failure (yellow for "openness to experience"), strongly avoids failure (red for "conscientiousness"), risk-tolerant if reward is likely (yellow for "extraversion"), and strongly avoids failure (red for "neuroticism"). With two reds and two yellows, the "reward is likely" would have to be very strong to overcome the two personality traits of "strongly avoids failure".

If your organization or situation is "new ideas are valued", then your high "openness to experience" means that you will likely use Gen AI for brainstorming and ideation. Your high "conscientiousness" means that accuracy and planning are important, so your Gen AI use is limited to structured tasks

that focus on this. With a high "extraversion", you use Gen AI for communication, persuasion and collaboration. Your low "neuroticism" means that you use Gen AI if it's interesting, but not it is more "cool curiosity" than passionate exploration.