Briefing Document: Analysis of ChatGPT Usage Patterns and User Demographics

Executive Summary

This document synthesizes the key findings from the NBER Working Paper No. 34255, "How People Use ChatGPT," which analyzes consumer usage from its November 2022 launch through July 2025. By this date, ChatGPT had achieved unprecedented global adoption, with over 700 million weekly active users (approximately 10% of the world's adult population) sending over 2.5 billion messages daily. The study utilizes a novel, privacy-preserving methodology with automated classifiers to analyze a massive dataset of user interactions.

The most critical takeaways are as follows:

1. **Shift to Non-Work Dominance:** While both work and non-work usage have grown, non-work related messages have surged, increasing from 53% to over 70% of total volume between June 2024 and June 2025. This indicates a substantial and rapidly growing impact on home production and personal life, suggesting massive consumer surplus.

2. **Concentrated Use Cases:** Nearly 80% of all conversations fall into three categories: "Practical Guidance" (e.g., tutoring, how-to advice), "Seeking Information," and "Writing." In professional contexts, "Writing" is the dominant activity, accounting for 40% of all work-related messages. Notably, two-thirds of these writing tasks involve modifying user-provided text rather than generating content from scratch.

3. **Primary Value is Decision Support:** A new classification framework reveals users are "Asking" for information to support decisions (49%) nearly as often as they are "Doing" tasks to produce output (40%). "Asking" has grown faster and correlates with higher user satisfaction. In professional settings, this pattern suggests ChatGPT's primary economic value lies in its role as a "co-pilot" that enhances decision-making and problem-solving for knowledge workers.

4. **Limited Use for Coding and Companionship:** Contrary to some popular narratives, computer programming (4.2%) and social-emotional uses like companionship or therapy (1.9%) represent relatively small shares of overall usage.

5. **Democratizing Demographics:** Early adopter gender gaps have closed, with active users in June 2025 slightly more likely to have typically feminine first names. Usage has also grown disproportionately faster in low- and middle-income countries over the past year.

6. **Usage Varies by Profession and Education:** Highly educated users and those in professional occupations are significantly more likely to use ChatGPT for work. Usage

patterns at work align with job functions—for instance, "Writing" is most common for management, while "Technical Help" is prevalent in computer-related fields. However, core activities like "Making Decisions and Solving Problems" are among the most frequent use cases across nearly all occupations, reinforcing the theme of decision support.

1. Unprecedented Growth and Adoption

ChatGPT's diffusion has been historically rapid. Launched in November 2022, it surpassed one million users in its first week. By July 2025, its global reach was immense:

• **Weekly Active Users (WAU):** Over 700 million on consumer plans (Free, Plus, Pro).

• **Message Volume:** Over 2.5 billion messages sent per day (approximately 29,000 per second).

• **Annual Growth:** Total message volume grew by a factor of more than five between July 2024 and July 2025.

A key finding is that growth is driven not only by new user acquisition but also by increased engagement from existing users. Every user cohort, including the earliest adopters, has shown consistently growing usage over time. This suggests that users are continually discovering new applications for the technology and that model improvements are successfully driving deeper engagement.

2. Analysis of Usage Patterns

The study employs several automated, LLM-based classifiers to categorize user messages while preserving privacy. This analysis reveals distinct patterns in *what* users do with ChatGPT and *how* they interact with it.

2.1 Work vs. Non-Work Usage

A primary finding is the dramatic growth and dominance of non-work-related usage. While both categories have grown in absolute terms, non-work messages have grown significantly faster.

Month	Non-Work Messages (Millions/Day)	Non-Work Share	Work Messages (Millions/Day)	Work Share	Total Messages (Millions/Day)
Jun 2024	238	53%	213	47%	451

Jun 2025	1,911	73%	716	27%	2,627

This trend holds true both for new user cohorts and within existing ones, indicating a behavioral shift among all users toward personal applications. This highlights that the economic impact of generative AI extends far beyond workplace productivity into areas of home production and general consumer welfare.

2.2 Dominant Conversation Topics

User conversations are highly concentrated in a few key areas. The study groups 24 granular categories into seven high-level topics.

Coarse Topic	Underlying Categories	Key Findings & Statistics
Practical Guidance	Tutoring/Teaching, How-To Advice, Creative Ideation, Health & Self-Care	The most common topic, accounting for **29%** of all usage. Education is a major component, with "Tutoring or Teaching" making up 10.2% of all messages.
Writing	Editing/Critiquing, Personal Communication, Translation, Summary Generation, Fiction Writing	Accounts for **24%** of usage (down from 36% a year prior). It is the #1 use case at work, comprising **40%** of work-related messages. 2/3 of writing tasks involve modifying user text.
Seeking Information	Specific Info, Product Research, Recipes	Grew from 14% to **24%** of usage in one year. This use case appears to be a close substitute for traditional web search.
Technical Help	Computer Programming, Mathematical Calculation, Data Analysis	Declined from 12% to **5%** of total usage. "Computer Programming" constitutes only **4.2%** of all messages.
Multimedia	Image Creation, Image Analysis, Other Media	Grew from 2% to over **7%** of usage, spurred by the release of new image-generation capabilities in April 2025.
Self-Expression	Greetings, Relationships & Personal Reflection, Games & Role Play	A small but growing category. "Relationships and Personal Reflection" is **1.9%** of messages; "Games and Role Play" is **0.4%**.

		This contradicts studies suggesting therapy/companionship is a primary use.
Other/Unknown	Asking About the Model, Unclear	A minor residual category.

2.3 User Intent: Asking, Doing, or Expressing

To understand user goals, the study introduces a new taxonomy based on the intended output:

• **Asking:** Seeking information or advice to inform a decision (e.g., "What's the difference between correlation and causation?").

• **Doing:** Requesting the model to perform a task and produce an output (e.g., "Rewrite this email to make it more formal").

• **Expressing:** Stating views or feelings without seeking information or action.

Overall Usage:

• **Asking:** 49%

• **Doing:** 40%

• **Expressing:** 11%

Over the past year, "Asking" and "Expressing" have grown faster than "Doing." Furthermore, "Asking" messages are consistently associated with higher user satisfaction, both via automated classifiers and direct user feedback.

Work-Related Usage: The pattern shifts for professional tasks, where "Doing" is more prominent.

• **Doing:** 56% (of which nearly two-thirds are Writing tasks)

• **Asking:** 35%

• **Expressing:** 9%

This suggests that while direct task automation ("Doing") is a significant workplace application, decision support ("Asking") remains a core function.

2.4 O*NET Work Activities

Mapping message content to the O*NET database of work activities reveals that usage is concentrated in cognitive, information-centric tasks.

• **81% of work-related messages** fall into two broad functions:

1. Obtaining, documenting, and interpreting information.
2. Making decisions, giving advice, solving problems, and thinking creatively.

• The most common activities are highly similar across disparate occupation categories (e.g., management, STEM, sales, administrative).

• Activities like **"Making Decisions and Solving Problems"** and **"Documenting/Recording Information"** consistently rank in the top five most frequent use cases for nearly every professional group. This reinforces the conclusion that ChatGPT is predominantly used as a tool for knowledge work and decision support.

3. Demographics of ChatGPT Users

The study provides a global, data-driven view of the user base, confirming some existing findings and revealing new trends in adoption.

• **Gender:** The early user base was disproportionately male (~80% of users with classifiable names). This gap has closed dramatically. As of June 2025, active users with typically feminine first names slightly outnumber those with typically masculine names (52% vs. 48%).

• **Age:** Younger users are the most active, with individuals aged 18-25 accounting for **46% of all messages** sent by adults. Work-related usage increases with age, peaking for users in the 36-65 range and declining for those 66 and older.

• **Geography:** While adoption is highest in high-GDP countries, growth between May 2024 and May 2025 was disproportionately faster in low- and middle-income countries (those with a GDP per capita between $10,000 and $40,000).

• **Education:** Users with higher levels of education are significantly more likely to use ChatGPT for work. 48% of messages from users with graduate education are work-related, compared to 37% for users with less than a bachelor's degree.

• **Occupation:** Users in highly paid professional and technical roles are more likely to use ChatGPT for work. The share of work-related messages is highest for computer-related occupations (57%) and lowest for non-professional roles (40%).

4. Conclusion and Economic Implications

The findings suggest that ChatGPT is a general-purpose technology with broad-based economic and social impact. The rapid growth of non-work applications points to

significant consumer welfare gains that are often overlooked in productivity-focused analyses.

Within the workplace, ChatGPT's primary value appears to be as a **"co-pilot" for knowledge workers**. It improves worker output by providing decision support, serving as a research assistant, and enhancing problem-solving capabilities. This is particularly valuable in knowledge-intensive jobs where the quality of decision-making is a key driver of productivity. While the technology is widely used for "Doing" tasks like writing, the faster growth and higher satisfaction associated with "Asking" suggest that its role in augmenting human cognition and decision-making is its most powerful and expanding application.