CONVERSATIONS WITH AI PART III

Bright sparks and bold ideas: how AI boosts human creativity in ideation workshops

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SUMMARY

Innovation, though essential, presents challenges in idea generation. Traditional workshops often fall short, suffering from common issues. Our solution? A fresh approach leveraging Generative AI, designed to steer clear of stale ideas and keep your business at the forefront.

At Ipsos, we've pinpointed four core hurdles that plague workshops: problem framing, familiarity bias, fixedness, and fear. Our method employs

Generative AI and expert prompts to tackle these effectively, overcoming the factors that often lead to workshop failure.

This piece offers a deep dive into how smart use of AI can supercharge divergent thinking and broaden possibilities. You'll learn how the fusion of human creativity and AI can revolutionize ideation, leading to efficient, innovative solutions. The ultimate reward? Game-changing ideas that disrupt the status quo.

A SINGLE SPARK CAN TRANSFORM EVERYTHING

Whether you are looking for the next breakthrough innovation, brainstorming ways to differentiate yourself or simply trying to identify ways to encourage people to return to the office – an ideation workshop can generate a single spark that transforms everything.

It is well documented that to get breakthrough ideas you need to diverge (the process of creating multiple, unique ideas or solutions to a problem that you are trying to solve). And once the ideas are there – you need to 'converge' to decide which ideas will work for your organization.

But how companies leverage ideation workshops has changed significantly. Back in the 20th century, creativity was the prized skillset of specialist innovation agencies, employed to facilitate 'ideation' events to elicit ground-breaking ideas. Provocative stimuli, specialist

creatives brought a fresh perspective and experiential magic, curated for multiple days (often at a great expense) and were the gateways to breakthrough ideas.

While some companies may still take this approach for major initiatives, in our experience, many clients have adopted for more agile, iterative and scientific approaches which engage broader teams within their organisations. In effect, the approach to ideating and testing has changed from one variable at a time to multiple variables in sequence. Teams have become more collaborative and now take greater ownership of the ideas they develop. Whether facilitated internally or externally, they may apply creative approaches to diverge and converge to create fresh new ideas.

Ipsos argues that, because of recent advances in Generative Artificial Intelligence (AI), even organizations who apply the most agile, collaborative, and iterative workshops will need to evolve their approach to stay ahead. Understanding this, Ipsos launched a fully revamped ideation workshop approach that encourages collaboration between expert facilitators, workshop participants, prompt

engineers and Generative AI. When executed well, creativity is magnified which in turn improves the chances of more innovative ideas. We developed this to overcome four main 'failure points' which most ideation workshops can experience. Before discussing how Ipsos prompt engineering and Generative AI help to resolve these points, one must understand the '4 F's.'

THE FOUR F'S OF WORKSHOP FAILURE

FRAMING THE PROBLEM

In today's action-focused business environment, we obsess too much on the *how* instead of taking the time to ask *why*. We want a quick solution so we can move forward and, in many cases, *solve* the wrong problem.

While finding the solution to the problem is undoubtedly important, we believe a greater, often overlooked challenge is accurately diagnosing and framing the problems in the first place. The way a problem is framed directly influences the solutions that are generated. Hence, by shifting your perspective and reframing the problem, you open the possibility of discovering remarkably improved solutions. Ipsos always starts with the assumption that the 'problem being addressed in a workshop' should be appropriately challenged. In most cases, this exercise should be completed prior to the workshop.

Let's think about this in a little more detail. Let's imagine you have just completed a research study to understand travellers' experience at

an international airport. Your target persona is called *Alex, a harried parent, travelling with two children on a long-distance flight to visit his spouse. Alex rushes through the airport only to wait hours at the gate. The flight has arrived late. While it is visible from the gate, the cleaning, preparation, and finally boarding passengers would take at least an hour. Alex's energetic offspring are on the verge of an epic tantrum. He is afraid this would only irritate already frustrated fellow passengers.*

You now want to run a workshop to ideate innovative and non-obvious ideas to improve the experience. The first step is to frame the problem. This is often done in a form of a 'How Might We' statement.

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The statement that instantly comes to mind is *how might we* speed up the boarding process so that travellers can get going as soon as possible. (Similarly, we could have tackled the problem of cutting down cleaning and preparation time, but it's advisable to have a HMW statement address a single issue).

As problem solvers, we get cracking on the problem immediately and fail to notice that the problem is not presented to us *neutrally.* Someone has already framed it for us: the problem is that the boarding process is *slow.* As a result, we commence with ideating alternatives to the current boarding procedures of assigned passengers to Zone A, Zone B or Zone C, where Zone A boards first.

Thus, our alternate ideas to the current boarding practice could be:

- **The Flying Carpet Method** – in which an actual carpet is marked with numbers to stand for the seats on the plane. Or…

- **The Steffen method** – where passengers in alternate window seats on one side of the plane to board first, then those sitting in alternate window seats on the other side of the plane, then the middle and aisle seats follow in the same way.

Each of these ideas share a commonly held assumption of what the problem is: airports are inherently stressful and unpleasant for families with young children and therefore we need to reduce time taken in preparation and boarding so that the family can get going at the earliest.

What if we were to adopt a fresh lens and re-frame the problem statement?

Could we challenge the assumption that airport experiences are inherently stressful and unpleasant for families with young children, and instead design an experience that is relaxing or even enjoyable?

This could lead to a set of solutions that are equally effective and perhaps cheaper, such as:

- A play area for kids, perhaps with the latest gaming console.

- How about offering a serene spa for travelers seeking respite from the stresses of travel (and an opportunity to get away from the misbehaving munchkins)?

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The Four F's	Definition
Framing the problem	Problem framing is the process of analyzing, understanding, precisely defining, and shaping the problem. It involves challenging assumptions, considering multiple perspectives, and ultimately making problem-solving easier. The way you frame a problem determines which solution you come up with.
Familiarity bias	Familiarity bias, also known as the mere exposure effect, describes our tendency to favor familiar options over possibly better options solely because they are more familiar to us. This bias could be potentially dangerous in the context of innovation as it could blindsided us from drawing inspiration from unfamiliar quarters.
Fixedness	Fixedness is a cognitive bias that occurs when one becomes entrenched in thinking about something in a particular way, thereby restricting their ability to consider new or innovative perspectives.

THREE TYPES OF FIXEDNESS

01. Functional	02. Structural	03. Relational
You see objects, components, and things around you, and you can't imagine them doing different functions than what they're designed to do.	This makes it hard to imagine objects having a different structure than what we're used to.	This type of fixedness makes it very hard to imagine two objects having a relationship that wasn't there before.

Fear	The fear of writing insightful ideas can cause individuals to self-doubt, self-censor and withhold contributions.

This in turn, hampers the potential for collaborative problem-solving and breakthrough innovations.

By leveraging ideas developed by Generative AI as a starting point, teams have a solid foundation to build upon. |

FAMILIARITY BIAS

Innovation requires thinking beyond the familiar and venturing into uncharted territory. It thrives when a diverse range of ideas, stemming from different perspectives, converge. However, this endeavour can be brought to a grinding halt by familiarity bias and our preference for the familiar.

Familiarity bias can inadvertently thwart the potential for innovation. It could:

- Prevent us from considering alternate perspectives strengthening our preference for maintaining the status quo.

- Limit our exploration and overlook potentially ground-breaking ideas or solutions.

- By clinging to familiar solutions, we may miss out on emerging trends or advancements in technology, processes, or consumer preference.

Plagued with familiarity bias, teams who excel at generating and recognizing practical and feasible ideas, face challenges in generating or embracing truly innovative and novel ideas. The deep knowledge and experience within a specific domain can inadvertently limit the ability to think beyond established boundaries and explore uncharted territories.

Returning to our example – to ideate innovative and non-obvious ideas to improve the travelling experience of parents – familiarity bias could limit our exploration to the airport itself, to the existing processes and to the way it is configured.

One effective way to overcome familiarity bias is by deliberately seeking inspiration from sources outside your own industry. By venturing beyond the confines of familiar territory, you expose yourself to diverse perspectives and approaches that can spark new insights and creative breakthroughs. This enables you to challenge established norms, break free from conventional thinking patterns, and discover innovative solutions to solve familiar business problems.

FIXEDNESS

Just like familiarity bias, fixedness too is a cognitive bias that can influence our thinking and decision-making processes.

Fixedness is characterized by cognitive rigidity. It occurs when someone becomes firmly entrenched in thinking about a subject matter within a specific framework.

Fixedness can hinder an individual's capacity to challenge the functions, structures, and interconnections within a system, thereby stifling innovation. However, questioning structural fixedness has given rise to notable innovations like Dyson's bagless vacuum cleaner.

So how does fixedness impact Alex's experience at the airport? Let's consider the typical waiting lounge for departing passengers. Due to fixedness, airport management may limit their perception of this space solely to its conventional purpose, overlooking its potential for alternative uses or revenue generation.
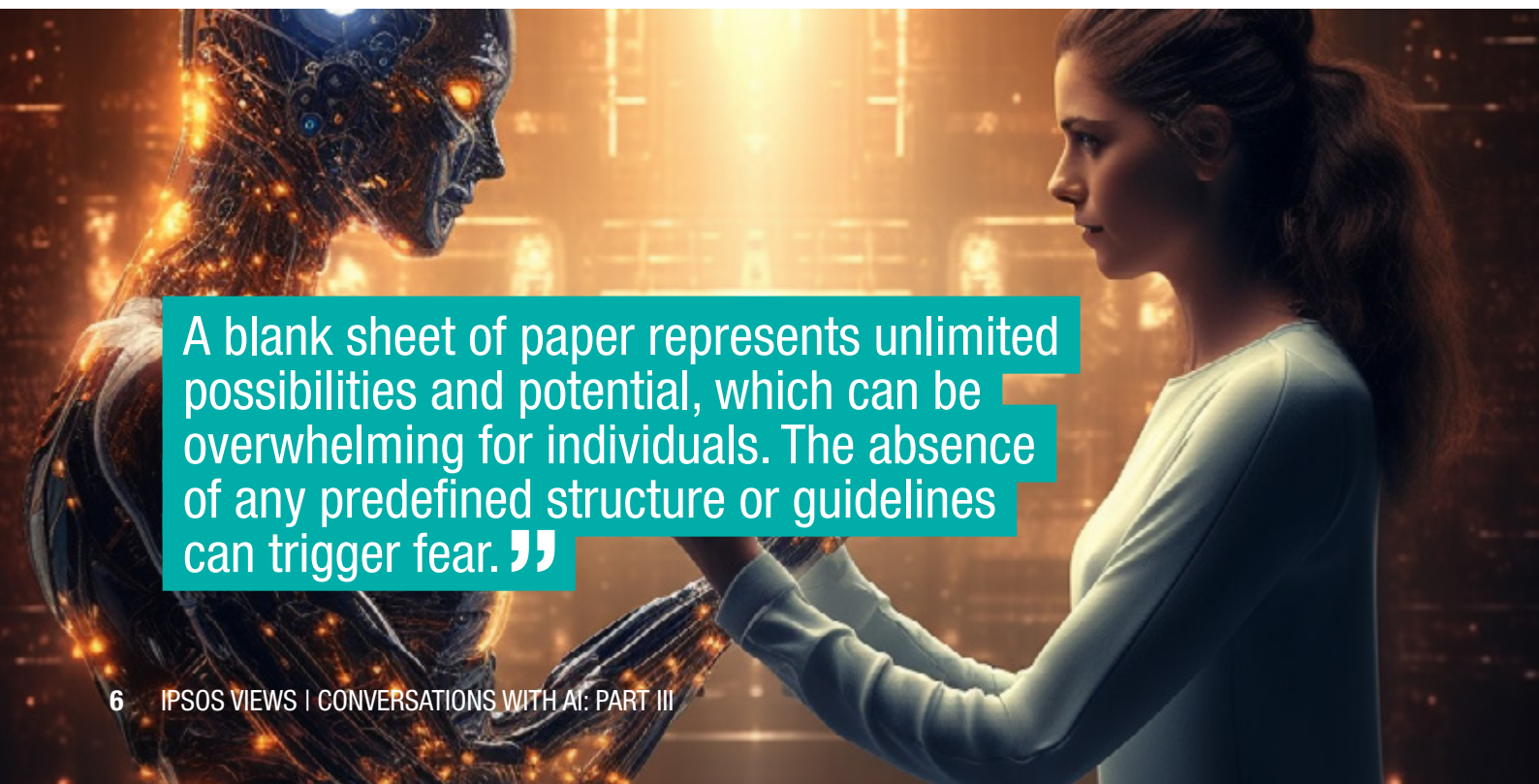
However, if the fixedness is overcome, innovative ideas could emerge. For example, someone might propose transforming the waiting lounge to a multipurpose zone that can serve as a temporary art gallery, a pop-up retail space, or a venue for live performances. By challenging the fixed perception of the space as solely a waiting lounge, the airport could explore creative ways to not only enhance the passenger experience but also generate additional revenue streams.

Fixedness bias could be overcome through various facilitation techniques or by bringing into the workshop obvious consultants like experience design experts or non-obvious ones who might have some connection to the problem the workshop is meant to solve.

FEAR

A blank sheet of paper represents unlimited possibilities and potential, which can be overwhelming for individuals. The absence of any predefined structure or guidelines can trigger a fear of making mistakes or producing something inadequate. This fear of failure can inhibit creative thinking and expression. Fear saps the ability to create divergent ideas. A lack of divergent ideas could lead to innovations in minor increments but offer nothing earth-shattering. On the occasions where teams could have a great idea, they could struggle with finding the right words to bring it to life.

Facilitators work to build confidence and trust with ice-breaker techniques and participation rules that encourage engagement and mitigate fear. Facilitators have long wished for an approach that would help generate ideas to spark ideation more easily, effectively triggering the spark that energizes participants to build off one another.

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MINIMIZING THE FOUR F'S WITH PROMPT ENGINEERING AND AI

With expert prompt engineering, Generative AI holds immense potential in fostering divergent thinking by offering fresh and innovative ideas, expanding the realm of possibilities, and prompting exploration of uncharted creative territories. When prompted well, Generative AI aids in the creation of a wide range of ideas, combining existing concepts in novel ways and can result in helping individuals express their ideas in a simple yet eloquent manner.

Additionally, with expert and strategically written follow-up prompts, Generative AI helps to iterate and refine workshop participants' thinking and reduce issues pertaining to **Framing, Familiarity, Fixedness** and **Fear**

RE-FRAMING THE PROBLEM WITH AI

Guided by a set of well-crafted prompts, AI can apply various principles to generate a diverse set of *how might we* questions that help teams challenge the understanding of the problem and rethink the goal. Thus, going back to our example of Alex, the harried parent at the airport, with a set of prompts Gen AI can help us to apply multiple principles to generate a set of *how might we* questions that could help us to see the problem with a fresh set of eyes.

It's important to note that these models are trained to provide logical answers, while reframing thrives on divergent thinking. Thus, it is obvious to us that when it comes to divergent thinking, we must ask the non-obvious questions to get the best out of AI.

Therefore, crafting an obvious prompt such as 'Give me ten *how might we* questions to redesign the ground experience at the local international airport' may not really give us much.

It is also important to note the role of the workshop participant is akin to an editor and curator of statements that effectively aid in reframing the problem. Instead of viewing Generative AI as the sole creator of the final product, recognize it as a valuable team member that contributes to the overall process.

Ipsos has developed intellectual property in its workshop reframing prompts. *Figure 1* is a portion of an AI output based on an Ipsos reframing prompt. Going back to our example of a harried parent, if prompted correctly, AI could help us.

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Principle		How Might We Statement (Reframing the problem)
01	Amp up the good	How might we amplify the positive aspects of the airport experience for families with young children, such as by providing more engaging play areas or better food options?
02	Remove the bad	How might we eliminate the negative aspects of the airport experience for families with young children, such as by reducing wait anxiety or providing more comfortable seating areas?
03	Explore the opposite	How might we flip the traditional airport experience on its head to better cater to families with young children, such as by designing an airport experience that is centered around play and exploration instead of efficiency?
04	Question an assumption	How might we challenge the assumption that airport experiences are inherently stressful and unpleasant for families with young children, and instead design an experience that is relaxing and even enjoyable?
05	Go after adjectives	How might we create an airport experience that is not just convenient and efficient, but also fun, educational, and memorable for families with young children?
06	Add an unexpected resource	How might we incorporate unexpected resources into the airport experience for families with young children, such as by partnering with local museums or cultural institutions to provide engaging exhibits or activities?
07	Create an analogy	How might we use analogies to inform the design of the airport experience for families with young children, such as by thinking of the airport as a playground or a museum?
08	Change a status quo	How might we disrupt the traditional airport experience to better cater to families with young children, such as by rethinking the layout of the airport or creating new types of play areas that are more interactive and engaging?

Source: Ipsos UU

ADDRESS FAMILIARITY BIAS BY ASKING AI 'WHERE ELSE'

Generative AI could question, 'Where else' has the problem been solved such as which industries have already made the process of addressing the problem of waiting and how have these industries managed to do the same?

With Ipsos' set of familiarity workshop prompts, AI can generate a wide range of ideas, concepts, and possibilities drawing inspiration from other industries. This helps break away from familiar patterns and encourages exploration of unconventional and novel ideas that might not have been considered otherwise. Again returning to the airport example, our familiarity prompts will help identify quickly what other categories share the same problem (Figure 2). In follow-up familiarity prompts, the facilitator and workshop participants can explore how they can learn and be inspired by those categories and how they addressed the same challenges.

Mobile ordering and delivery services: Alleviate the uncertainty of waiting for food to arrive, providing updates and estimated arrival times.

Theme parks: Where guests are engaged by performers, musicians, and entertainers and make waiting in a queue more enjoyable.

Elevator companies: Address idleness anxiety by installing mirrors, thereby influencing subjective time perception.

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CONQUER FIXEDNESS BY AI'S DIVERGENT THINKING

Expert prompt engineering and Generative AI can support divergent thinking by making associations among remote concepts and producing ideas drawn from them. At the early stages of new-product development, atypical ideas created by Generative AI can inspire teams to think beyond their preconceptions in both form and function.

Additionally, one could also leverage prompt engineering and AI to replicate the response of a persona thereby bringing about a fresh perspective. For instance, the solutions generated by Confucius, a theme park designer, a behavioral scientist or an army logistics expert would exhibit notable distinctions, thus fostering divergent thinking and enhancing the ideation process. In addition, one could also work with techniques such as SCAMPER[4] to generate a plethora of divergent ideas designed to address specific aspects of fixedness – functional, structural, or relational.

While not all generated concepts will be brilliant or feasible, they often contain elements that can be refined and applied or stimulate new lines of thinking by workshop participants. The primary objective is to generate a large quantity of ideas in a rapid and cost-effective manner.

Passport Harmonies
is an innovative concept that transforms the airport ground experience into a captivating musical journey for passengers.


HERE'S HOW IT WORKS:

Musical Zones: Throughout the airport, designated areas are transformed into 'Musical Zones' featuring live performances, interactive displays, and ambient music. These zones are placed near boarding gates and waiting areas.

Instrumental Passport: Upon check-in or arrival at the airport, passengers receive an 'Instrumental Passport' that contains a curated collection of songs and melodies from various genres and cultures.

Interactive Displays: Interactive displays are set up within the musical zones, allowing passengers to explore different musical instruments, learn about their history, an even play virtual versions of them. This provides an engaging and education experience for passengers of all ages.

Live Performances: Talented musicians and bands perform live at designated stages within the musical zones. Their performances encompass a wide range of musical genres, creating a vibrant and immersive atmosphere throughout the airport.
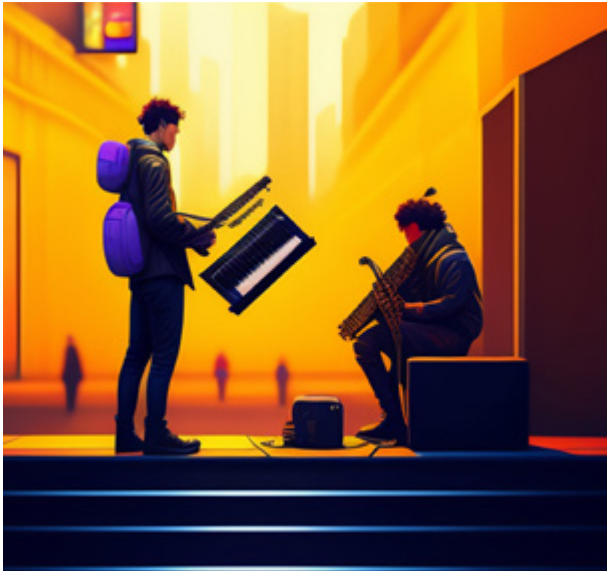
Musical Exploration: Passengers are encouraged to embark on a musical exploration by following a designated route within the airport, guided by signs and maps. As they progress, they can listen to specific songs or musical pieces from their instrumental passport that match the cultural background of the destination they are travelling to.

Relaxation Areas: Along the musical route, relaxation areas with comfortable seating are available for passengers to take a break, listen to soothing melodies, or even participate in guided meditation sessions accompanied by calming music.

Collaborative Jams: Interactive installations or digital interfaces are placed in certain areas, allowing passengers to collaborate and create their own music using virtual instruments or vocal harmonies. This fosters a sense of creativity and encourages interaction among travellers.

Source: Ipsos UU

FEAR – AVOIDING THE BLANK STARE BY LEVERAGING AI

Starting off with an initial idea developed through Generative AI, gives teams a tangible starting point. It provides a foundation for further development. By leveraging AI-generated ideas, teams can save time and effort that would otherwise be required to create an entirely new concept.

Moreover, Large Language Models (LLMs) excel in language-related tasks. They act as pocket copywriters, helping articulate, organize, expand, or condense ideas. They offer grammar checks, sentence restructuring, and can adapt expressions to target audiences. With intelligent prompts, Generative AI helps overcome writer's block and refines ideas by crafting headlines, combining concepts, and embellishing insights, benefits, and RTBs (reasons to believe).

In workshops, Generative AI can alleviate the pressure on participants and help them overcome their fear (blank stare of a blank sheet of paper) or generate absurd ideas to make space safer for 'wilder' ideation. Consequently, their focus shifts from creating ideas from scratch to refining and enhancing concepts. This transition allows participants to engage in a collaborative process of editing, embellishing, and fine-tuning their ideas, benefiting from the AI-powered assistance.

A SPARK TO WALK AWAY WITH

Overcoming the four F's with expert prompt engineering and AI will positively disrupt the innovation process. With the proper reframing, familiarity and fixedness prompts, on a secure, private and tested AI platform, a new workshop model will replace the old. It may not get a breakthrough solution in the first attempt,... – but it can be leveraged to help produce more innovative ideas, while making the process more efficient.

REFERENCES

- **Cover page prompt:** Imagine Color photo of a vibrant explosion in the sky, reminiscent of a fireworks display. Instead of traditional fireworks, the bursts consist of various objects and symbols representing different ideas and perspectives. Each explosion represents a distinct thought or concept, bursting forth in all directions. The vibrant colors and shapes symbolize the diversity and range of possibilities that arise from divergent thinking. This visual metaphor captures the essence of divergent thinking by illustrating the explosive and dynamic nature of generating multiple ideas, where each burst represents a unique and innovative perspective. The visual spectacle of the exploding ideas showcases the excitement and creativity involved in divergent thinking. --chaos 10 --ar 9:16 --v 5.2 (on MidJourney)

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2. Harvard Business Review Press - What's your problem? – Thomas Wendell-Wedellsborg

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FURTHER READING

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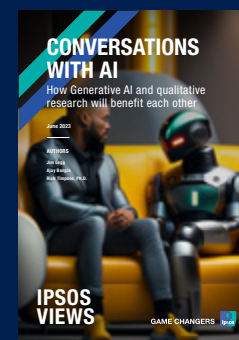
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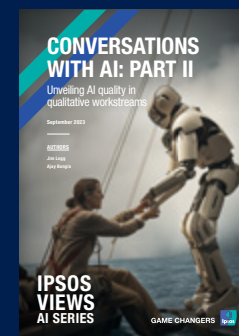
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CONVERSATIONS WITH AI PART III

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