The Adoption of ChatGPT*

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Abstract

We study the adoption of ChatGPT, the icon of Generative AI, using a large-scale survey experiment linked to comprehensive register data in Denmark. Surveying 100,000 workers from 11 exposed occupations, we document that ChatGPT is widespread, but substantial inequalities have emerged. Women are 20 percentage points less likely to have used the tool. Furthermore, despite its potential to lift workers with less expertise, users of ChatGPT earned more already before its arrival. Workers see a substantial productivity potential in ChatGPT but are often hindered by employer restrictions and the need for training. Informing workers about expert assessments of ChatGPT shifts workers' beliefs but has limited impacts on actual adoption.

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The arrival of ChatGPT marks the era of Generative Artificial Intelligence (AI), in which intelligent algorithms may disrupt several high-skilled occupations (Eloundou et al., 2024). This paper provides descriptive and experimental evidence on the adoption of ChatGPT, examining who has adopted the technology, how workers anticipate it will affect their jobs, and why some workers use it and others do not.

In collaboration with Statistics Denmark, we surveyed 100,000 workers from 11 exposed occupations[1] between November 2023 and January 2024, achieving a 29% response rate and a representative sample.[2] Our survey includes an experiment, informing workers about expert assessments of ChatGPT in their job tasks, and a follow-up to see whether treatment effects persist. We link the survey responses to register data on individual labor market histories, earnings, wealth, education, and demographics to characterize heterogeneity in the adoption of ChatGPT.

We first document ChatGPT is widespread in the exposed occupations: half of workers have used the technology, with adoption rates ranging from 79% for software developers to 34% for financial advisors, and almost everyone is aware of it. Workers differ in their intensity of ChatGPT usage, with 32% currently using it and 6% having a Plus subscription. The widespread adoption of ChatGPT, only a year after its first launch, solidifies it as a landmark event in technology history.

Second, we look within the exposed occupations and ask what characterizes workers who use ChatGPT. Existing evidence highlights workers with less prior expertise have the most to gain from ChatGPT and other Generative AI (Brynjolfsson, Li and Raymond, 2023; Noy and Zhang, 2023), suggesting that the technology could help alleviate existing inequalities between workers (Autor, 2024). Consistent with this view, we find younger and less experienced workers are more likely to use ChatGPT. In particular, every year of age and experience is associated with a 1.0 and 0.7 percentage point lower likelihood of using ChatGPT. However, despite the lower tenure, workers who use ChatGPT earned slightly more already before its arrival, reflecting higher-achieving individuals within

[1] Our list of occupations includes accountants, customer support specialists, financial advisors, HR professionals, IT support specialists, journalists, legal professionals, marketing professionals, office clerks, software developers, and teachers.

[2] As we show, our results are robust to reweighing the sample to exactly match the population on observables, and to using randomized participation incentives to control for selection into the survey based on worker unobservables, following Dutz et al. (2022). We focus the main analysis on about 18,000 individuals who were still in their exposed occupations and fully completed the surveys, but show our findings are robust to adding in the partial responses.

cohorts (in particular, individuals with more education and higher grades) are more likely to use ChatGPT. These adoption patterns suggest less able workers may need further assistance to reap the benefits of Generative AI. As a final piece of descriptive evidence, we document a staggering gender gap in the adoption of ChatGPT: women are 20 percentage points less likely to have used ChatGPT than men in the same occupation. The gender gap is pervasive in all occupations, exists in various adoption measures, and persists when comparing coworkers within the same workplace and controlling for workers' detailed task mixes.

Next, we examine how workers anticipate ChatGPT will impact their work activities. Workers in the exposed occupations see a substantial productivity potential in ChatGPT, confirming expert predictions (Eloundou et al., 2024): the average worker estimates that ChatGPT can halve working times in about a third of his job tasks. Workers are twice as likely to state ChatGPT provides smaller rather than larger time savings for workers with greater expertise, consistent with existing evidence that the technology substitutes for human expertise (Noy and Zhang, 2023). Workers expect little substitution between tasks in response to ChatGPT, with 38% reporting they will not perform more of the tasks ChatGPT saves time completing. The limited cross-task substitution suggests that in the short run, before firms have reorganized their work to the new technology, ChatGPT may cause limited reallocation between job tasks. Finally, workers hold widely varying views on the time savings from ChatGPT, and these perceptions correlate with their actual use of the technology, suggesting a potential role for individual beliefs in determining who uses ChatGPT.[3]

In the experimental part of the study, we investigate whether informing workers about ChatGPT's capabilities can shift their perceptions and, if so, whether the changed beliefs translate into actual adoption. To evaluate these questions, we embed an experiment in our survey, exposing a random set of participants to expert assessments of the time savings from ChatGPT in their job tasks. The expert assessments are based on Eloundou et al. (2024), which we adapt to the Danish context and validate with industry experts. The information treatment is successful in shifting workers' beliefs: the gap to the expert

[3]From one viewpoint, it is reassuring that the substantial assessed time savings from ChatGPT are driven by workers who have used the tool (and thus experienced the time savings first-hand). From another, it also suggests that some workers may not use ChatGPT because they are not aware of its productive use cases.

assessments shrinks by 15%, with effects that persist in the follow-up survey two weeks later. Yet, despite understanding the potential time savings from ChatGPT, treated workers are not more likely to use ChatGPT in the following two weeks.

Finally, we examine what prevents workers from converting the potential productivity gains from ChatGPT into actual adoption. Workers report restrictions on use and needing training as the primary barriers to adoption, highlighting the role of firm policies (e.g., providing guidelines for use or facilitating employee training) in steering the further adoption of ChatGPT. By contrast, few workers report "existential fears," such as becoming dependent on technology or redundant in their jobs, as reasons for not using ChatGPT.

1 Data

The data infrastructure in Denmark offers an ideal setting to study the adoption of ChatGPT. In particular, every Dane has a digital mailbox that Statistics Denmark can use to send survey invitations. We link the survey to the administrative registers at Statistics Denmark, which offers two advantages to this study. First, we observe detailed occupational codes for all workers, allowing us to target the survey to individuals in exposed occupations, such as software developers, school teachers, and paralegals. Second, the registers contain a wealth of information about individuals, allowing us to study heterogeneity by workers' labor market histories, earnings, wealth, education, and demographics. We preregistered our survey and experiment at AEA-RCT-R-0012527.

1.1 Expert Assessments

The starting point of our study is an expert assessment of the time savings from ChatGPT in detailed job tasks. We use the expert assessments (*i*) to identify occupations that are exposed to ChatGPT and (*ii*) as the information treatment in our experiment. We provide an overview of our expert assessments in this section and relegate details to Appendix B.1.[4]

[4]Because we consider time savings in *existing* tasks, our survey will tend to focus on the *automation* potential of ChatGPT. Acemoglu and Restrepo (2019); Autor et al. (2024) show that automation technologies often also create *new* tasks (e.g., fact-checking of GPT-generated output), which tend to reinstate workers in the production process (Acemoglu and Restrepo, 2019; Autor et al., 2024).

1.1.1 Productivity Metric

Our expert assessments are based on the "Direct Exposure (E1)" metric of Eloundou et al. (2024), which asks whether access to ChatGPT can halve the time an average worker takes to complete a task at equal quality. The metric is based on the capabilities of GPT-3.5, which powered the free version of ChatGPT at the time of our study.[5] Box A provides the rubric of the metric, which we call "productivity" in this paper.

1.1.2 GPT Ratings

Eloundou et al. (2024) use a combination of human assessments and GPT prompts to classify the productivity of ChatGPT in the Detailed Work Activities (DWAs) in the O*NET database. We start by replicating the GPT ratings of Eloundou et al. (2024), applying minor adjustments to classify the most detailed Job Duties in the O*NET register.[6,7] We validate that the GPT ratings match our independent assessments of a random selection of 100 tasks.

1.1.3 Selecting Occupations

We use the GPT ratings to identify the occupations to include in our study. In particular, we include all occupations that (*i*) have at least one job task that is exposed to ChatGPT, (*ii*) are captured by a well-defined set of ISCO codes, and (*iii*) contain enough workers for statistical analysis. The resulting list of occupations is accountants, customer support specialists, financial advisors, HR professionals, IT support specialists, journalists, legal professionals, marketing professionals, office clerks, software developers, and teachers. Appendix B.1.1 describes how we identify these occupations in the register data.

1.1.4 Selecting Job Tasks

We include six representative job tasks for each occupation in our survey. Appendix B.1.2 details our selection algorithm, which picks the combination of six job tasks that best

[5]Eloundou et al. (2024) also propose the forward-looking measures "Exposure by LLM-powered applications (E2)" and "Exposure given image capabilities (E3)." We use the E1 scores as these capture the technology available to workers at the time of our study.

[6]We thank Pamela Mishkin and Daniel Rock for sharing their GPT prompt and exposure scores.

[7]Eloundou et al. (2024) classify the DWAs in O*NET, as these are comparable across occupations. We use the Job Duties because they are more relevant to specific occupations. In total, we have around 30,000 Job Duties that aggregate up to approximately 1,600 DWAs.

matches the productivity scores of the entire set of tasks in the respective occupation. Section E lists the job tasks we include for each occupation in the survey.

1.1.5 Human Ratings

We independently rate each of the six job tasks in the 11 occupations. The GPT and human ratings agree on all of the 66 job tasks. We furthermore validate the assessments with industry specialists and technology experts in Denmark.

1.1.6 Explanations and Sheets

Our information treatment includes a short (1-2 sentence) explanation for each expert assessment. We use GPT to generate draft explanations for its assessed productivity ratings, which we manually review for validity and clarity. Section H provides our final set of expert assessments and explanations. Furthermore, we allow participants to sign up for information sheets on how to use ChatGPT in their job tasks. Section I provides details on the sheets.

1.2 Survey Outline

1.2.1 Main Survey

Our main survey is organized into five blocks summarized below. The full questionnaire is in Appendix G.

Block 1: Adoption. After selecting their occupation, workers are asked about their experiences with ChatGPT. Workers report the importance of the surveyed tasks in their jobs and their own expertise in each job task.

Block 2: Prior Beliefs. Workers assess the time savings from ChatGPT for an average worker in their occupation, thus completing the productivity rubric of Section 1.1.[8] Workers also assess whether the time savings are smaller, similar, or larger for workers with greater expertise in the task.

[8]Incentivized belief elicitation is not possible because Statistics Denmark does not allow payments that depend on respondents' answers.

Block 3: Treatment. The treatment group is exposed to the expert assessments from Section 1.1, seeing a comparison of their assessments and the expert assessments, together with a brief explanation of each expert assessment. The control group sees a summary of their assessments. Figure C.1 displays the treatment and control pages.

Block 4: Intended Adoption and Posterior Beliefs. Workers report their intended use of ChatGPT in the coming two weeks. They also assess their own time savings from ChatGPT, thus completing the productivity rubric for themselves (instead of the average worker), which we call "individual productivity". Finally, workers assess how time savings from ChatGPT will affect their task outputs and time allocations.

Block 5: Frictions. If applicable, workers are asked why their assessed time savings from ChatGPT differ for an average worker versus themselves. If applicable, workers are asked why they do not intend to use ChatGPT despite stating it could save them time. Workers may also sign up for an information sheet with use cases of ChatGPT in their job tasks.

1.2.2 Follow-Up Survey

We distribute a follow-up survey two weeks after workers' responses to the main survey. The follow-up survey follows the structure of the main survey with two exceptions: in Block 1, we ask about adoption and task importance in the past two weeks. We ask this question to be consistent with the time window of intended adoption in Block 4 of the main survey. Second, we exclude Block 3 (Treatment) from the follow-up survey.

1.3 Survey Sample

We surveyed 100,000 workers from the 11 exposed occupations between November 2023 and January 2024, distributing a follow-up two weeks after workers' initial responses. We sent three reminders per survey round, two by e-mail and one by text. The invitation letter is in Appendix F. The main survey achieved a response rate of 29.2%, among which 86.4% were still employed in an exposed occupation.[9] Among these eligible participants, the main

[9]The remaining 13.6% reflect workers who had left their jobs between June 2023 (the latest month of register data) and November 2023 (the launch of the survey) or whose occupational codes were outdated in the registers.

survey had a completion rate of 72.1%. Of the workers who completed the main survey, 41.0% responded to our follow-up survey, with a completion rate of 81.2%. Attrition rates in our survey are balanced across our treatment arms and similar to previous surveys in the Danish setting (Hvidberg, Kreiner and Stantcheva, 2023). Although we focus our main analysis on the completed responses, all our findings are robust to adding in the partial responses.

1.3.1 Representativeness

We conduct several checks to ensure our survey data paint a representative picture.

First, Table B.2 ensures our sample represents the population on observables, including age, gender, experience, earnings, and wealth, and Table B.1 (Column (2)) shows our findings are robust to controlling for selection into the survey based on these observables.

Second, following Dutz et al. (2022), we use randomized participation incentives to examine selection into our survey based on worker unobservables. Table B.3 shows workers who randomly receive a higher participation prize are more likely to participate in the survey but do not systematically differ in their responses. Table B.1 (Column (3)) uses this variation to show our findings are robust to controlling for workers' latent willingness to participate in the survey.

Finally, we compare the responses of workers who fully complete versus drop out of our main survey and follow-up. Table B.4 shows that these workers have similar characteristics, adoption behaviors, and beliefs about ChatGPT.

1.3.2 Response Quality

We conduct several checks on the quality of our survey responses.

As an external validation, we cross-check variables that are also recorded in the administrative registers. First, our survey and administrative registers agree on the occupation of 87% of our respondents.[10] Second, validating the quality of respondents' subjective assessments, Figure B.1 shows workers' self-reported task expertise is strongly correlated with their experience in the relevant occupation recorded in the registers.

[10]The disagreements likely reflect measurement error in the registers because firms generally do not update occupational switches of existing employees (Groes, Kircher and Manovskii, 2015). Furthermore, some workers may have switched jobs between June 2023 (our latest month of register data) and November 2023 (the launch of our survey). Table B.5 shows the disagreements occur in cells that reflect likely switches, such as (IT Support, Software Developer). By contrast, the survey and register data agree on the occupation of 100% of our school teachers.

As an internal validation, we examine the correlation between repeat measurements in the main survey and the follow-up survey. In particular, Tables B.7 and B.8 show that workers' reported task importance and task expertise scores are strongly correlated between the main survey and follow-up. Further validating workers' assessments, Table B.6 shows that workers' reported expertise in a task is highly related to how important the task is in their jobs. Finally, we confirm workers' beliefs about ChatGPT correlate with the expert assessments.[11]

2 Descriptive Evidence

2.1 Adoption of ChatGPT

2.1.1 Adoption across Occupations

Figure 1 shows the adoption of ChatGPT across our 11 occupations, reporting extensive margins in Panel (a) and intensity of usage in Panel (b). ChatGPT is widespread in the exposed occupations. More than half of workers have used it, 40% have used it for work, and 24% for a core job task.[12,13] Almost all workers are aware of ChatGPT. Workers differ in their intensity of ChatGPT usage, with 32% currently using it, 27% using it for work, 18% using it in a core task, and 6% having a Plus subscription.[14]

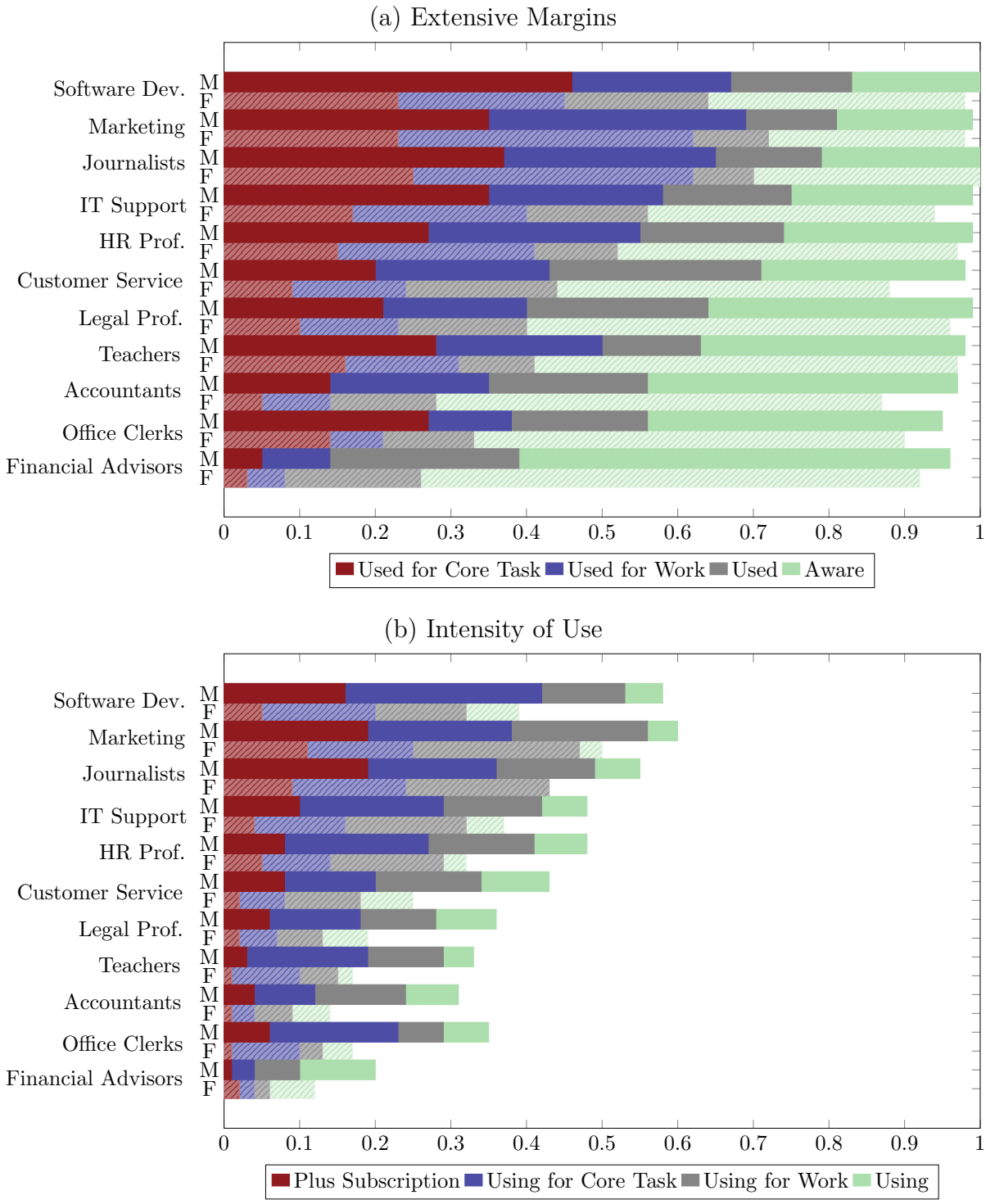
[11]Workers and experts agree on the exposure rankings of 78% of the job tasks. For example, according to workers, the least exposed job task is "Establish and enforce rules for behavior and procedures for maintaining order among students" of teachers, and the most exposed task is "Analyze financial information obtained from clients to determine strategies for meeting clients' financial objectives" of financial advisors.

[12]Appendix Figure A.1 shows that most workers who use ChatGPT for work also use it for leisure.

[13]Workers are not more likely to use ChatGPT for "peripheral" tasks than "core" tasks. In particular, the task-level rates of adoption are 9.5% for peripheral tasks (that are "somewhat important" or "important") and 9.9% for core tasks (that are "very important" or "extremely important").

[14]Our rates of adoption align with smaller-scale national surveys of ChatGPT. In particular, using the Eloundou et al. (2024) β-exposure scores to extrapolate outside our survey occupations (assuming a fixed ratio between exposure and adoption) implies 31% (22%) of workers in Denmark have used ChatGPT (for work). In comparison, RISJ (2024) find that 35% of Danes had used ChatGPT by May 2024. Adoption rates for ChatGPT are similar in Denmark and the US and multiple times higher than for any other generative AI tool (Pew, 2024; RISJ, 2024).

Figure 1: Adoption of ChatGPT by Occupations and Gender



Notes: This figure shows the adoption of ChatGPT in different occupations, split by male (M) and female (F) workers. Panel (a) plots the shares of workers who have used ChatGPT for a core job task, have used ChatGPT for work, have used ChatGPT, and are aware of ChatGPT. Panel (b) shows the shares of workers who have an active Plus subscription to ChatGPT, are using ChatGPT for a core job task, are using ChatGPT for work, and are using ChatGPT. "Core tasks" are "very important" or "extremely important" to the worker's job. "Using" means the worker has used it in the past two weeks. *Sample*: The figure is based on all completed survey responses.

Adoption rates differ across occupations, with IT-prone and high-skilled occupations, such as software developers and marketing specialists, leading the curve with rates of adoption around 78%.[15] Occupations with lower educational requirements and where employers may restrict usage, such as office clerks and financial advisors, have the lowest adoption rates, around 36%. Sections 2.1.2 and 2.3 examine the roles of worker skills and employer restrictions in the adoption of ChatGPT.

2.1.2 Adoption within Occupations

Table 1 dives within the exposed occupations and asks what characterizes workers who use ChatGPT.

Existing research highlights workers with less prior expertise have the most to gain from ChatGPT and other Generative AI (Brynjolfsson, Li and Raymond, 2023; Noy and Zhang, 2023). Consistent with this view, we find younger and less experienced workers are more likely to use ChatGPT. In particular, every year of age and experience in the relevant occupation is associated with a 1.0 and 0.7 percentage point lower likelihood of having used ChatGPT. However, despite the lower tenure, workers who use ChatGPT earned slightly more before its arrival, reflecting that more able workers are more likely to use ChatGPT. Educational achievements explain a small part of the ability bias in adoption: an additional year of schooling increases adoption rates by 0.1 percentage points, and a standard deviation higher GPA from high school is associated with a 2.1 percentage point higher rate of adoption (Table A.1).[16]

The last row of Table 1 documents a staggering gender gap in the adoption of ChatGPT: women are about 18 percentage points less likely to use ChatGPT than comparable men in the same occupation. Figure 1 shows the gender gap is pervasive across occupations.[17]

[15]The adoption rates for ChatGPT are high relative to existing AI technologies. Acemoglu et al. (2022*b*) document 3.2% of US firms used AI between 2016 and 2018, with adoption in the leading sector (Information) below 10%. Humlum and Meyer (2022) report 4.5% of Danish firms used AI tools in 2017. McElheran et al. (2024) measure five AI-embedded technologies, showing 5.8% of US firms used any of these in 2017. Acemoglu et al. (2022*a*) show AI jobs constituted 0.8% of online vacancies in the US in 2018. Babina et al. (2024) find 0.3% of employees at US public firms held AI-related positions in 2018.

The higher adoption rates for ChatGPT likely reflect that this is a worker-driven phenomenon. Bonney et al. (2024) document 5.4% of US firms reported using AI as of February 2024, with adoption in the leading sector (Information) around 20%. Our worker-level survey complements existing firm-based surveys by measuring workers' use of ChatGPT independent of firm-wide adoption initiatives.

[16]Otis et al. (2024) show high-performing entrepreneurs in Kenya accrue larger gains from access to a GPT-powered AI assistant, consistent with our finding that higher-achieving workers may be better positioned to use ChatGPT.

[17]It is difficult to find another technology with a similar gender gap as ChatGPT, especially within

Columns (2)-(5) of Table 1 show that the gender and income gaps hold for a wide array of adoption measures. In particular, although the absolute gaps shrink for rare outcomes (e.g., active use for a core job task or Plus subscription), the relative effects of gender and income (measured in percent of the outcome mean) only increase for these more intensive adoption measures. Table A.2 reports the relative effects.

Table 1: Who Has Adopted ChatGPT? (Comparison within Occupations)

	Extensive Margin			Intensity of Use			
	Used	Used for Work	Used for Core Task	Using	Using for Work	Using for Core Task	Plus Subscription
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Age	-0.010	-0.007	-0.004	-0.006	-0.005	-0.004	-0.001
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Experience	-0.007	-0.006	-0.005	-0.004	-0.004	-0.003	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)
log(Earnings)	0.083	0.082	0.048	0.044	0.049	0.035	0.022
	(0.009)	(0.009)	(0.009)	(0.008)	(0.008)	(0.008)	(0.005)
Net Wealth / Earnings	0.001	-0.001	-0.002	-0.004	-0.003	-0.003	-0.003
	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
Female	-0.182	-0.138	-0.119	-0.138	-0.119	-0.100	-0.041
	(0.008)	(0.008)	(0.007)	(0.007)	(0.007)	(0.006)	(0.004)
Mean of Outcome	0.552	0.398	0.244	0.323	0.271	0.183	0.061
Adj R^2	0.187	0.171	0.119	0.135	0.140	0.109	0.059
Observations	17907	17907	15696	17907	17907	15696	17907

Notes: This table compares workers within occupations and asks what characterizes those who have adopted ChatGPT. The regressions control for occupation fixed effects. Standard errors in parentheses. The adoption measures are (1) "have used", (2) "have used for work", (3) "have used for a core task", (4) "currently using", (5) "currently using for work", (6) "currently using for a core task", and (7) "have a Plus subscription". "Core tasks" are "very important" or "extremely important" to the worker's job. "Currently using" means the worker has used it in the past two weeks *Sample*: The figure is based on all completed survey responses. All characteristics are based on register variables. *Experience* is the years of employment in the relevant occupation (`DISCO_KODE`). *Earnings* are total labor income (`LOENMV_13`). *Net Wealth* is the sum of real assets, financial assets, pension savings, minus the sum of priority debt, other private debt, and public debt (`FGNF_2020`), winzorized at the 5th and 95th percentiles. *Sample*: The table is based on all completed survey responses that can be linked to the registry data.

What explains the large gender differences in the use of ChatGPT? In Table A.3, we assess whether women specialize in jobs that are less exposed to ChatGPT. In particular,

detailed occupations. Statistics Denmark conducts a nationally representative survey on "ICT Usage by Individuals", which provides some benchmarks. In 2023, all Danes used the internet (99% of both women and men), and there was no purpose for internet use with a similar gender gap as ChatGPT. Across all purposes and periods, the only statistic with a similar gender gap is "Downloading software (other than games software)" in 2008-2011, with women 20 pp less likely to do so (42% vs. 62%). However, while that gap is in the broad population, the gender gap we document exists within detailed job categories (e.g., comparing two software developers with similar task mixes).

comparing workers within the same workplace and controlling for workers' detailed task mixes shrinks the gender gap from 22 to 16 percentage points, leaving a substantial gender gap unexplained by job specializations. In Section 2.4, we examine the roles of worker beliefs and adoption barriers in driving the gender disparities in the use of ChatGPT.

2.2 Beliefs about ChatGPT

Table 2 examines how workers anticipate ChatGPT will impact their job tasks. Column (1) shows workers see a large productivity potential of ChatGPT in their occupations, estimating it can halve working times in 37% of the job tasks for the typical worker.

Table 2, Columns (2)-(4) report workers' beliefs about whether ChatGPT provides smaller, similar, or larger time savings for workers with more expertise in the task. Workers are twice as likely (39% vs. 20%) to state the time savings from ChatGPT are smaller rather than larger for workers with greater task expertise. These patterns align with existing research on the productivity effects of ChatGPT (Dell'Acqua et al., 2023; Noy and Zhang, 2023) and suggest workers understand the technology substitutes for human expertise.

Table 2, Column (5) shows how workers perceive their *own* time savings from ChatGPT. Workers are slightly more skeptical about their own productivity gain from ChatGPT (compared with the typical worker in Column (1)), estimating it can halve their working times in 32% of their job tasks.[18] Figure 2.(a) shows workers give their expertise levels and worries about correctness (i.e., "hallucinations") as the main reasons they gain less from ChatGPT than the average worker.

Table 2, Columns (6)-(8) show how workers expect ChatGPT will impact their task outputs and time allocations. Strikingly, 38% of workers report they will not perform more of a task if ChatGPT can save time completing it. By contrast, 24% of workers report they will devote a larger share of their working time to tasks ChatGPT can save time completing.[19] The limited cross-task substitution suggests that in the short run, before industries have reorganized work around the new technology, ChatGPT may cause

[18]Table A.4 shows that workers' estimates of the time savings from ChatGPT are highly similar if we weight tasks by their importance scores. In particular, the substantial time savings from ChatGPT do not reflect that it saves time on less important tasks.

[19]The cross-task substitution is particularly limited among teachers, among whom 61% state a cross-task substitution of zero, whose job tasks arguably are more fixed by the school system.

limited reallocation between job tasks.[20,21]

Table 2: Worker Beliefs about ChatGPT

		Expertise Complementarity				Cross-Task Substitution		
	Productivity	Negative	Neutral	Positive	Individual Productivity	Zero	Inelastic	Elastic
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Software Dev.	0.363	0.430	0.366	0.205	0.275	0.332	0.495	0.173
	(0.313)	(0.383)	(0.332)	(0.312)	(0.319)	(0.471)	(0.500)	(0.378)
Marketing	0.452	0.304	0.432	0.264	0.407	0.340	0.398	0.262
	(0.323)	(0.348)	(0.347)	(0.340)	(0.348)	(0.474)	(0.490)	(0.440)
Journalists	0.233	0.468	0.356	0.177	0.205	0.385	0.462	0.154
	(0.236)	(0.385)	(0.338)	(0.302)	(0.235)	(0.487)	(0.499)	(0.361)
IT Support	0.419	0.413	0.380	0.207	0.348	0.365	0.421	0.213
	(0.300)	(0.348)	(0.318)	(0.287)	(0.309)	(0.482)	(0.494)	(0.410)
HR Prof.	0.393	0.397	0.419	0.184	0.321	0.434	0.346	0.220
	(0.283)	(0.354)	(0.330)	(0.266)	(0.284)	(0.496)	(0.476)	(0.414)
Customer Service	0.380	0.377	0.411	0.212	0.349	0.351	0.313	0.337
	(0.330)	(0.361)	(0.338)	(0.280)	(0.344)	(0.477)	(0.464)	(0.473)
Legal Prof.	0.352	0.421	0.405	0.174	0.298	0.377	0.436	0.188
	(0.287)	(0.368)	(0.344)	(0.278)	(0.289)	(0.485)	(0.496)	(0.390)
Teachers	0.210	0.358	0.495	0.147	0.191	0.613	0.249	0.139
	(0.232)	(0.371)	(0.363)	(0.255)	(0.244)	(0.487)	(0.432)	(0.345)
Accountants	0.382	0.390	0.410	0.200	0.297	0.326	0.388	0.286
	(0.331)	(0.387)	(0.362)	(0.305)	(0.333)	(0.469)	(0.487)	(0.452)
Office Clerks	0.417	0.333	0.437	0.230	0.361	0.393	0.368	0.239
	(0.315)	(0.347)	(0.343)	(0.291)	(0.321)	(0.488)	(0.482)	(0.427)
Financial Adv.	0.466	0.369	0.468	0.164	0.433	0.240	0.400	0.361
	(0.342)	(0.370)	(0.358)	(0.271)	(0.371)	(0.427)	(0.490)	(0.480)
All Workers	0.370	0.387	0.416	0.197	0.317	0.377	0.388	0.235
	(0.311)	(0.369)	(0.345)	(0.292)	(0.320)	(0.485)	(0.487)	(0.424)

Notes: This table shows workers' mean beliefs about ChatGPT with standard deviations in parentheses. Column (1) reports the share of job tasks where access to ChatGPT can halve working times for an average worker. Columns (2)-(4) show the share of job tasks in which ChatGPT delivers respectively smaller, similar, and larger time savings for workers with greater task expertise. Column (5) shows the share of job tasks where access to ChatGPT can halve workers' *own* working times. Column (6) shows the share of workers who will not complete more of a task if ChatGPT can save time in it. Column (7) is the share of workers who will complete more of a task if ChatGPT but will not dedicate a larger share of their work time to the task. Column (8) is the share of workers who will dedicate a larger share of their time to a task if ChatGPT can save time completing it. *All workers* are averages with equal weights to each occupation. *Sample*: The table is based on all completed survey responses. Columns (5)-(8) focus on the control group as these survey questions come after the treatment page.

Finally, Table 2 reveals that beliefs about ChatGPT vary vastly within occupations: the standard deviation of workers' estimated productivity shares (Column (1)) is 31

[20]Eisfeldt et al. (2024) show firms exposed to ChatGPT saw a rise in their stock prices following its release, reflecting anticipations that the technology will help reduce their labor costs.

[21]Agrawal, Gans and Goldfarb (2023) provide a model of organization-wide adoption of AI across job tasks. The reorganization of work to leverage tools like ChatGPT may also create new tasks for workers, further boosting labor demand (Acemoglu and Restrepo, 2019; Autor et al., 2024).

percentage points. Furthermore, as Appendix Figure A.3 shows, most workers are (very) uncertain in their assessments of the time savings from ChatGPT. In Section 3, we examine the causal role of worker beliefs in driving the adoption of ChatGPT.

2.3 Frictions from Beliefs to Adoption

Section 2.2 showed many workers see a large potential of ChatGPT to save time in their job tasks. Do these perceived productivity gains manifest in workers' actual use of the technology? In this section, we examine the transmission from worker beliefs to adoption behaviors.

Figure 2.(b) reveals a striking fact: among workers who believe ChatGPT can halve their time to do a job task, about 50%–60% do *not* intend to use it. These "adoption frictions" suggest large unrealized productivity gains from ChatGPT. What prevents workers from converting potential gains into actual adoption? The most important frictions relate to firm policies: 43% of workers report they need training to use ChatGPT, and 35% report employers actively restrict their usage.[22] "Existential fears" of becoming redundant in the job or dependent on technology are the least important adoption frictions, with less than 10% of workers reporting these fears as reasons for not using ChatGPT.

The stated need for training suggests workers would like to learn how to use ChatGPT. Indeed, Figure A.2 shows 55% of survey participants sign up for our information sheet on using ChatGPT in their job tasks, with 18% eventually clicking on the material.

Frictions to adoption also help explain the systematic differences between occupations in the use of ChatGPT (Figure 1). In particular, Table A.5 shows occupations with lower rates of adoption are more likely to face barriers to adoption. For example, while 82% of financial advisors face an adoption friction, 37% of software developers report the same. The relevant frictions also differ by occupations. Employer restrictions are more likely to bind in occupations that handle sensitive information, such as financial advisors and legal professionals. Less IT-prone occupations, such as teachers, report they need training to use ChatGPT, whereas this is less of a concern for software developers. Customer service representatives avoid ChatGPT due to fears of being replaced or becoming dependent on

[22]The need for training reflects workers who personally need training, as opposed to firms requiring training they cannot access. For example, the share of workers who state they need training is 51% among workers who do not face employer restrictions on use, as opposed to 22% among workers who face restrictions.

technology. Finally, in occupations where writing is a core competency, such as journalism and teaching, workers resist ChatGPT because it diminishes their enjoyment of their job.[23]

2.4 Gender Gaps

Section 2.1.2 revealed a large gender gap in the adoption of ChatGPT, showing women are about 20 percentage points less likely to use ChatGPT than men in the same occupation. Why have so few women adopted ChatGPT? Figure 2 provides some insights.

The gender gap in adoption does *not* reflect differences in mean beliefs, as women are about as optimistic as men about the productivity of ChatGPT (Panel (a)). In particular, Table A.3 shows the estimated gender gap in adoption is unaffected by controlling for workers' assessed time savings from ChatGPT. Women are more uncertain about these assessments, however, and controlling for uncertainty of beliefs shrinks the gender gap in adoption from 16% to 15%.

Figure 2.(b) shows women are more likely to face an adoption barrier. In particular, women report they need training to use ChatGPT.[24] By contrast, men's use of ChatGPT is more limited by employer restrictions and data confidentiality.[25]

Despite women's stated need for training, Figure A.2 shows men are more likely to sign up for our information sheets on using ChatGPT. Hence, simply offering workers introductory material is unlikely to close the gender gap in adoption.

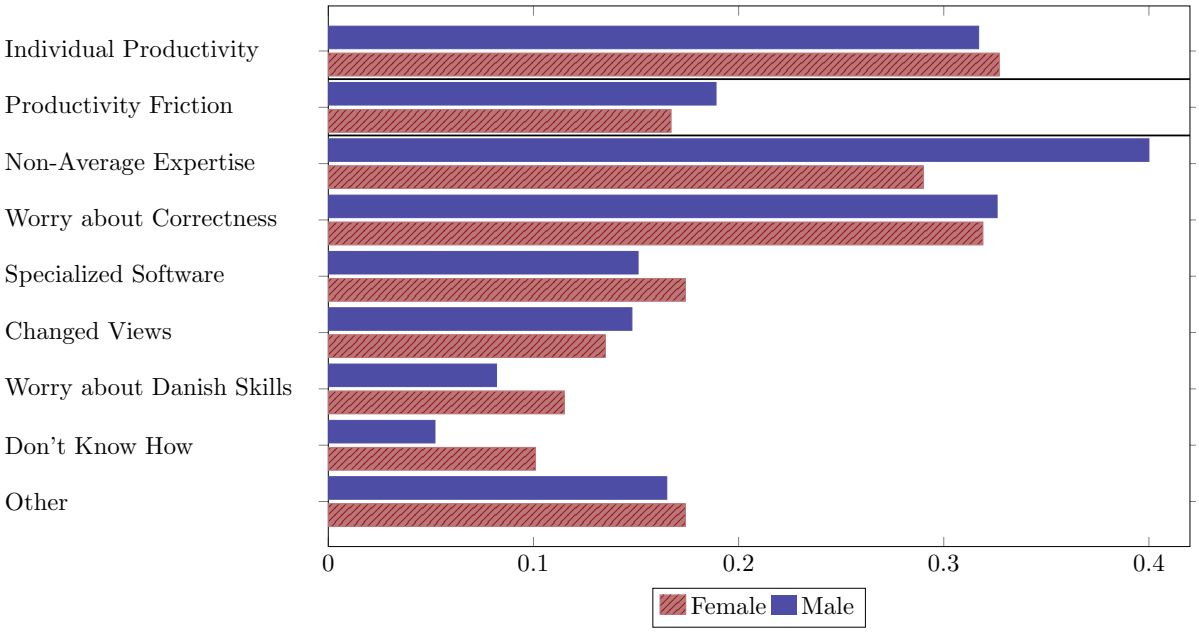
[23]Some of the adoption barriers may be legitimate and efficient, especially those related to restrictions on sensitive material. By contrast, the lack of training seems less likely to be efficient, as experimental evaluations show workers need minimal training to reap substantial time savings from ChatGPT (Noy and Zhang, 2023).

[24]Consistent with this finding, women are also more likely to state they "do not know how" to use ChatGPT as a reason their benefits from it are lower (Panel (a)).

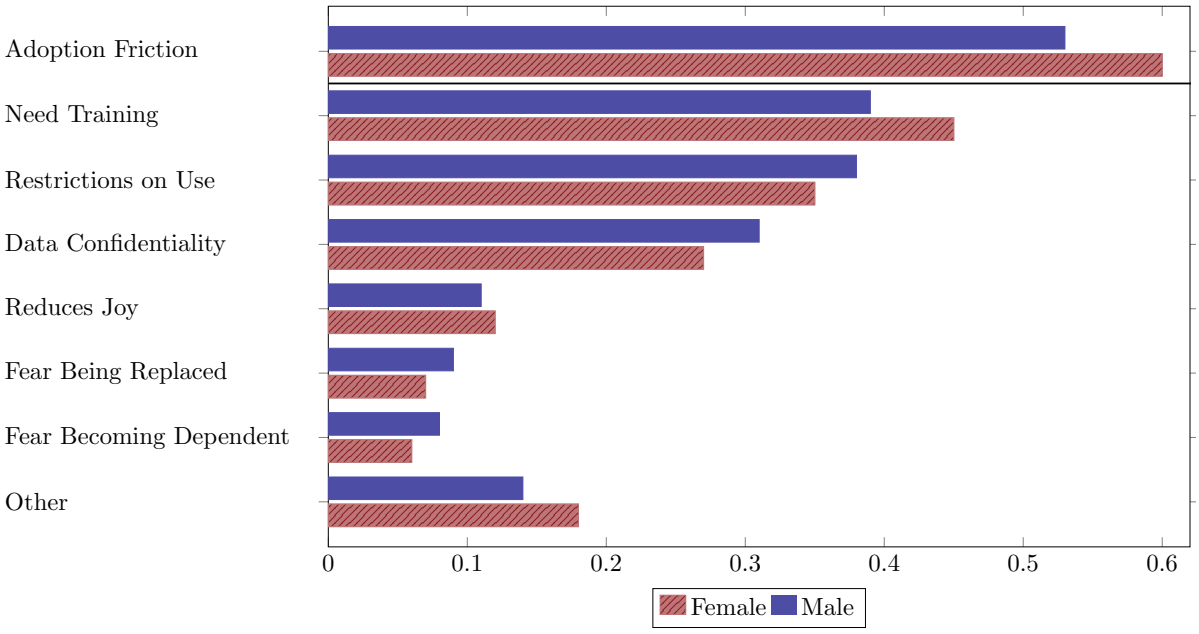
[25]Carvajal, Franco and Isaksson (2024) identify a comparable gender gap in a survey experiment among 514 university students in Norway. In particular, they document female students use ChatGPT much less, are less proficient at writing ChatGPT prompts, and are more sensitive to bans on using ChatGPT.

Figure 2: Frictions from Beliefs to Adoption

(a) Beliefs about the Productivity of ChatGPT



(b) Frictions from Productivity to Adoption



Notes: This figure studies the transmission from workers' beliefs about ChatGPT to their adoption of the technology. Panel (a) shows workers' beliefs about the capabilities of ChatGPT. The top set of bars shows the share of job tasks in which workers state ChatGPT can halve their working times ("individual productivity"). The next set of bars focuses on the tasks in which workers state ChatGPT can halve working times for an average worker but not for themselves (a "productivity friction"). The remaining bars report workers' reasons for these productivity frictions. As workers may report multiple reasons for their friction, the reason bars may sum to more than 100%. Panel (b) explores what prevents workers from adopting ChatGPT despite believing in its individual productivity. The upper bars show the share of tasks where workers do not intend to use ChatGPT despite believing in its individual productivity (an "adoption friction"). The figure focuses on tasks workers expect to perform. The bars below show workers' reasons for these adoption frictions. The figure controls for differences in the gender composition of occupations by reweighing the gender-specific statistics to match the average composition across occupations. *Sample*: The figure is based on all completed survey responses of the control group.

3 Experimental Evidence

Why have some workers adopted ChatGPT, and others have not? The descriptive evidence in Section 2 suggests a potential role of individual beliefs in driving who uses ChatGPT. In particular, workers hold widely varying views on the productivity of ChatGPT but are also highly uncertain about these assessments. The scope for diverging beliefs is particularly pertinent for ChatGPT, which falls into the class of General Purpose Technologies, whose use cases are vast and uncertain (Eloundou et al., 2024; Goldfarb, Taska and Teodoridis, 2023).

This section studies the causal role of worker beliefs in driving the adoption of ChatGPT. In particular, we expose a random set of workers to the expert assessment of ChatGPT described in Section 1.1. Using this experiment, we study whether information shifts workers' perception of ChatGPT and, if so, whether the changed beliefs affect their adoption decisions. We preregistered our experiment at AEA-RCT-R-0012527, with the analysis in this section focusing on the productivity treatment.

3.1 Identification Strategy

Our identification strategy combines the information treatment with workers' pre-treatment deviations from the expert assessments. Following Jäger et al. (2024), the idea is that workers who are initially far off from the expert assessments receive a larger information treatment from exposure to the information.

Our outcomes of interest Y_i^{Post} are workers' posterior beliefs and adoption behaviors. The reduced-form estimating equation reads

$$Y_i^{\text{Post}} = \beta_0 + \beta_1 \text{Deviation}_i^{\text{Pre}} + \beta_2 \text{Treated}_i + \beta_3 \text{Treated}_i \times \text{Deviation}_i^{\text{Pre}} + \epsilon_i, \qquad (1)$$

where $\text{Deviation}_i^{\text{Pre}}$ is worker i's pre-treatment deviation from the expert assessments, and Treated_i indicates the information treatment. We denote superscripts by pre- and post-treatment timing.

To estimate effects at the worker level, we use workers' average deviations across their six surveyed job tasks, $\text{Deviation}_i^{\text{Pre}} = \frac{1}{6}\sum_{t=1}^{6}\left(\text{Productivity}_{it}^{\text{Pre}} - \text{Productivity}_t^{\text{Expert}}\right)$. Table A.6 shows our findings are robust to weighing the tasks by their importance scores and Figure A.4 supports the linear specification with binned scatter plots.

3.2 Results

Table 3, Panel A shows the impact of the information treatment on workers' posterior beliefs and adoption behaviors. Column (1) reports the impact on workers' beliefs about their own time savings from ChatGPT. The information treatment is successful in shifting workers' beliefs, with the deviations from the expert assessments shrinking by 14.9%.[26]

Columns (2)-(5) study workers' adoption behaviors in the main survey, reporting effects on workers' intended use and interest in information about use cases of ChatGPT. Overall, the information treatment has muted effects on adoption, with magnitudes that are about 10%-20% of the effect on beliefs and not statistically significant.

Columns (6)-(8) report impacts in the follow-up survey. Workers' beliefs remain shifted two weeks after the treatment, with about 55%-85% of the original effect persisting. However, workers are not more likely to have actually used ChatGPT in the two weeks that followed the treatment. Table A.7 presents the corresponding IV estimates, confirming that the treatment shifts workers' beliefs but with muted effects on adoption behaviors.

3.2.1 Adoption Frictions

The muted effects of information on actual adoption are consistent with the substantial frictions to adoption documented in Section 2.3. In particular, Table 3 shows the correlation β_1 between workers' prior beliefs ("Deviation") and adoption behaviors ("Intent to Use") is also muted and around $\beta_1 \approx 20\%$. In fact, our reduced-form estimates on intended use are somewhat smaller than but within the confidence bands of those predicted by the correlations.[27] Furthermore, Table A.8 shows workers' responses to the information treatment are hindered by the same barriers as those reported in the general population in Figure 2(b), namely "needing training" and "employer restrictions."

3.2.2 Gender Gaps

In Panels B and C of Table 3, we split our experiment by gender. Women's beliefs are more than twice as responsive to the treatment on impact, as their deviations from the expert assessments shrink by 22% in the main survey, compared with 9% for men.

[26]The treatment also has a direct negative impact on worker beliefs β_2. This could reflect that workers perceive technology experts as overoptimistic about the productivity of ChatGPT.

[27]The effects predicted by the correlation is given by $\beta_1^{\text{Adoption}} \times \beta_3^{\text{Ind.Prod.}}$ (i.e., the correlation between adoption and beliefs, scaled by the reduced-form impacts on beliefs).

Women are also more likely to intend to use ChatGPT following the treatment, whereas men's adoption behaviors are unaltered by the information. Women's larger initial belief response dissipates entirely after two weeks, however, as the treatment effects on workers' beliefs shrink to 8%. The effects on women's actual use two weeks after are also attenuated and not statistically significant.

Table 3: Effects of the Information Treatment on Beliefs and Adoption Behaviors

	Main Survey						Follow Up		
	Ind. Productivity (1)	Ind. Productivity Follow Up Sample (2)	Intent to Use in Job Tasks (3)	Intent to Use (4)	Interest in Material (5)	Clicks on Material (6)	Individual Productivity (7)	Use in Job Tasks (8)	Use (9)
Panel A: All									
Deviation × Treated	-0.149	-0.156	-0.014	-0.028	-0.019	-0.006	-0.087	0.015	0.010
	(0.012)	(0.020)	(0.013)	(0.023)	(0.025)	(0.019)	(0.024)	(0.019)	(0.037)
Treated	-0.021	-0.021	-0.007	-0.016	-0.026	-0.018	-0.014	0.006	-0.003
	(0.005)	(0.008)	(0.004)	(0.009)	(0.009)	(0.007)	(0.010)	(0.007)	(0.014)
Deviation	0.735	0.761	0.181	0.246	0.212	0.039	0.544	0.104	0.140
	(0.009)	(0.015)	(0.010)	(0.018)	(0.019)	(0.015)	(0.019)	(0.015)	(0.028)
Control Means	0.309	0.300	0.104	0.327	0.553	0.182	0.265	0.079	0.223
Observations	12093	4051	12092	12093	12093	12093	4051	4051	4051
Panel B: Male									
Deviation × Treated	-0.092	-0.084	0.003	-0.006	-0.002	-0.005	-0.086	0.034	0.040
	(0.016)	(0.026)	(0.019)	(0.032)	(0.033)	(0.026)	(0.030)	(0.028)	(0.051)
Treated	-0.004	-0.001	-0.001	-0.010	-0.028	-0.021	-0.015	0.013	-0.006
	(0.007)	(0.012)	(0.007)	(0.013)	(0.013)	(0.011)	(0.014)	(0.012)	(0.021)
Deviation	0.739	0.745	0.241	0.288	0.174	0.017	0.581	0.148	0.167
	(0.013)	(0.021)	(0.015)	(0.025)	(0.026)	(0.020)	(0.025)	(0.023)	(0.040)
Control Means	0.312	0.296	0.146	0.420	0.597	0.189	0.264	0.108	0.292
Observations	6124	2189	6124	6124	6124	6124	2189	2189	2189
Panel C: Female									
Deviation × Treated	-0.218	-0.255	-0.033	-0.050	-0.033	-0.008	-0.082	-0.005	-0.035
	(0.020)	(0.032)	(0.015)	(0.032)	(0.037)	(0.028)	(0.041)	(0.023)	(0.050)
Treated	-0.034	-0.038	-0.013	-0.022	-0.023	-0.015	-0.010	0.000	0.004
	(0.007)	(0.011)	(0.005)	(0.011)	(0.013)	(0.010)	(0.014)	(0.007)	(0.017)
Deviation	0.733	0.783	0.112	0.190	0.247	0.063	0.493	0.044	0.109
	(0.014)	(0.023)	(0.012)	(0.024)	(0.028)	(0.022)	(0.031)	(0.015)	(0.036)
Control Means	0.307	0.305	0.061	0.234	0.508	0.174	0.266	0.045	0.142
Observations	5969	1862	5968	5969	5969	5969	1862	1862	1862

Notes: This table shows the reduced-form effects of the information treatment on workers' posterior beliefs and adoption behaviors. Equation (1) provides the regression specification. Columns (1)-(4) show the effects on workers' beliefs and intended use (coming two weeks) in the main survey. Columns (5)-(6) show the effects on sign-ups and clicks on an information sheet on ChatGPT in the workers' job tasks (described in Appendix I). Columns (7)-(9) show effects on workers' beliefs and actual use (past two weeks) in the follow-up survey. *Deviation* is workers' average deviation from the expert assessments of the productivity of ChatGPT in their surveyed job tasks; see Section 3.1 for the definition. *Individual Productivity* is workers' average individual productivity of ChatGPT in their surveyed job tasks. Occupation fixed effects are absorbed. Standard errors are in parentheses. *Sample*: The table is based on all completed survey responses in the *productivity treatment* and *control* arms.

Why are women more responsive to the information treatment? Figure A.3 shows women are less confident in their priors about ChatGPT, which could explain why they are also more swayed by the expert assessments. To explore this hypothesis, Table A.9 splits the information experiment by workers' prior uncertainty. While men with uncertain

priors are more responsive to the information (10.9% vs. 8.5%), this difference explains a minor part of the difference to women. In particular, women are 9.8 pp. and 13.6 pp. more responsive to the information than men with similar levels of prior confidence.

In summary, these findings show the gender gap in adoption does *not* reflect women are less responsive to information about the technology. On the contrary, women respond more to the information but face barriers that prevent their further adoption. In particular, Table A.8, Panel B confirms the "need for training" is actively hindering more women from taking advantage of ChatGPT.

4 Conclusion

The arrival of ChatGPT is a landmark event in technology history. A year after its launch, ChatGPT is widespread in the exposed occupations, with adoption rates ranging from 79% for software developers to 34% for financial advisors. Thus far, the rapid take-up has been driven by the individual decisions of workers to start using it, with many employers playing a passive or regressive role.

Looking ahead, firms could play a critical role in facilitating the further adoption of Generative AI such as ChatGPT. Indeed, many workers who currently do not use ChatGPT report employers are restricting their use or that they need training to use it. Hence, by providing guidelines for productive use or facilitating employee training, employers could help more workers unlock the productivity potential of Generative AI.

A proactive approach by firms or governments to aid the further adoption of Generative AI could also help alleviate three concerning patterns in the current adoption of ChatGPT. First, despite the potential of Generative AI to alleviate existing inequalities, workers who currently use ChatGPT earned slightly more before its arrival. Hence, workers with less expertise may need further assistance to reap the benefits of Generative AI.

Second, our analysis revealed a staggering gender gap in adoption, with women being much less likely to use ChatGPT. A planned effort to train workers could help resolve this gender gap, as many women report they need training to use ChatGPT.

Finally, many workers report they will not expand their output in tasks where ChatGPT boosts their productivity. However, as firms reorganize their workflows around Generative AI such as ChatGPT, the productivity gains may also deliver greater expansion in output, ultimately contributing to economic growth.

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Supplementary Materials
The Adoption of ChatGPT

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Box A.1: Productivity Rubric (Eloundou et al., 2024)

Think of a **[journalist] with an average level of experience and expertise** trying to complete a given task. The worker has access to ChatGPT, the internet, a computer with existing software, and other tools typically used to complete the task.

Specify the following tasks according to the rubric below. Equivalent quality means someone reviewing the work would not be able to tell whether the worker completed it with or without assistance from ChatGPT.

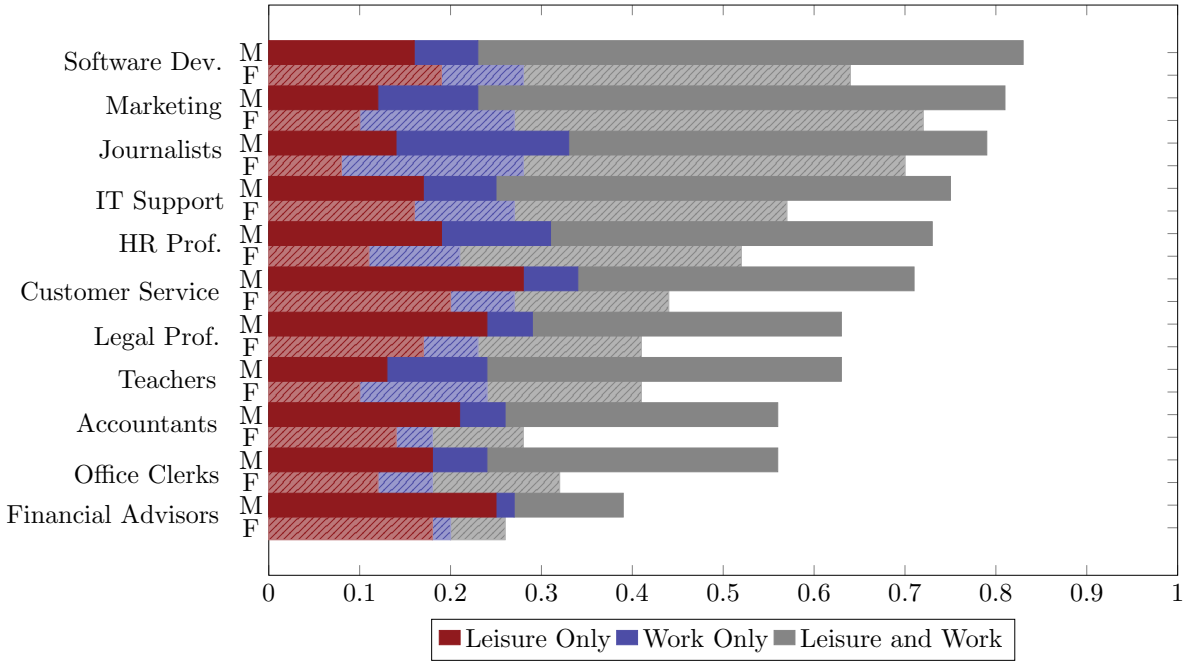
Large time savings from ChatGPT
Specify the task's time savings as "Large" if **access to ChatGPT *can halve the time*** it takes for an average [journalist] to complete the task with equivalent quality.

Small or no time savings from ChatGPT
Specify the task's time savings as "Small or no" if **access to ChatGPT *cannot halve the time*** it takes for an average [journalist] to complete the task with equivalent quality.

[***Write commentaries, columns, or scripts***]

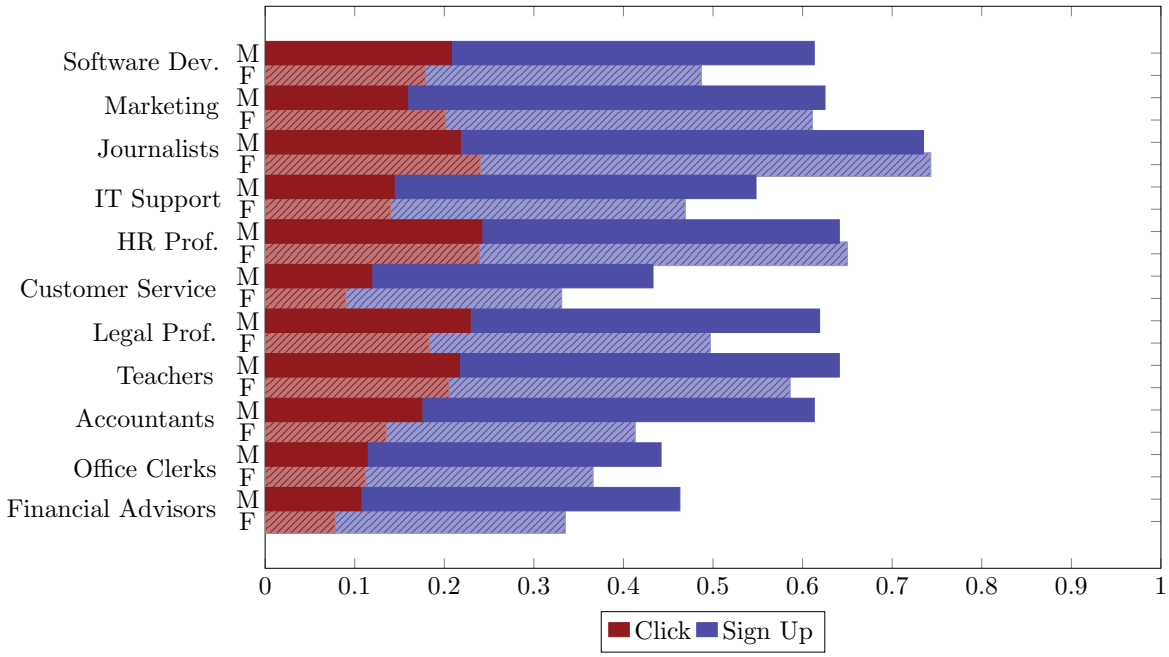
Notes: This figure provides the rubric for our *productivity* metric.

Figure A.1: Adoption of ChatGPT across Occupations



Notes: This figure shows the shares of male (M) and female (F) workers in each occupation who have used ChatGPT for leisure only, for work tasks only, or for both leisure and work. *Sample*: The figure is based on all completed survey responses.

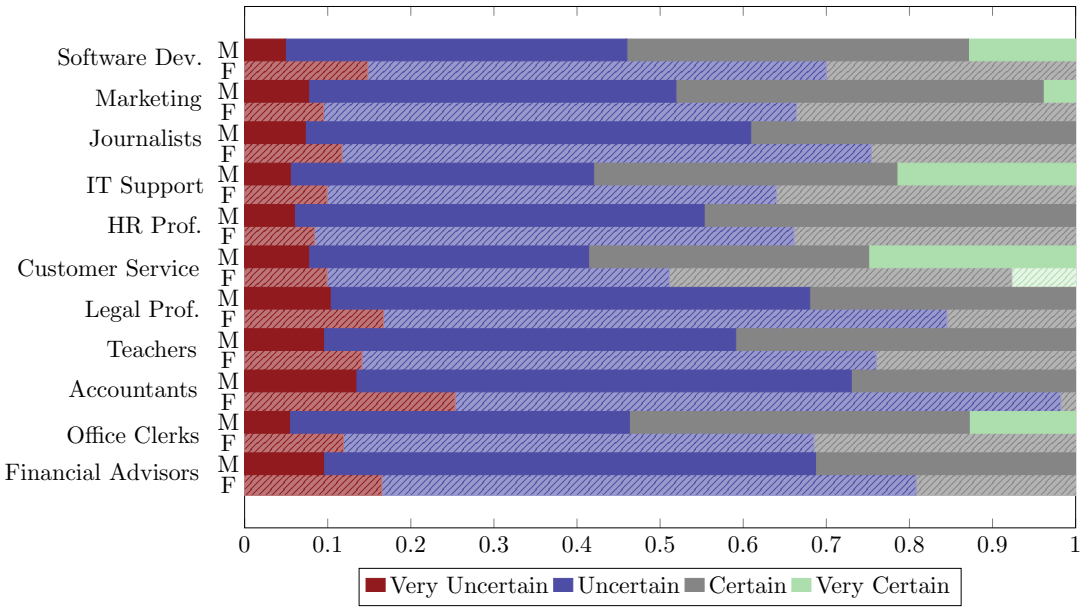
Figure A.2: Interest in Information Sheet on Using ChatGPT



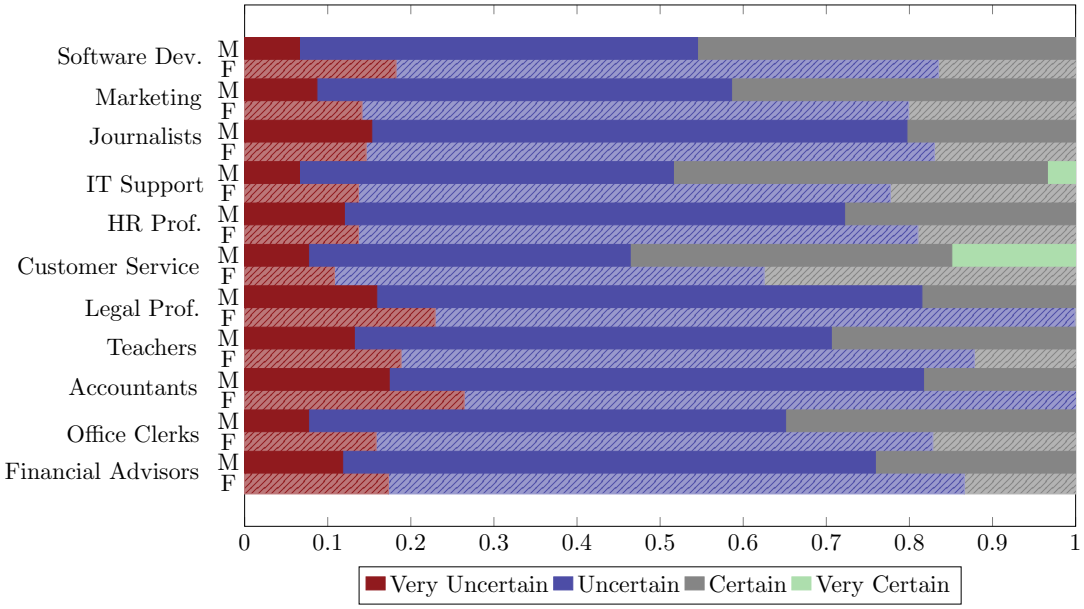
Notes: This figure shows the share of workers who sign up for and click on our information sheets on using ChatGPT in their job tasks. *Sample*: The figure is based on all completed survey responses of our control group.

Figure A.3: Uncertainty of Worker Beliefs about ChatGPT

(a) Productivity

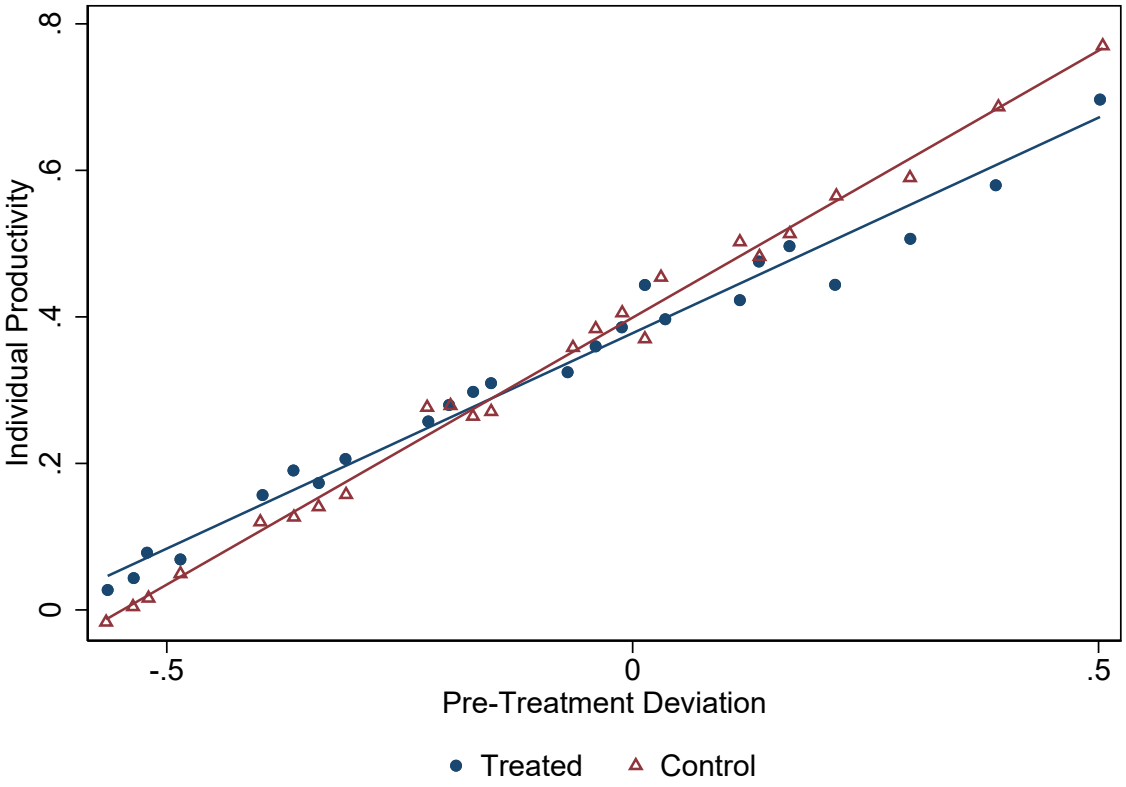


(b) Expertise Complementarity



Notes: This figure shows workers' uncertainty in their assessment of the productivity (time savings for an average worker) and expertise-complementarity (time savings for greater expertise) of ChatGPT. *Sample*: The figure is based on all completed survey responses.

Figure A.4: Effect of the Information Treatment on Worker Beliefs



Notes: This figure shows a binned scatter plot of workers' posterior beliefs about their individual productivity of ChatGPT against their pre-treatment deviations from the expert assessments of the productivity of ChatGPT. The figure plots the relationship separately for our treatment and control group, showing how the information treatment shifts workers' beliefs about ChatGPT. Occupation fixed effects are absorbed. *Sample*: The figure is based on all completed survey responses of the *productivity treatment* and *control* arms.

Table A.1: Educational Achievements and the Adoption of ChatGPT (Cohort Ages 22-38)

	Extensive Margin			Intensity of Use			
	Used (1)	Used for Work (2)	Used for Core Task (3)	Using (4)	Using for Work (5)	Using for Core Task (6)	Plus Subscription (7)
Age	-0.011	-0.006	-0.003	-0.003	-0.002	-0.001	0.000
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Experience	-0.001	0.003	0.001	0.000	0.002	0.001	-0.001
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
log(Earnings)	-0.030	-0.029	-0.024	-0.036	-0.036	-0.017	0.008
	(0.016)	(0.019)	(0.018)	(0.018)	(0.018)	(0.017)	(0.010)
Net Wealth / Earnings	-0.015	-0.009	-0.011	-0.008	-0.005	-0.005	-0.003
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.005)	(0.003)
Female	-0.255	-0.207	-0.172	-0.185	-0.175	-0.145	-0.053
	(0.019)	(0.019)	(0.018)	(0.019)	(0.018)	(0.016)	(0.009)
Years of Schooling	0.001	0.001	0.001	0.001	0.001	0.000	-0.001
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
GPA High School	0.019	0.003	-0.001	-0.009	-0.004	0.002	0.000
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.009)	(0.006)
Mean of Outcome	0.650	0.454	0.272	0.389	0.320	0.211	0.076
Adj R^2	0.167	0.186	0.155	0.143	0.165	0.149	0.112
Observations	3078	3078	2775	3078	3078	2775	3078

Notes: This table compares workers within occupations and asks what characterizes those who have used ChatGPT. *Years of schooling* is the minimum years of schooling required for the workers' highest completed education (`HFPRIA`). *GPA High School* is the workers' grade point average in high school, standardized within cohorts (`KARAKTER`). See the footnote to Table 1 for other variable definitions. Occupational fixed effects have been absorbed. Standard errors in parentheses. *Sample*: The table is based on all completed survey responses that can be linked to registry education data and high school diplomas, which generally cover cohort ages 22-38.

Table A.2: Who Has Adopted ChatGPT? Relative Effects

	Extensive Margin			Intensity of Use			
	Used (1)	Used for Work (2)	Used for Core Task (3)	Using (4)	Using for Work (5)	Using for Core Task (6)	Plus Subscription (7)
Age	-0.017	-0.017	-0.018	-0.018	-0.019	-0.020	-0.016
	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.004)
Experience	-0.013	-0.016	-0.021	-0.014	-0.013	-0.017	-0.017
	(0.002)	(0.002)	(0.004)	(0.003)	(0.003)	(0.005)	(0.008)
log(Earnings)	0.150	0.206	0.198	0.137	0.180	0.189	0.353
	(0.016)	(0.022)	(0.036)	(0.026)	(0.029)	(0.042)	(0.079)
Net Wealth / Earnings	0.002	-0.002	-0.009	-0.011	-0.011	-0.014	-0.046
	(0.003)	(0.004)	(0.006)	(0.005)	(0.005)	(0.008)	(0.013)
Female	-0.331	-0.347	-0.488	-0.428	-0.439	-0.549	-0.666
	(0.014)	(0.019)	(0.030)	(0.023)	(0.026)	(0.036)	(0.060)
Mean of Outcome	0.552	0.398	0.244	0.323	0.271	0.183	0.061
Adj R^2	0.187	0.171	0.119	0.135	0.140	0.109	0.059
Observations	17907	17907	15696	17907	17907	15696	17907

Notes: This table compares workers within occupations and asks what characterizes those who have used ChatGPT. The outcome variables are normalized by their means, such that the estimates measure relative effects. The regressions control for occupation fixed effects. Standard errors in parentheses. See the footnote to Table 1 for variable definitions.

Table A.3: Who Has Adopted ChatGPT? Additional Control Variables

	(1)	(2)	(3)	(4)	(5)	(6)
Age	-0.009	-0.010	-0.009	-0.008	-0.008	-0.008
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)
Experience	-0.010	-0.007	-0.006	-0.005	-0.005	-0.005
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
log(Earnings)	0.091	0.083	0.070	0.066	0.065	0.065
	(0.008)	(0.009)	(0.008)	(0.013)	(0.013)	(0.013)
Net Wealth / Earnings	-0.004	0.001	0.000	-0.003	-0.003	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Female	-0.219	-0.182	-0.174	-0.161	-0.161	-0.148
	(0.007)	(0.008)	(0.008)	(0.010)	(0.010)	(0.010)
Occupation FEs		✓	✓	✓	✓	✓
Task Importance FEs			✓	✓	✓	✓
Workplace FEs				✓	✓	✓
Beliefs, Share of Exposed Tasks					✓	✓
Uncertainty						✓
Adj R^2	0.138	0.187	0.202	0.238	0.239	0.252
Observations	17909	17909	17909	14341	14341	14341

Notes: This table studies the gender gap in whether workers have used ChatGPT. Column (1) reports the raw gap in our 11 exposed occupations. Column (2) adds occupation fixed effects, reflecting the specification in Table 1. Column (3) adds fixed effects for task importance levels (330 fixed effects, reflecting 5 importance levels for the 6 job tasks of each of the 11 occupations). Column (4) adds workplace fixed effects. Column (5) controls for worker beliefs about the productivity of ChatGPT. Column (6) controls for the the uncertainty of workers' beliefs. Table 1. *Sample*: The table is based on all completed survey responses. Columns (4)-(6) restrict to workers with linked employer-employee data.

Table A.4: Worker Beliefs about ChatGPT (Task Importance Weighted)

		Expertise Complementarity				Cross-Task Substitution		
	Productivity	Negative	Neutral	Positive	Individual Productivity	Zero	Inelastic	Elastic
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Software Dev.	0.367	0.432	0.361	0.206	0.283	0.332	0.495	0.173
	(0.318)	(0.385)	(0.334)	(0.315)	(0.326)	(0.471)	(0.500)	(0.378)
Marketing	0.453	0.306	0.429	0.265	0.410	0.340	0.398	0.262
	(0.327)	(0.352)	(0.350)	(0.343)	(0.351)	(0.474)	(0.490)	(0.440)
Journalists	0.264	0.468	0.342	0.190	0.243	0.385	0.462	0.154
	(0.268)	(0.389)	(0.342)	(0.318)	(0.274)	(0.487)	(0.499)	(0.361)
IT Support	0.422	0.418	0.374	0.208	0.350	0.365	0.421	0.213
	(0.307)	(0.354)	(0.321)	(0.291)	(0.314)	(0.482)	(0.494)	(0.410)
HR Prof.	0.389	0.407	0.408	0.186	0.323	0.434	0.346	0.220
	(0.290)	(0.359)	(0.331)	(0.272)	(0.290)	(0.496)	(0.476)	(0.414)
Customer Service	0.375	0.384	0.404	0.211	0.344	0.351	0.313	0.337
	(0.332)	(0.368)	(0.342)	(0.284)	(0.349)	(0.477)	(0.464)	(0.473)
Legal Prof.	0.367	0.426	0.394	0.180	0.314	0.377	0.436	0.188
	(0.301)	(0.375)	(0.349)	(0.289)	(0.304)	(0.485)	(0.496)	(0.390)
Teachers	0.205	0.363	0.490	0.147	0.188	0.613	0.249	0.139
	(0.233)	(0.375)	(0.365)	(0.258)	(0.245)	(0.487)	(0.432)	(0.345)
Accountants	0.377	0.394	0.410	0.196	0.296	0.326	0.388	0.286
	(0.333)	(0.391)	(0.365)	(0.305)	(0.334)	(0.469)	(0.487)	(0.452)
Office Clerks	0.401	0.345	0.432	0.223	0.344	0.393	0.368	0.239
	(0.312)	(0.353)	(0.345)	(0.289)	(0.315)	(0.488)	(0.482)	(0.427)
Financial Adv.	0.463	0.375	0.463	0.162	0.427	0.240	0.400	0.361
	(0.344)	(0.374)	(0.362)	(0.271)	(0.372)	(0.427)	(0.490)	(0.480)
All Workers	0.371	0.393	0.410	0.198	0.321	0.377	0.388	0.235
	(0.316)	(0.373)	(0.349)	(0.296)	(0.325)	(0.485)	(0.487)	(0.424)

Notes: This table shows workers' mean beliefs about ChatGPT with standard deviations in parentheses. The table reproduces Table 2 with tasks weighted by their worker-reported importance scores (1-5). Column (1) reports the share of job tasks where access to ChatGPT can halve working times for an average worker. Columns (2)-(4) show the share of job tasks in which ChatGPT delivers respectively smaller, similar, and larger time savings for workers with greater task expertise. Column (5) shows the share of job tasks where access to ChatGPT can halve workers' *own* working times. Column (6) shows the share of workers who will not complete more of a task if ChatGPT can save time in it. Column (7) is the share of workers who will complete more of a task if ChatGPT but will not dedicate a larger share of their work time to the task. Column (8) is the share of workers who will dedicate a larger share of their time to a task if ChatGPT can save time completing it. *All workers* are averages with equal weights to each occupation. *Sample*: The table is based on all completed survey responses. Columns (5)-(8) focus on the control group as these survey questions come after the treatment page.

Table A.5: Adoption Frictions by Occupations

Occupation	Friction (1)	Need Training (2)	Restrictions on Use (3)	Data Confidentiality (4)	Reduces Joy (5)	Fear Being Replaced (6)	Fear Becoming Dependent (7)	Other (8)
Software Dev.	.369	.263	.475	.308	.103	.047	.093	.193
Marketing	.377	.368	.367	.348	.11	.085	.092	.143
Journalists	.468	.478	.233	.241	.216	.105	.076	.283
IT Support	.464	.34	.419	.33	.119	.074	.107	.138
HR Prof.	.563	.414	.343	.294	.085	.044	.036	.218
Customer Service	.556	.344	.293	.252	.169	.163	.149	.111
Legal Prof.	.666	.342	.501	.408	.062	.04	.047	.194
Teachers	.591	.642	.058	.206	.253	.052	.096	.15
Accountants	.616	.526	.344	.289	.06	.053	.054	.116
Office Clerks	.617	.423	.29	.244	.089	.084	.036	.191
Financial Adv.	.82	.379	.552	.222	.066	.071	.045	.096

Notes: This table shows the adoption frictions by occupations. Column (1) reports the share of tasks where workers do not intend to use ChatGPT despite its ability to save time for them (that is, tasks subject to an "adoption friction"). The table focuses on tasks workers expect to perform. Columns (2)-(8) report the reasons (in shares) workers report for their adoption frictions. As workers may report multiple reasons for their friction, the shares may sum to more than 100%. *Sample*: The figure is based on all completed survey responses of the control group.

Table A.6: Effects of the Information Treatment (Task Importance Weighted)

	Main Survey						Follow Up		
	Ind. Productivity (1)	Ind. Productivity Follow Up Sample (2)	Intent to Use in Job Tasks (3)	Intent to Use (4)	Interest in Material (5)	Clicks on Material (6)	Individual Productivity (7)	Use in Job Tasks (8)	Use (9)
Panel A: All									
Deviation × Treated	-0.135	-0.136	-0.014	-0.026	-0.030	-0.010	-0.082	0.014	0.014
	(0.012)	(0.020)	(0.013)	(0.023)	(0.024)	(0.019)	(0.024)	(0.020)	(0.036)
Treated	-0.017	-0.012	-0.007	-0.016	-0.028	-0.018	-0.013	0.005	-0.002
	(0.005)	(0.008)	(0.005)	(0.009)	(0.009)	(0.007)	(0.010)	(0.008)	(0.014)
Deviation	0.707	0.722	0.195	0.262	0.213	0.039	0.525	0.118	0.165
	(0.009)	(0.015)	(0.010)	(0.017)	(0.018)	(0.014)	(0.019)	(0.015)	(0.027)
Control Means	0.310	0.299	0.112	0.327	0.553	0.182	0.268	0.087	0.223
Observations	12093	4051	12092	12093	12093	12093	4051	4051	4051
Panel B: Male									
Deviation × Treated	-0.084	-0.071	0.000	-0.006	-0.010	-0.005	-0.079	0.035	0.033
	(0.016)	(0.025)	(0.019)	(0.032)	(0.033)	(0.025)	(0.030)	(0.029)	(0.050)
Treated	0.000	0.006	0.000	-0.010	-0.030	-0.021	-0.015	0.013	-0.008
	(0.007)	(0.012)	(0.008)	(0.013)	(0.013)	(0.011)	(0.014)	(0.012)	(0.021)
Deviation	0.717	0.718	0.257	0.300	0.171	0.017	0.567	0.161	0.196
	(0.013)	(0.020)	(0.015)	(0.024)	(0.025)	(0.020)	(0.024)	(0.023)	(0.038)
Control Means	0.316	0.299	0.157	0.420	0.597	0.189	0.270	0.117	0.292
Observations	6124	2189	6124	6124	6124	6124	2189	2189	2189
Panel C: Female									
Deviation × Treated	-0.197	-0.228	-0.030	-0.048	-0.049	-0.018	-0.080	-0.008	-0.017
	(0.019)	(0.033)	(0.016)	(0.031)	(0.036)	(0.028)	(0.041)	(0.025)	(0.050)
Treated	-0.032	-0.028	-0.014	-0.023	-0.026	-0.016	-0.009	-0.002	0.005
	(0.007)	(0.012)	(0.005)	(0.011)	(0.013)	(0.010)	(0.014)	(0.009)	(0.018)
Deviation	0.698	0.732	0.119	0.203	0.249	0.063	0.468	0.056	0.122
	(0.014)	(0.024)	(0.012)	(0.024)	(0.027)	(0.021)	(0.030)	(0.016)	(0.035)
Control Means	0.303	0.300	0.067	0.234	0.508	0.174	0.264	0.052	0.142
Observations	5969	1862	5968	5969	5969	5969	1862	1862	1862

Notes: This table shows the reduced-form effects of the information treatment on workers' posterior beliefs and adoption behaviors (Equation (1)). The table reproduces Table 3 with tasks weighted by their worker-reported importance scores (1-5). Columns (1)-(4) show the effects on workers' beliefs and intended use (coming two weeks) in the main survey. Columns (5)-(6) show the effects on sign-ups and clicks on an information sheet on ChatGPT in the workers' job tasks (described in Appendix I). Columns (7)-(9) show effects on workers' beliefs and actual use (past two weeks) in the follow-up survey. *Deviation* is workers' average deviation from the expert assessments of the productivity of ChatGPT in their surveyed job tasks; see Section 3.1 for the formal definition. *Individual Productivity* is workers' average individual productivity of ChatGPT in their surveyed job tasks. Occupation fixed effects are absorbed. Standard errors are in parentheses. *Sample*: The table is based on all completed survey responses in the *productivity treatment* and *control* arms.

Table A.7: Causal Effects of Worker Beliefs on Adoption Behaviors

	Main Survey				Follow Up	
	Intent to Use in Job Tasks (1)	Intent to Use (2)	Interest in Material (3)	Clicks on Material (4)	Use in Job Tasks (5)	Use (6)
Panel A: All						
Individual Productivity	0.100	0.194	0.141	0.048	-0.094	-0.066
	(0.084)	(0.156)	(0.165)	(0.128)	(0.127)	(0.237)
Control Means	0.104	0.327	0.553	0.182	0.079	0.223
First Stage F-Stat	80.024	80.024	80.024	80.024	34.570	34.570
Observations	12092	12092	12092	12092	4051	4051
Panel B: Male						
Individual Productivity	-0.042	-0.016	-0.211	-0.114	-0.256	-0.559
	(0.183)	(0.335)	(0.351)	(0.269)	(0.294)	(0.574)
Control Means	0.146	0.420	0.597	0.189	0.108	0.292
First Stage F-Stat	25.610	25.610	25.610	25.610	9.887	9.887
Observations	6124	6124	6124	6124	2189	2189
Panel C: Female						
Individual Productivity	0.172	0.267	0.201	0.071	0.018	0.121
	(0.073)	(0.149)	(0.167)	(0.131)	(0.093)	(0.199)
Control Means	0.061	0.234	0.508	0.174	0.045	0.142
First Stage F-Stat	62.765	62.765	62.765	62.765	31.510	31.510
Observations	5968	5968	5968	5968	1862	1862

Notes: This table shows the causal effects of the information treatment through workers' beliefs. Section D.2 describes the econometric specification. Columns (1)-(2) show the effects on intended use of ChatGPT (coming two weeks) in the main survey. Columns (3)-(4) show the effects on sign-ups and clicks on an information sheet on ChatGPT in the workers' job tasks (described in Appendix I). Columns (5)-(6) show effects on actual use of ChatGPT (past two weeks) in the follow-up survey. Occupation fixed effects are absorbed. Standard errors are in parentheses. Individual productivity is the share of job tasks in which ChatGPT can halve working times. *Sample*: The table is based on all completed survey responses in the *productivity treatment* and *control* arms.

Table A.8: Adoption Frictions in the Information Experiment

	Need Training (1)	Restrictions on Use (2)	Data Confidentiality (3)	Reduces Joy (4)	Fear Being Replaced (5)	Fear Becoming Dependent (6)	Other (7)
Panel A: All							
Complier	0.479	0.303	0.272	0.105	0.046	0.040	0.233
	(0.033)	(0.032)	(0.030)	(0.021)	(0.017)	(0.017)	(0.025)
Control	0.432	0.351	0.286	0.109	0.073	0.071	0.169
	(0.006)	(0.006)	(0.006)	(0.004)	(0.003)	(0.003)	(0.005)
Observations	72558	72558	72558	72558	72558	72558	72558
Panel B: Male							
Complier	0.439	0.429	0.414	0.082	0.096	0.032	0.163
	(0.063)	(0.063)	(0.060)	(0.041)	(0.033)	(0.035)	(0.046)
Control	0.374	0.413	0.314	0.105	0.082	0.084	0.146
	(0.009)	(0.009)	(0.009)	(0.006)	(0.005)	(0.005)	(0.007)
Observations	36744	36744	36744	36744	36744	36744	36744
Panel C: Female							
Complier	0.497	0.237	0.197	0.119	0.020	0.045	0.268
	(0.037)	(0.035)	(0.034)	(0.023)	(0.019)	(0.018)	(0.030)
Control	0.481	0.299	0.263	0.112	0.065	0.060	0.189
	(0.008)	(0.008)	(0.007)	(0.005)	(0.004)	(0.004)	(0.007)
Observations	35814	35814	35814	35814	35814	35814	35814

Notes: This table shows complier and control means for the reported adoption frictions, that is, reasons workers do not use ChatGPT in a job task despite believing it can halve their working times. Compliers are workers who report adoption friction only if receiving the treatment. Section D.3 describes the econometric specification. *Sample*: The table is based on all completed survey responses in the *productivity treatment* and *control* arms.

Table A.9: Effects of the Information Treatment by Gender and Uncertainty

	Main Survey						Follow Up		
	Ind. Productivity (1)	Ind. Productivity Follow Up Sample (2)	Intent to Use in Job Tasks (3)	Intent to Use (4)	Interest in Material (5)	Clicks on Material (6)	Individual Productivity (7)	Use in Job Tasks (8)	Use (9)
Panel A: Uncertain									
Deviation × Treated	-0.109	-0.109	-0.001	-0.039	-0.030	0.009	-0.106	0.016	0.042
	(0.027)	(0.042)	(0.022)	(0.049)	(0.053)	(0.039)	(0.049)	(0.029)	(0.072)
Deviation × Treated × Female	-0.098	-0.166	-0.031	-0.035	-0.015	-0.018	-0.013	-0.040	-0.116
	(0.038)	(0.062)	(0.027)	(0.063)	(0.073)	(0.055)	(0.073)	(0.039)	(0.094)
Observations	6534	2126	6533	6534	6534	6534	2126	2126	2126
Panel B: Certain									
Deviation × Treated	-0.085	-0.065	-0.002	0.019	0.007	-0.012	-0.064	0.052	0.042
	(0.019)	(0.031)	(0.027)	(0.042)	(0.043)	(0.034)	(0.037)	(0.042)	(0.069)
Deviation × Treated × Female	-0.136	-0.164	-0.019	-0.017	-0.025	0.010	0.016	-0.042	-0.035
	(0.034)	(0.053)	(0.038)	(0.066)	(0.069)	(0.054)	(0.070)	(0.057)	(0.106)
Observations	5559	1925	5559	5559	5559	5559	1925	1925	1925

Notes: This table shows the effects of the information treatment by gender and prior belief uncertainty. The estimates are based on interacting Equation (1) with gender: $Y_i = \beta_0 + \beta_1 D_i + \beta_2 T_i + \beta_3 T_i D_i + \beta_4 F_i + \beta_5 T_i F_i + \beta_6 T_i D_i F_i + \epsilon_i$, where we abbreviate D for pre-treatment deviation from the expert assessments, T for treated, and F for female. The table displays our parameters of interest, β_3 and β_6. Panel A focuses on workers who are uncertain or very uncertain in their prior beliefs about the productivity of ChatGPT, while Panel B focuses on workers who are certain or very certain in their priors. Columns (1)-(4) show the effects on workers' posterior beliefs and intended use (coming two weeks) in the main survey. Columns (5)-(6) show the effects on sign-ups and clicks on an information sheet on ChatGPT in the workers' job tasks (described in Appendix I). Columns (7)-(9) show effects on workers' beliefs and actual use (past two weeks) in the follow-up survey. Occupation fixed effects are absorbed. Standard errors are in parentheses. Individual productivity is the share of job tasks in which ChatGPT can halve working times. *Sample*: The table is based on all completed survey responses in the *productivity treatment* and *control* arms.

B Data

B.1 Expert Assessments

B.1.1 Selecting Occupations

We use a combination of occupational codes (ISCO), industry codes (DB, a disaggregation of NACE), and educational codes (HFAUDD) to identify our target occupations in the registers.

1. Accountants and Auditors: ISCO 2411, 3313.
2. Customer Service Representatives: ISCO 4222, 4225, 4229.
3. Financial Advisors: ISCO 2412 and DB 641900.
4. Human Resource Professionals: ISCO 2423, 4416.
5. IT-support workers: ISCO 351.
6. Journalists: ISCO 264, DB 581300, 581410, 581420, 601000, 602000.
7. Lawyers and Paralegals: ISCO 2611, 2619, 3411.
8. Marketing Professionals: ISCO 2431, 2433, 2434.
9. Secretaries and Office Clerks: ISCO 334, 411, 412.
10. Software Developers: ISCO 251, DB 620000-620900.
11. Teachers
    (a) Primary school: ISCO 2341, DB 852010, HFAUDD 5440, 5441.
    (b) High school: ISCO 233, DB 853120.

B.1.2 Selecting Job Tasks

We include six job tasks for each occupation in our survey. We select the job tasks to represent ChatGPT's average capabilities in the entire set of job tasks in the occupations (the O*NET database typically contains 20-50 job tasks per occupation). In addition to matching the average productivity scores (the E1 score of Eloundou et al. (2024)), we also ensure the job tasks are representative with respect to expertise-complementarity (expert assessment of whether ChatGPT delivers smaller/similar/larger time savings for workers with greater expertise) and the forward-looking productivity measures E2 ("Exposure by

LLM-powered applications") and E3 ("Exposure given image capabilities") of Eloundou et al. (2024).

Define scores X_t of tasks t to target

$$X = \{\text{E1}(0/1), \text{E2}(0/1), \text{E3}(0/1), \text{Complementarity}(-1/0/1)\}. \tag{2}$$

Our goal is to find a combination of six job tasks t whose average scores X match those in the entire set of job tasks $\mathcal{T}_o$ of occupation o.

First, to address the fact that the scores above are not measured on the same scale, we calculate distances in standard deviations of each score (calculated among all tasks of occupation o). Second, to allow some scores to receive higher priority, we assign each score a weight $\omega = (\omega_1, ..., \omega_S)$, where $S = \#M$.

Define all combinations of six job tasks drawn from $\mathcal{T}_o$ without replacement by $\mathcal{C}(\mathcal{T}_o)$. Our objective function reads

$$\min_{\mathcal{T}_c \in \mathcal{C}(\mathcal{T}_o)} \sum_{s=1}^{S} \omega_s \frac{(m_c(X_s) - m_{Po}(X_s))^2}{v_{Po}(X_s)}, \tag{3}$$

where $m_c(X)$ is the mean score of task combination c, and $m_{Po}(X)$ and $v_{Po}(X)$ are the population mean and variances of scores in occupation o.

We solve equation (3) by evaluating the objective function at all combinations of job tasks. For each occupation, we successfully find a task selection that exactly matches the productivity and complementarity scores. In the case of multiple minima of Equation (3), we prioritize job tasks with higher O*NET importance scores for the occupation.

Section E lists the resulting job tasks we include for each occupation in the survey.

B.2 Survey Sample

B.2.1 Representativeness

Table B.1: Robustness to Non-Response Bias

	Raw	Reweighting on Observables	Reweighting on Unobservables
	(1)	(2)	(3)
Panel A: Adoption			
Used	0.553	0.577	0.539
	(0.497)	(0.494)	(0.497)
Used for Work	0.399	0.414	0.405
	(0.490)	(0.493)	(0.490)
Used for Core Task	0.215	0.217	0.209
	(0.410)	(0.412)	(0.411)
Panel B: Beliefs			
Productivity	0.364	0.380	0.425
	(0.310)	(0.311)	(0.310)
Negative Complementarity	0.381	0.376	0.349
	(0.368)	(0.365)	(0.368)
Neutral Complementarity	0.424	0.424	0.426
	(0.348)	(0.345)	(0.348)
Positive Complementarity	0.195	0.200	0.224
	(0.291)	(0.293)	(0.291)
Individual Productivity	0.309	0.326	0.308
	(0.318)	(0.322)	(0.318)
Zero Substitution	0.397	0.376	0.315
	(0.489)	(0.484)	(0.489)
Inelastic Substitution	0.381	0.396	0.475
	(0.486)	(0.489)	(0.485)
Elastic Substitution	0.222	0.228	0.210
	(0.416)	(0.420)	(0.416)

Notes: This table shows how accounting for non-response bias affects summary statistics of workers' adoption of and beliefs about ChatGPT. Column (1) shows the raw means of the survey responses. Column (2) reweighs the survey responses according to workers' inverse probability of survey participation based on a logit regression on the observables in Table 1 (including occupation). Column (3) reweighs the survey responses according to workers' latent resistance to survey participation; see Section D.1 for details on the method. Standard deviations in parentheses. *Sample*: The table is based on all completed survey responses.

Table B.2: Balance Table for Survey Respondents

	Population (1)	Sampled (2)	Responded (3)
Age	42.43	42.42	45.40
	(11.57)	(11.57)	(11.50)
Female	0.52	0.52	0.49
	(0.50)	(0.50)	(0.50)
log(Earnings)	13.07	13.07	13.11
	(0.58)	(0.59)	(0.53)
Experience	6.05	6.05	7.11
	(4.58)	(4.57)	(4.67)
Wealth / Earnings	4.09	4.87	4.10
	(157.39)	(262.30)	(39.57)
Observations	283,398	99,817	18,088

Notes: This table compares the mean characteristics of workers (variables from Table 1) among our population (Column 1), our sampled survey invitees (Column 2), and the survey respondents (with complete responses, Column 3). Standard deviations in parentheses. *Sample*: The table is based on all individuals in our survey population.

Table B.3: Balance Table for Participation Prize Categories

	Levels	Differences to 1000 DKK			
	1000 DKK	2500 DKK	5000 DKK	10000 DKK	p-value
	(1)	(2)	(3)	(4)	(5)
Panel A: Characteristics					
Age	45.40	-0.46	-0.43	-0.50	0.14
		(0.24)	(0.84)	(0.85)	
log(Earnings)	13.11	-0.03	-0.00	-0.02	0.04
		(0.01)	(0.05)	(0.05)	
Experience	7.11	-0.01	-0.01	-0.05	0.95
		(0.09)	(0.35)	(0.35)	
Net Wealth/Earnings	4.10	-0.05	0.88	0.38	0.54
		(0.27)	(0.42)	(0.42)	
Female	0.49	0.00	-0.01	-0.00	0.44
		(0.01)	(0.03)	(0.03)	
Panel B: Adoption					
Used	0.55	-0.02	-0.01	-0.01	0.42
		(0.01)	(0.03)	(0.03)	
Used for Work	0.40	-0.01	-0.00	-0.00	0.63
		(0.01)	(0.03)	(0.03)	
Used for Core Task	0.21	-0.01	0.00	-0.00	0.59
		(0.01)	(0.02)	(0.03)	
Panel C: Beliefs					
Productivity	0.36	0.00	0.01	0.01	0.10
		(0.01)	(0.02)	(0.02)	
Negative Complementarity	0.38	-0.01	-0.01	-0.01	0.44
		(0.01)	(0.03)	(0.02)	
Neutral Complementarity	0.42	0.01	0.01	0.00	0.33
		(0.01)	(0.02)	(0.02)	
Positive Complementarity	0.19	-0.00	0.00	0.01	0.70
		(0.01)	(0.02)	(0.02)	
Individual Productivity	0.31	-0.02	0.00	-0.00	0.36
		(0.01)	(0.03)	(0.03)	
Zero Substitution	0.40	0.01	-0.03	-0.01	0.16
		(0.02)	(0.07)	(0.07)	
Inelastic Substitution	0.38	-0.02	0.02	0.02	0.19
		(0.02)	(0.07)	(0.07)	
Elastic Substitution	0.22	0.01	0.01	-0.00	0.80
		(0.02)	(0.05)	(0.06)	
Response Rate	0.16	0.02	0.02	0.04	0.00
		(0.00)	(0.00)	(0.00)	
Observations	4,021	4,518	4,547	5,002	

Notes: This table shows individuals assigned to the different participation prize categories (1,000 DKK, 2,500 DKK, 5,000 DKK, and 10,000 DKK) have similar characteristics (Panel A), adoption behaviors (Panel B), and beliefs (Panel C) but differ in their rates of completed responses (last row). Column (5) reports p-values of a joint test that the mean outcomes are equal across the four prize categories. Table B.1 uses the differences in take-up to account for non-response bias in the survey responses; see Section D.1 for details. *Sample*: The table is based on all completed survey responses.

Table B.4: Balance Table for Complete vs. Partial Responses

	Main Survey		Follow Up Survey	
	Completed	Drop Out	Completed	Drop Out
	(1)	(2)	(3)	(4)
Panel A: Characteristics				
Age	45.40	45.01	46.80	45.37
	(11.50)	(11.52)	(11.38)	(11.30)
log(Earnings)	13.11	13.10	13.13	13.15
	(0.53)	(0.53)	(0.50)	(0.48)
Experience	7.11	6.88	7.62	7.29
	(4.67)	(4.63)	(4.65)	(4.58)
Net Wealth/Earnings	4.10	3.75	5.20	3.23
	(39.57)	(16.43)	(64.01)	(11.94)
Female	0.49	0.60	0.47	0.52
	(0.50)	(0.49)	(0.50)	(0.50)
Panel B: Adoption				
Used	0.55	0.51	0.54	0.59
	(0.50)	(0.50)	(0.50)	(0.49)
Used for Work	0.40	0.38	0.38	0.44
	(0.49)	(0.48)	(0.49)	(0.50)
Used for Core Task	0.21	0.17	0.20	0.24
	(0.41)	(0.38)	(0.40)	(0.43)
Panel C: Beliefs				
Productivity	0.36	0.37	0.35	0.38
	(0.31)	(0.32)	(0.31)	(0.31)
Negative Complementarity	0.38	0.33	0.39	0.38
	(0.37)	(0.35)	(0.37)	(0.36)
Neutral Complementarity	0.42	0.44	0.42	0.42
	(0.35)	(0.36)	(0.35)	(0.34)
Positive Complementarity	0.19	0.22	0.19	0.20
	(0.29)	(0.31)	(0.29)	(0.29)
Observations	18,088	7,003	6,515	1,775

Notes: This table compares the mean characteristics adoption behaviors, and beliefs (in the main survey) of workers who fully complete the main survey (Column 1), partially complete the main survey (Column 2), fully complete the follow-up survey (Column 3), and partially complete the follow-up survey (Column 2). Standard deviations in parentheses. *Sample*: The table is based on all individuals with partial responses to our main survey.

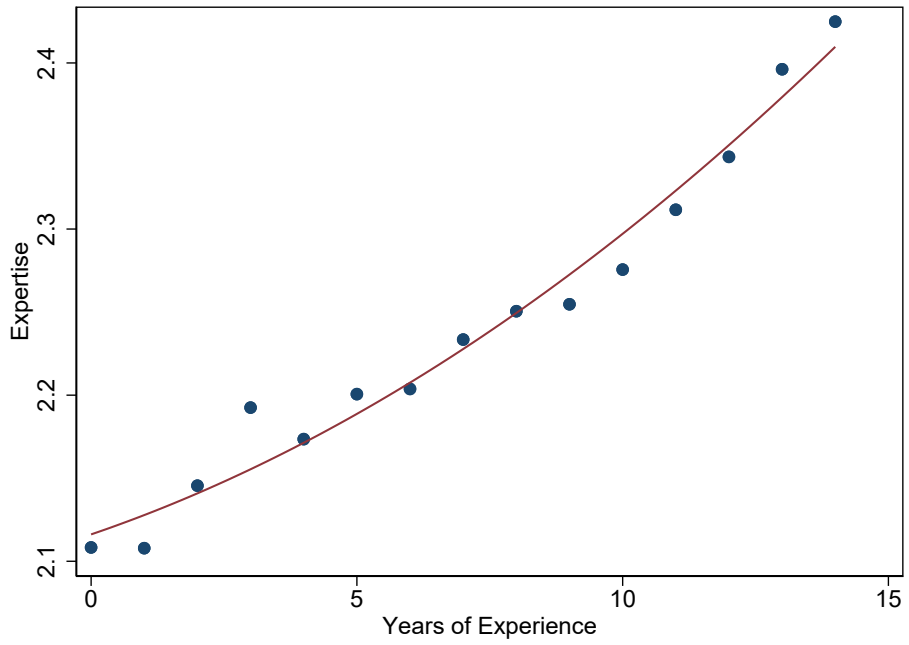
B.2.2 Response Quality

Table B.5: Correlation between Occupation in Survey vs. Register, P(Survey|Register)

		In Survey											
		Journalists	Software Developers	Paralegals	Accountants and Auditors	Customer Service Rep.	Marketing Professionals	Financial Advisors	HR Professionals	Office Clerks	Teachers	IT Support	Observations
Register	Journalists	0.97	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	555
	Software Developers	0.00	0.87	0.00	0.00	0.01	0.02	0.00	0.00	0.01	0.00	0.08	3,185
	Paralegals	0.01	0.03	0.79	0.02	0.01	0.00	0.01	0.02	0.08	0.01	0.01	2,518
	Accountants and Auditors	0.00	0.02	0.01	0.85	0.01	0.01	0.02	0.02	0.05	0.00	0.01	2,710
	Customer Service Rep.	0.01	0.03	0.01	0.01	0.79	0.04	0.01	0.01	0.07	0.01	0.01	869
	Marketing Professionals	0.00	0.05	0.00	0.00	0.09	0.74	0.01	0.01	0.06	0.00	0.03	2,125
	Financial Advisors	0.00	0.00	0.00	0.00	0.01	0.00	0.95	0.00	0.02	0.00	0.00	1,918
	HR Professionals	0.01	0.03	0.06	0.01	0.00	0.01	0.02	0.68	0.14	0.01	0.02	1,434
	Office Clerks	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.96	0.00	0.01	3,395
	Teachers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	4,135
	IT Support	0.00	0.15	0.00	0.00	0.02	0.02	0.00	0.01	0.03	0.00	0.76	2,277

Notes: This table shows the correlation between the occupational codes reported in the survey and those registered in the administrative data of Statistics Denmark. The cells show the probability of reporting the column occupation in the survey, conditional on having the row occupation registered with Statistics Denmark. The average agreement rate (diagonal element) is 87%. *Sample*: The table is based on all completed survey responses.

Figure B.1: Self-Reported Task Expertise vs. Registered Experience in Occupation



Notes: This figure shows the correlation between workers' self-reported expertise and their years of experience in the relevant occupation. Expertise is reported on a three-point scale: 1 (Low), 2 (Average), and 3 (High). *Sample*: The table is based on all completed survey responses that can be linked to registry data on experience.

Table B.6: Self-Reported Expertise vs. Task Importance

		Expertise			
		Low	Average	High	Observations
Importance	Not Important	0.68	0.22	0.09	15,816
	Somewhat Important	0.35	0.48	0.17	13,121
	Important	0.13	0.54	0.32	24,203
	Very Important	0.05	0.39	0.55	29,555
	Extremely Important	0.02	0.22	0.76	25,833

Notes: This table shows the correlation between workers' reported expertise in and importance of tasks in the main survey. The cells show the probability of reporting the column expertise score, conditional on reporting the row importance score. *Sample*: The table is based on all completed survey responses.

Table B.7: Persistence of Importance Score, $P(\text{Follow-Up}_{it}|\text{Main}_{it})$

		Follow Up					
		Not Important	Somewhat Important	Important	Very Important	Extremely Important	Observations
Main Survey	Not Important	0.69	0.14	0.09	0.05	0.03	5,134
	Somewhat Important	0.32	0.31	0.22	0.11	0.03	4,309
	Important	0.16	0.21	0.36	0.22	0.06	7,907
	Very Important	0.10	0.11	0.28	0.38	0.13	9,778
	Extremely Important	0.08	0.06	0.13	0.31	0.42	9,028

Notes: This table shows the correlation between the task importance scores reported in the follow-up and the main survey. Whereas the main survey asked about the tasks' general importance, the follow-up asked about their importance in the past two weeks. The cells show the probability of reporting the column importance score in the follow-up, conditional on having reported the row importance score in the main survey. *Sample*: The table is based on all individuals who completed the main and follow-up surveys.

Table B.8: Persistence of Expertise Score, $P(\text{Follow-Up}_{it}|\text{Main}_{it})$

		Follow Up			
		Low	Average	High	Observations
Main	Low	0.64	0.29	0.07	6,573
	Average	0.16	0.60	0.25	13,175
	High	0.04	0.23	0.73	16,408

Notes: This table shows the correlation between the task expertise scores reported in the follow-up and the main survey. The cells show the probability of reporting the column expertise score in the follow-up, conditional on having reported the row expertise score in the main survey. *Sample*: The table is based on all individuals who completed the main and follow-up surveys.

C Experimental Evidence

Table C.1: Balance Table for Information Experiment

	Control (1)	Treatment - Control (2)	p-value (3)
Panel A: Characteristics			
Age	45.40	0.15	0.45
		(0.20)	
log(Earnings)	13.11	0.02	0.01
		(0.01)	
Experience	7.11	0.06	0.46
		(0.08)	
Net Wealth/Earnings	4.10	-1.06	0.23
		(0.88)	
Female	0.49	-0.00	0.59
		(0.01)	
Panel B: Adoption			
Used	0.55	-0.01	0.17
		(0.01)	
Used for Work	0.40	-0.01	0.17
		(0.01)	
Used for Core Task	0.21	-0.01	0.19
		(0.01)	
Panel C: Beliefs			
Productivity	0.36	-0.00	0.63
		(0.01)	
Negative Complementarity	0.38	-0.01	0.37
		(0.01)	
Neutral Complementarity	0.42	-0.00	0.92
		(0.01)	
Positive Complementarity	0.19	0.01	0.21
		(0.01)	
Observations	6,077	6,016	

Notes: This figure shows worker characteristics, assessments, and adoption (before treatment) balance across the treatment arms. *Sample*: The table is based on all completed survey responses in the *productivity treatment* and *control* arms that can be linked to registry data.

Figure C.1: Treatment Page of the Information Experiment

(a) Treatment

Write commentaries, columns, or scripts	
Question: Can ChatGPT save time?	
Your assessment	Small or no time savings
Expert assessment	Large time savings
Explanation of the **expert assessment**	ChatGPT can generate drafts, suggest changes, and provide ideas for articles, etc.
Question: Can someone with greater expertise save more time?	
Your assessment	Similar time savings for the journalist with greater expertise

(b) Control

Write commentaries, columns, or scripts	
Question: Can ChatGPT save time?	
Your assessment	Small or no time savings
Question: Can someone with greater expertise save more time?	
Your assessment	Similar time savings for the journalist with greater expertise

Notes: This figure shows an English translation of the treatment screen of the information experiment, focusing on an example task of journalists. Panel (a) shows the treatment page, comparing expert assessments of the time savings from ChatGPT with workers' prior assessments. The expert assessments are supported by short explanations. Panel (b) shows the placebo page of the control group, summarizing workers' prior assessments.

D Econometric Specifications

D.1 Sample Selection Correction using Randomized Incentives

This section describes our procedure for controlling for selection into the survey based on worker unobservables. Following Dutz et al. (2022), we specify a sample selection model that exploits the exogenous variation in survey response rates from our randomized participation incentives.

Individual i responds to the survey if his incentive Z_i exceeds his latent resistance U_i:

$$R_i = \mathbf{1}[p(Z_i) \geq U_i], \tag{4}$$

where $p(Z)$ is the participation propensity score among individuals with incentive level Z, and we normalize the distribution of resistances to be uniform, $U_i \sim U[0,1]$.[28]

Let Y_i^* denote the outcome of interest for individual i. We assume a linear Marginal Survey Response (MSR) function:

$$Y_i^* = \alpha_0 + \alpha_1 U_i. \tag{5}$$

Combining Equations (4)-(5), the average response in our survey among individuals with incentive Z is

$$\mathbb{E}[Y|Z] = \frac{1}{p(Z)} \int_0^{p(Z)} [\alpha_0 + \alpha_1 U] dU = \alpha_0 + \frac{\alpha_1}{2} p(Z). \tag{6}$$

Our parameter of interest is the average survey response (ASR) in the general population:

$$\text{ASR} = E[Y^*] = \int_0^1 [\alpha_0 + \alpha_1 U] dU = \alpha_0 + \frac{\alpha_1}{2}. \tag{7}$$

We can estimate the ASR by first calculating the propensity scores for each incentive level $P(Z)$, then estimating the linear regression (6), and finally plugging the estimated MSR coefficients $(\hat{\alpha}_0, \hat{\alpha}_1)$ into Equation (7).

As is common in the MTE literature (see, e.g., Bhuller et al. (2020); Carneiro, Heckman

[28] Dutz et al. (2022) develop a general framework for correcting for sample selection that allows for multiple dimensions of unobserved heterogeneity. Because we only use the explicitly randomized variation from the participation incentives, our selection correction procedure falls into the more traditional class of single threshold models (Gronau, 1974; Heckman, 1979). Heckman and Vytlacil (2007, 2005) provide an overview of selection models and lay out the Marginal Treatment Effects (MTE) framework.

and Vytlacil (2011)), we estimate the ASR in the support of the propensity scores:

$$\text{ASR}(p_{min}, p_{max}) = E[Y^* | p_{min} \leq U_i \leq p_{max}] \tag{8}$$

$$= \frac{1}{(p_{max} - p_{min})} \int_{p_{min}}^{p_{max}} [\alpha_0 + \alpha_1 U] dU = \alpha_0 + \frac{\alpha_1}{2} \frac{p_{max}^2 - p_{min}^2}{p_{max} - p_{min}}, \tag{9}$$

which avoids extrapolations outside our domain of identification. Table B.1, Column (3) reports our estimates of Equation (9).

D.2 Causal Effects of Worker Beliefs

This section describes how we estimate the causal effects of the information treatment through workers' beliefs. We pursue an IV strategy where the endogenous variable is workers' beliefs about their productivity of ChatGPT (IndProd), and the instrument is the information treatment and its interaction with workers' pre-treatment deviations from the expert assessments. Our outcomes of interest Y_i^{Post} are workers' posterior beliefs and adoption behaviors. We estimate the following model with two-stage least squares (2SLS):

$$\text{IndProd}_i^{\text{Post}} = \beta_{10} + \beta_{11}\text{Deviation}_i^{\text{Pre}} + \beta_{12}\text{Treated}_i + \beta_{13}\text{Treated}_i \times \text{Deviation}_i^{\text{Pre}} + \epsilon_i \tag{10}$$

$$Y_i^{\text{Post}} = \beta_{20} + \beta_{21}\text{Deviation}_{it}^{\text{Pre}} + \beta_{22}\widehat{\text{IndProd}}_{it}^{\text{Post}} + \epsilon_{2it}, \tag{11}$$

where Equation (10) is the first stage, and the 2SLS estimate of β_{22} identifies the causal effects of the information treatment through workers' beliefs, as reported in Table A.7. The specification in Equations (10)-(11) follows Jäger et al. (2024).

D.3 Adoption Frictions in the Information Experiment

This section describes how we estimate the frictions that hinder the information treatment from affecting workers' adoption behaviors. Let *friction compliers* denote workers who face an adoption friction (i.e., do not intend to use ChatGPT despite believing it can save time) if they receive the information treatment. We profile the friction reasons (e.g., employer restrictions, required training, etc.) faced by these compliers by running the

2SLS regressions at the worker-task level:

$$\text{Friction}_{it}^{\text{Post}} = \beta_{10} + \beta_{11}\text{Deviation}_{it}^{\text{Pre}} + \beta_{12}\text{Treated}_i + \beta_{13}\text{Treated}_i \times \text{Deviation}_{it}^{\text{Pre}} + \epsilon_{1it} \tag{12}$$

$$\text{Reason}_{it}^{\text{Post}} = \beta_{20} + \beta_{21}\text{Deviation}_{it}^{\text{Pre}} + \beta_{22}\widehat{\text{Friction}}_{it}^{\text{Post}} + \epsilon_{2it}, \tag{13}$$

where $\text{Friction}_{it}^{\text{Post}}$ indicates that worker i faces an adoption friction in task t, $\text{Reason}_{it}^{\text{Post}}$ denotes the reason for the friction, $\text{Deviation}_{it}^{\text{Pre}}$ is worker i's pre-treatment deviation from the expert assessments in task t, and Treated_i indicates the information treatment. Equation (12) is the first stage, and the 2SLS estimate of β_{22} identifies the share of friction compliers with the particular reason for their friction, as reported in Table A.8. The specification in Equations (12)-(13) follows Abadie (2003).

E Job Tasks in the Survey

This section lists the job tasks we include for each occupation in the survey. Table E.1 provides the English translations and Table E.2 is the original Danish versions.

Table E.1: Job Tasks Included in the Survey (English Translation)

Occupation	Job Task
Accountants & Auditors	Prepare detailed reports on audit findings.
Accountants & Auditors	Supervise auditing of establishments, and determine scope of investigation required.
Accountants & Auditors	Examine and evaluate financial and information systems, recommending controls to ensure system reliability and data integrity.
Accountants & Auditors	Confer with company officials about financial and regulatory matters.
Accountants & Auditors	Prepare, examine, or analyze accounting records, financial statements, or other financial reports to assess accuracy, completeness, and conformance to reporting and procedural standards.
Accountants & Auditors	Compute taxes owed and prepare tax returns, ensuring compliance with payment, reporting, or other tax requirements.
Customer Service Rep.	Confer with customers by telephone or in person to provide information about products or services, take or enter orders, cancel accounts, or obtain details of complaints.
Customer Service Rep.	Keep records of customer interactions or transactions, recording details of inquiries, complaints, or comments, as well as actions taken.
Customer Service Rep.	Check to ensure that appropriate changes were made to resolve customers' problems.
Customer Service Rep.	Contact customers to respond to inquiries or to notify them of claim investigation results or any planned adjustments.
Customer Service Rep.	Determine charges for services requested, collect deposits or payments, or arrange for billing.
Customer Service Rep.	Review claims adjustments with dealers, examining parts claimed to be defective, and approving or disapproving dealers' claims.
Financial Advisors	Interview clients to determine their current income, expenses, insurance coverage, tax status, financial objectives, risk tolerance, or other information needed to develop a financial plan.
Financial Advisors	Recommend to clients strategies in cash management, insurance coverage, investment planning, or other areas to help them achieve their financial goals.
Financial Advisors	Manage client portfolios, keeping client plans up-to-date.
Financial Advisors	Implement financial planning recommendations, or refer clients to someone who can assist them with plan implementation.
Financial Advisors	Analyze financial information obtained from clients to determine strategies for meeting clients' financial objectives.
Financial Advisors	Answer clients' questions about the purposes and details of financial plans and strategies.
HR Professionals	Interpret and explain human resources policies, procedures, laws, standards, or regulations.
HR Professionals	Hire employees and process hiring-related paperwork.
HR Professionals	Inform job applicants of details such as duties and responsibilities, compensation, benefits, schedules, working conditions, or promotion opportunities.
HR Professionals	Prepare or maintain employment records related to events, such as hiring, termination, leaves, transfers, or promotions, using human resources management system software.
HR Professionals	Address employee relations issues, such as harassment allegations, work complaints, or other employee concerns.
HR Professionals	Schedule or conduct new employee orientations.
IT Support	Answer user inquiries regarding computer software or hardware operation to resolve problems.
IT Support	Oversee the daily performance of computer systems.
IT Support	Read technical manuals, confer with users, or conduct computer diagnostics to investigate and resolve problems or to provide technical assistance and support.
IT Support	Set up equipment for employee use, performing or ensuring proper installation of cables, operating systems, or appropriate software.
IT Support	Enter commands and observe system functioning to verify correct operations and detect errors.
IT Support	Maintain records of daily data communication transactions, problems and remedial actions taken, or installation activities.
Journalists	Write commentaries, columns, or scripts.
Journalists	Coordinate and serve as an anchor on news broadcast programs.
Journalists	Examine news items of local, national, and international significance to determine topics to address, or obtain assignments from editorial staff members.
Journalists	Analyze and interpret news and information received from various sources to broadcast the information.
Journalists	Arrange interviews with people who can provide information about a story.
Journalists	Present news stories, and introduce in-depth videotaped segments or live transmissions from on-the-scene reporters.

Table E.1 (Continued): Job Tasks Included in the Survey (English Translation)

Occupation	Job Task
Legal Professionals	Prepare affidavits or other documents, such as legal correspondence, and organize and maintain documents in paper or electronic filing system.
Legal Professionals	Prepare legal documents, including briefs, pleadings, appeals, wills, contracts, and real estate closing statements.
Legal Professionals	Prepare for trial by performing tasks such as organizing exhibits.
Legal Professionals	Investigate facts and law of cases and search pertinent sources, such as public records and internet sources, to determine causes of action and to prepare cases.
Legal Professionals	Meet with clients and other professionals to discuss details of case.
Legal Professionals	File pleadings with court clerk.
Marketing Professionals	Prepare reports of findings, illustrating data graphically and translating complex findings into written text.
Marketing Professionals	Collect and analyze data on customer demographics, preferences, needs, and buying habits to identify potential markets and factors affecting product demand.
Marketing Professionals	Conduct research on consumer opinions and marketing strategies, collaborating with marketing professionals, statisticians, pollsters, and other professionals.
Marketing Professionals	Measure and assess customer and employee satisfaction.
Marketing Professionals	Measure the effectiveness of marketing, advertising, and communications programs and strategies.
Marketing Professionals	Attend staff conferences to provide management with information and proposals concerning the promotion, distribution, design, and pricing of company products or services.
Office Clerks	Operate office machines, such as computers, voice mail systems, photocopiers, and scanners.
Office Clerks	Answer telephones, direct calls, and take messages.
Office Clerks	Communicate with customers, employees, and other individuals to answer questions, disseminate or explain information, take orders, and address complaints.
Office Clerks	Compile, copy, sort, and file records of office activities, business transactions, and other activities.
Office Clerks	Open, sort, and route incoming mail, answer correspondence, and prepare outgoing mail.
Office Clerks	Compute, record, and proofread data and other information, such as records or reports.
Software Developers	Write, analyze, review, and rewrite programs, using workflow chart and diagram, and applying knowledge of computer capabilities, subject matter, and symbolic logic.
Software Developers	Correct errors by making appropriate changes and rechecking the program to ensure that the desired results are produced.
Software Developers	Perform or direct revision, repair, or expansion of existing programs to increase operating efficiency or adapt to new requirements.
Software Developers	Consult with managerial, engineering, and technical personnel to clarify program intent, identify problems, and suggest changes.
Software Developers	Conduct trial runs of programs and software applications to be sure they will produce the desired information and that the instructions are correct.
Software Developers	Consult with and assist computer operators or system analysts to define and resolve problems in running computer programs.
Teachers	Prepare students for later grades by encouraging them to explore learning opportunities and to persevere with challenging tasks.
Teachers	Adapt teaching methods and instructional materials to meet students' varying needs and interests.
Teachers	Establish and enforce rules for behavior and procedures for maintaining order among students.
Teachers	Prepare objectives and outlines for courses of study, following curriculum guidelines or requirements of states and schools.
Teachers	Prepare, administer, and grade tests and assignments to evaluate students' progress.
Teachers	Prepare materials and classrooms for class activities.

Table E.2: Job Tasks Included in the Survey (Original Danish Version)

Faggruppe	Arbejdsopgave
Revisions- og regnskabsmedarbejder	Udarbejde detaljerede revisionsrapporter.
Revisions- og regnskabsmedarbejder	Overvåge revision af virksomheder og fastsætte omfanget af en sådan undersøgelse.
Revisions- og regnskabsmedarbejder	Undersøge finansielle systemer eller IT-systemer og anbefale kontroller af systemers pålidighed og dataintegritet.
Revisions- og regnskabsmedarbejder	Rådføre sig med virksomhedsledelsen om økonomiske og regulatoriske forhold.
Revisions- og regnskabsmedarbejder	Forberede, undersøge eller analysere regnskabsdokumenter eller andre finansielle rapporter for at vurdere nøjagtighed, fuldstændighed samt overholdelse af rapporterings- og proceduremæssige standarder.
Revisions- og regnskabsmedarbejder	Beregne skatteforpligtelser og udarbejde selvangivelser i overensstemmelse med skatteregler.
Kundesupport	Tale med kunder personligt eller telefonisk for at informere om produkter eller tjenester, modtage ordrer, opsige konti eller indhente detaljer om kundeklager.
Kundesupport	Registrere kontakt eller transaktioner med kunder vedrørende detaljer om forespørgsler, klager eller kommentarer samt besluttede foranstaltninger.
Kundesupport	Kontrollere at passende foranstaltninger blev foretaget for at løse kunders problemer.
Kundesupport	Kontakte kunder for at besvare forespørgsler eller informere dem om udfaldet af klageundersøgelser eller planlagte foranstaltninger.
Kundesupport	Fastlægge pris på efterspurgte ydelser, udstede fakturaer, eller indsamle deposita og betalinger.
Kundesupport	Gennemgå reklamationer med forhandlere, undersøge hævdede fejl i produkter, og godkende eller afvise forhandleres krav.
Økonomisk rådgiver	Interviewe klienter for at afgøre deres nuværende indkomst, udgifter, forsikringsdækning, skattestatus, økonomiske mål, risikotolerance eller andre oplysninger, der er nødvendige for at udvikle en økonomisk plan.
Økonomisk rådgiver	Anbefale klienter strategier inden for likviditetsstyring, forsikringsdækning, investeringsplanlægning eller andre områder for at hjælpe dem med at opnå deres økonomiske mål.
Økonomisk rådgiver	Forvalte klientporteføljer og holde klientplaner opdaterede.
Økonomisk rådgiver	Gennemføre anbefalinger fra en økonomisk plan eller henvise klienter til nogen, der kan hjælpe dem med implementeringen.
Økonomisk rådgiver	Analysere økonomiske oplysninger om klienter for at fastlægge strategier, der opfylder klienters økonomiske mål.
Økonomisk rådgiver	Besvare klienters spørgsmål om formålet for og detaljerne i økonomiske planer og strategier.
HR-medarbejder	Fortolke og forklare politikker, procedurer, love, standarder eller reguleringer inden for HR-området.
HR-medarbejder	Ansætte medarbejdere og behandle ansættelsesrelateret papirarbejde.
HR-medarbejder	Informere jobansøgere om ansættelsesvilkår, såsom jobindhold og -ansvar, løn og goder, arbejdstider og -forhold samt muligheder for forfremmelse.
HR-medarbejder	Opbygge eller vedligeholde ansættelsesregistre i forbindelse med ansættelse, fratrædelse, orlov, omplacering eller forfremmelser ved hjælp af HR-software.
HR-medarbejder	Håndtere medarbejderrelationer, herunder sager om chikane, arbejdsrelaterede klager eller andre bekymringer fra medarbejdere.
HR-medarbejder	Planlægge eller gennemføre introduktioner for nye medarbejdere.
IT-supporter	Besvare brugerhenvendelser vedrørende drift af computerhardware eller -software for at løse problemer.
IT-supporter	Overvåge daglig performance af computersystemer.
IT-supporter	Læse tekniske manualer, kommunikere med brugere eller udføre computerdiagnostik for at undersøge og løse problemer eller yde teknisk hjælp og support.
IT-supporter	Opsætte udstyr til medarbejdere og udføre eller sikre korrekt installation af kabler, operativsystemer eller software.
IT-supporter	Indtaste kommandoer og observere computersystemers funktion for at bekræfte korrekt drift eller registrere fejl.
IT-supporter	Føre log over daglige dataoverførsler, installationer og tekniske problemer samt afhjælpende foranstaltninger.
Journalist	Skrive kommentarer, klummer eller artikler.
Journalist	Være vært på og tilrettelægge nyhedsudsendelser.
Journalist	Gennemgå nyheder af lokal, national og international betydning for at fastlægge hvilke emner, der skal behandles eller få tildelt historier fra redaktionen.
Journalist	Analysere og fortolke nyheder og information fra forskellige kilder for at videreformidle informationen.
Journalist	Arrangere interviews med personer, der kan give information om en historie.
Journalist	Præsentere nyhedshistorier og introducere dybdegående videosegmenter eller live transmissioner fra journalister på stedet.

Table E.2 (Continued): Job Tasks Included in the Survey (Original Danish Version)

Faggruppe	Arbejdsopgave
Juridisk medarbejder	Forberede erklæringer eller andre dokumenter såsom juridisk korrespondance, organisere og vedligeholde dokumenter i et papirbaseret eller elektronisk arkivsystem.
Juridisk medarbejder	Forberede juridiske dokumenter, herunder processkrifter, forsvars- og anklageskrifter, appeller, testamenter, kontrakter og ejendomshandelsdokumenter.
Juridisk medarbejder	Forberede en retssag såsom at udarbejde bevismateriale.
Juridisk medarbejder	Undersøge fakta, omstændigheder og lovgivning i sager og søge relevante kilder, såsom offentlige registre og internetkilder, for at afklare årsager til søgsmål og forberede sager.
Juridisk medarbejder	Møde klienter og fagfolk for at drøfte sagsdetaljer.
Juridisk medarbejder	Indsende processkrifter til retssekretæren.
Marketingmedarbejder	Udarbejde rapporter, der illustrerer data grafisk og formidler komplekse sammenhænge i tekst.
Marketingmedarbejder	Indsamle og analysere data om kundeoplysninger, præferencer, behov og købsvaner for at identificere potentielle markeder og faktorer, der påvirker produkters efterspørgsel.
Marketingmedarbejder	Undersøge forbrugerholdninger og marketingstrategier i samarbejde med marketingmedarbejdere, statistikere, meningsmålere og andre fagfolk.
Marketingmedarbejder	Måle og vurdere kunde- og medarbejdertilfredshed.
Marketingmedarbejder	Måle effekten af marketing, reklame og kommunikationsindsatser og -strategier.
Marketingmedarbejder	Deltage i medarbejdermøder for at give information og forslag vedrørende markedsføring, distribution, design og prissætning af virksomhedens produkter eller tjenester.
Kontoransat eller sekretær	Betjene kontormaskiner såsom computere, telefonsvarere, kopimaskiner og scannere.
Kontoransat eller sekretær	Besvare telefonopkald, viderestille opkald og modtage beskeder.
Kontoransat eller sekretær	Kommunikere med kunder, brugere, medarbejdere og andre for at besvare spørgsmål, formidle eller forklare information, modtage ordrer og håndtere klager.
Kontoransat eller sekretær	Udarbejde, sortere og arkivere optegnelser over kontor-, forretnings- og andre aktiviteter.
Kontoransat eller sekretær	Åbne, sortere og videresende indgående post, besvare henvendelser og forberede udgående post.
Kontoransat eller sekretær	Bearbejde, registrere og tjekke data og anden information såsom optegnelser eller rapporter.
Softwareudvikler	Skrive, analysere, gennemgå og ændre programmer, fx. ved hjælp af rutediagrammer samt ved anvendelse af viden om emnet, computers kapacitet og symbolsk logik.
Softwareudvikler	Rette fejl i programmer og kontrollere, at ønskede resultater opnås.
Softwareudvikler	Udføre eller lede revision, fejlretning eller udvidelse af eksisterende programmer for at øge driftseffektiviteten eller møde nye krav.
Softwareudvikler	Konsultere ledelses-, ingeniør- og teknisk personale for at afklare målet for et computerprogram, identificere problemer og foreslå ændringer.
Softwareudvikler	Teste programmer og softwareapplikationer for at sikre, at de genererer det ønskede output og at instruktionerne er korrekte.
Softwareudvikler	Konsultere og hjælpe IT-teknikere eller systemanalytikere med at identificere og løse problemer i forbindelse med kørsel af computerprogrammer.
Lærer	Forberede eleverne til senere klassetrin ved at motivere dem til at udforske læringsmuligheder og støtte dem i at løse udfordrende opgaver.
Lærer	Tilpasse undervisningsmetoder og -materialer for at imødekomme elevers forskellige behov og interesser.
Lærer	Fastlægge og håndhæve regler for adfærd og procedurer for at opretholde orden blandt eleverne.
Lærer	Forberede undervisningsmål og -forløb i overensstemmelse med læseplaner eller krav fra stat, kommune eller skole.
Lærer	Formulere, afholde og bedømme prøver og opgaver for at vurdere elevers udvikling.
Lærer	Indrette klasseværelser og fysiske materialer til undervisningsaktiviteter.

F Invitation Letter

This section contains the invitation letter for the main survey. We sent three reminders, two by e-mail (Digital Post) and one by text (SMS).

The English translation starts on page 33, with the original Danish version on page 35.

November 2023

Artificial intelligence and your job tasks

Dear [name]

Statistics Denmark is inviting you to participate in a research project about ChatGPT and your job tasks. You participate by clicking the link below and answering the questionnaire.

ChatGPT is a chatbot with artificial intelligence. You have been selected because you work in an occupation where it may be relevant to use ChatGPT.

Your answers are important regardless of your knowledge of artificial intelligence or ChatGPT. Your participation will advance research about new technology in the labor market. Everyone who completes the questionnaire will automatically participate in a lottery with **a prize of [X,XXX] Kr. tax free**.

Statistics Denmark is conducting the survey for researchers at the University of Copenhagen and the University of Chicago. It takes **about 15 minutes** to complete the questionnaire.

Start the survey [url]

Or access www.dst.dk/ditsvar and enter your response code **[code]**.

Statistics Denmark handles your data confidentially. We convey the results in a way that makes it impossible to see how individuals have responses, and the data is used solely for statistical and scientific purposes.

Participation is voluntary. If you do not wish to participate, you can indicate this: [refusal_link]

If you have questions, you can write to info@dstsurvey.dk or call on 7777 7708 (every day between 9am and 4pm). Please provide your response code when contacting us.

Best regards,

Marie Fuglsang
Head of Division, DST Survey

Anders Humlum
Assistant Professor, University of Chicago

We take care of your answers

Statistics Denmark processes personal data in accordance with the rules of the European General Data Protection Regulation (GDPR) and the Danish Data Protection Act. Furthermore, Statistics Denmark has a data confidentiality policy, which ensures that information about citizens is protected and exclusively used for statistical or scientific studies. We handle your responses confidentially and only use the results in such a way that no one can see your individual answers.

Your responses in this survey are exclusively used for statistical and scientific purposes within this survey. Your responses are deleted or archived according to applicable legislation when the information no longer serves a purpose in the study.

Statistics Denmark is the data processor for collecting your responses in the survey. Once you have answered the questions, your responses in pseudonymized form are forwarded to the University of Copenhagen, which is the data controller for the survey. This means that your responses cannot be directly traced back to you.

The legal basis for data processing is Article 6(1)(e) of the GDPR. If sensitive information is involved, the legal basis is Article 9(2)(j) of the GDPR and § 10 of the Danish Data Protection Act.

You can contact the data protection advisor of Statistics Denmark via databeskyttelse@dst.dk

Read more:

Statistics Denmark's compliance with GDPR also applies to the information about you in this survey. Read more about the processing and what rights and complaint options you have here

Read more about security and confidentiality at Statistics Denmark here

Read more about the data controller here

Who is invited to Statistics Denmark's surveys?

Anyone residing in Denmark can be invited to participate in one of Statistics Denmark's surveys. In our surveys, it is important to know the opinions and attitudes of the entire population across gender, age, education, and residence.

Why may we contact you?

Statistics Denmark has three main tasks according to the Statistics Denmark Act:

- to collect, process, and publish statistical information about society, possibly in co-operation with other statistics producers. In addition, to prepare statistical analyses and forecasts.
- to contribute to international statistical cooperation.
- to perform statistical projects for private and public customers for a fee under the rules of income-generating activities.

It is as part of the third bullet that we are allowed to contact you about this survey.

November 2023

Kunstig intelligens og dine arbejdsopgaver

Kære [navn]

Danmarks Statistik inviterer dig til at deltage i et forskningsprojekt om ChatGPT og dine arbejdsopgaver. Du deltager ved at klikke på nedenstående link og svare på spørgeskemaet.

ChatGPT er en chatbot med kunstig intelligens. Du er blevet udvalgt, fordi du arbejder i et erhverv, hvor det kan være relevant at bruge ChatGPT.

Dine svar er vigtige uanset dit kendskab til kunstig intelligens eller ChatGPT. Din deltagelse vil fremme forskning i ny teknologi på arbejdsmarkedet. Alle der gennemfører spørgeskemaet, deltager automatisk i lodtrækningen om **en præmie på [X.XXX] kr. skattefrit.**

Danmarks Statistik gennemfører spørgeskemaet for forskere på Københavns Universitet og University of Chicago. Det tager **ca. 15 minutter** at besvare spørgeskemaet.

Start undersøgelsen [url]

Eller gå ind på www.dst.dk/ditsvar og tast svarkoden **[kode]**

Danmarks Statistik behandler dine svar fortroligt. Vi formidler resultaterne på en måde, så ingen kan se, hvad den enkelte har svaret og data anvendes alene til statistiske og videnskabelige formål.

Det er frivilligt at deltage. Ønsker du ikke at deltage, kan du tilkendegive det: [refusal_link]

Har du spørgsmål, kan du skrive til info@dstsurvey.dk eller ringe på tlf. 7777 7708 (alle dage ml. kl. 9-16). Oplys venligst din svarkode ved henvendelse.

Med venlig hilsen

Marie Fuglsang
Kontorchef, DST Survey

Anders Humlum
Adjunkt, University of Chicago

Vi passer på dine svar

Danmarks Statistik behandler personoplysninger i overensstemmelse med reglerne i den europæiske databeskyttelsesforordning (GDPR) og den danske databeskyttelseslov. Danmarks Statistik har derudover en datafortrolighedspolitik, som sikrer, at oplysninger om borgerne beskyttes og udelukkende behandles til statistiske eller videnskabelige undersøgelser. Vi behandler dine svar fortroligt og bruger kun resultaterne på en måde, så ingen kan se, hvad du har svaret.

Dine svar i denne undersøgelse bruges udelukkende til statistiske og videnskabelige formål i denne undersøgelse. Dine svar slettes eller arkiveres efter gældende lovgivning, når oplysningerne ikke længere har et formål i undersøgelsen.

Danmarks Statistik er databehandler for indsamlingen af dine svar i undersøgelsen. Når du har svaret på spørgsmålene, videregives dine svar i pseudonymiseret form til Københavns Universitet, der er dataansvarlig for undersøgelsen. Det betyder, at dine svar ikke direkte kan tilbageføres til dig.

Retsgrundlaget for databehandling er databeskyttelsesforordningens artikel 6, stk. 1, litra e. Hvis der indgår følsomme oplysninger er retsgrundlaget forordningens artikel 9, stk. 2, litra j, og databeskyttelseslovens § 10.

Du kan kontakte Danmarks Statistiks databeskyttelsesrådgiver via databeskyttelse@dst.dk

Læs mere:

Danmarks Statistiks efterlevelse af GDPR gælder også for oplysningerne om dig i denne undersøgelse. Læs mere om behandlingen og hvilke rettigheder og klagemuligheder du har her

Læs mere om sikkerhed og fortrolighed hos Danmarks Statistik her

Læs mere om den dataansvarlige her

Hvem bliver inviteret til Danmarks Statistiks undersøgelser?

Alle, der har bopæl i Danmark, har mulighed for at blive inviteret til at deltage i en af Danmarks Statistiks undersøgelser. I vores undersøgelser er det vigtigt at kende meninger og holdninger fra hele befolkningen på tværs af køn, alder, uddannelse og bopæl.

Hvorfor må vi kontakte dig?

Danmarks Statistik har tre hovedopgaver ifølge Lov om Danmarks Statistik:

- at indsamle, bearbejde og offentliggøre statistiske oplysninger om samfundet, evt. i samarbejde med andre statistikproducenter. Herudover at udarbejde statistiske analyser og prognoser.
- at bidrage til det internationale statistiksamarbejde.
- at udføre statistiske opgaver for private og offentlige kunder mod betaling efter reglerne for indtægtsdækket virksomhed.

Det er som led i den tredje bullit, at vi har lov til at kontakte dig om denne undersøgelse.

G Survey Questionnaire

This section contains our survey questionnaire. The questionnaire follows a common structure for the different occupations but with job tasks and titles tailored to each specific occupation.

For the sake of brevity, the questionnaire below focuses on one occupation (journalism), listing one of their six job tasks (write commentaries, columns, or scripts). We indicate the occupation-specific fields by square brackets.

The questionnaire below corresponds to the main survey. The follow-up survey follows the same structure with two exceptions: in Block 1, we ask about adoption and task importance in the past two weeks (Questions 3, 6, 8). We make this change to be consistent with the time window of intended adoption in Block 4 of the main survey (Questions 18 and 19). Second, we exclude Block 3 (Question 17, i.e., treatment/control) from the follow-up survey.

The English translation starts on page 38, with the original Danish version on page 48.

1. Introduction

ChatGPT is a chatbot that uses artificial intelligence. You have been selected to participate in this survey because you work in an occupation where it may be relevant to use ChatGPT.
Your participation is important regardless of your knowledge of artificial intelligence or ChatGPT.

Block 1: Adoption

2.a Occupation

Are you employed in [journalism]?

- Yes
- No

2.b Occupation [if 2.a='No']

Are you employed in one of the following occupations?
If you are employed in more than one occupation, please select your primary work area.

- Auditing and accounting
- Customer support
- Financial advising
- Human resources
- IT support
- Legal work
- Marketing
- Office and secretarial work
- Software development
- Teaching
- I am not employed in the above occupations

2.c Screen Out [if 2.b = 'I am not employed in the above occupations']

Thank you for participating in the survey. Unfortunately, you are not in the target group for this survey, and we therefore have no more questions.

3. Task Importance [all tasks]

We will first ask about some typical tasks among [journalists].
For each task, please assess how **important the task is for your job**.
Extremely important means that the task is critical for carrying out your job.
[Write commentaries, columns, or scripts]

- Not important
- Somewhat important
- Important
- Very important
- Extremely important

4. Task Expertise [all tasks]
For each task, please assess your **own expertise** in the task.
Expertise may, for example, come from previous experience with or innate abilities in performing the task.
[Write commentaries, columns, or scripts]

- Low expertise
- Average expertise
- High expertise

5. Awareness of ChatGPT
We will now ask about your experiences with ChatGPT.
Had you heard about ChatGPT before this survey?

- Yes
- No

6. Prior Use of ChatGPT [if 5='Yes']
Have you used ChatGPT?

- Yes
- No

7. Purposes of Prior Use [if 6='Yes']
For what purposes have you used ChatGPT?

- Work only
- Leisure only
- Both work and leisure

8. Prior Use in Job Tasks [if 7='Work only' or 7='Both work and leisure'; all tasks]
Have you used ChatGPT to perform the following job tasks?
Mark all tasks where you have used ChatGPT.
[Write commentaries, columns, or scripts]

9. Current Use of ChatGPT [if 6='Yes']
Have you used ChatGPT in the past two weeks?

- Yes
- No

10. Plus Subscription [if 6='Yes']
Do you have an active Plus subscription to ChatGPT?

- Yes
- No

Block 2: Prior Beliefs

11. Prior Beliefs: Productivity Introduction

Time Savings from ChatGPT

We will next ask for your assessment of whether ChatGPT can save time on various job tasks.
Note: Your answers are important regardless of your knowledge of ChatGPT. If you are not familiar with ChatGPT, we ask you to give your best guess. You will later get the opportunity to indicate how certain you are in your evaluations.

12. Prior Beliefs: Productivity of ChatGPT [all tasks]

Think of **a [journalist] with an average level of experience and expertise** trying to complete a given task. The worker has access to ChatGPT, the internet, a computer with existing software, and other tools typically used to complete the task.

Specify the following tasks according to the description below. Equivalent quality means someone reviewing the work would not be able to tell whether the worker completed it with or without assistance from ChatGPT.

Large time savings from ChatGPT

Specify the task's time savings as "Large" if **access to ChatGPT *can halve the time*** it takes for an average [journalist] to complete the task with equivalent quality.

Small or no time savings from ChatGPT

Specify the task's time savings as "Small or no" if **access to ChatGPT *cannot* halve the time** it takes for an average [journalist] to complete the task with equivalent quality.

Please provide your best estimates even if you are unsure of them.

[Write commentaries, columns, or scripts]

- Small or no time savings from ChatGPT
- Large time savings from ChatGPT

13. Uncertainty of Productivity Prior

How certain are you about your previous assessments of the time savings from ChatGPT for an average [journalist]?

- Very uncertain
- Uncertain
- Certain
- Very certain

14. Prior Beliefs: Complementarity Introduction

We now ask you to assess how the potential time savings from ChatGPT relate to [journalists'] expertise in given job tasks.

15. Prior Beliefs: Expertise Complementarity of ChatGPT [all tasks]

Imagine two [journalists] with average levels of experience and expertise but who differ in their expertise in a given task.

A [journalist] with greater expertise in the task: The worker has extensive experience in the task, has in-depth knowledge of its nuances, and has a track record of accuracy and efficiency in executing it.

A [journalist] with less expertise in the task: The worker has a broad understanding of the principles of the task but lacks expertise in executing the specific task.

The two [journalists] are similar in all other aspects except their expertise in the specific task.

Specify the following tasks according to whether access to ChatGPT in the task yields smaller, similar, or larger time savings for the worker with greater expertise compared to the worker with less expertise in the task.

Please provide your best estimates even if you are unsure of them.

[Write commentaries, columns, or scripts]

- Smaller time savings for the [journalist] with greater expertise
- Similar time savings for the [journalist] with greater expertise
- Larger time savings for the [journalist] with greater expertise

16. Uncertainty of Complementarity Prior

How certain are you about your previous assessments of how the time savings from ChatGPT relate to [journalists'] expertise?

- Very uncertain
- Uncertain
- Certain
- Very certain

Block 3: Treatment

17.a Productivity Treatment [if randomized into productivity treatment group; all tasks]
We previously asked you to evaluate the time savings from ChatGPT in various job tasks.

The University of Pennsylvania and OpenAI (the developer of ChatGPT) conducted an expert assessment in August 2023 of the time savings from ChatGPT in the same tasks. Researchers from the University of Copenhagen have validated and extended the expert assessments in collaboration with industry experts from Denmark.

Please take the time to review the table, as the information may become useful in the rest of the survey.

Note: You can continue by clicking on the "next" button after 15 seconds on this page. Once you proceed, you cannot go back to this table.

[Write commentaries, columns, or scripts]	
Question: Can ChatGPT save time?	
Your assessment	Small or no time savings
Expert assessment	Large time savings
Explanation of the **expert assessment**	ChatGPT can generate drafts, suggest changes, and provide ideas for articles, etc.
Question: Can someone with greater expertise save more time?	
Your assessment	Similar time savings for the [journalist] with greater expertise

17.b Complementarity Treatment [if randomized into complementarity treatment group; all tasks]
We previously asked you to evaluate the time savings from ChatGPT in various job tasks.

The University of Pennsylvania and OpenAI (the developer of ChatGPT) conducted an expert assessment in August 2023 of the time savings from ChatGPT in the same tasks. Researchers from the University of Copenhagen have validated and extended the expert assessments in collaboration with industry experts from Denmark.

Please take the time to review the table, as the information may become useful in the rest of the survey.

Note: You can continue by clicking on the "next" button after 15 seconds on this page. Once you proceed, you cannot go back to this table.

[Write commentaries, columns, or scripts]	
Question: Can ChatGPT save time?	
Your assessment	Small or no time savings
Question: Can someone with greater expertise save more time?	
Your assessment	Similar time savings for the [journalist] with greater expertise
Expert assessment	Smaller time savings for the [journalist] with greater expertise
Explanation of the **expert assessment**	A competent [journalist] can more easily prepare drafts and revise articles, etc., and therefore has less benefit from ChatGPT in the task.

17.c Control [if randomized into control group; all tasks]
We previously asked you to evaluate the time savings from ChatGPT in various job tasks.

Please take the time to review the table, as the information may become useful in the rest of the survey.

Note: You can continue by clicking on the "next" button after 15 seconds on this page. Once you proceed, you cannot go back to this table.

[Write commentaries, columns, or scripts]	
Question: Can ChatGPT save time?	
Your assessment	Small or no time savings
Question: Can someone with greater expertise save more time?	
Your assessment	Similar time savings for the [journalist] with greater expertise

Block 4: Intended Adoption and Posterior Beliefs

18. Intentions to Use ChatGPT

Do you expect to use ChatGPT in the next two weeks?

- Yes
- No

19. Intentions to Use in Job Tasks [if 18='Yes'; all tasks]

Do you expect to use ChatGPT in the following job tasks in the next two weeks?

[Write commentaries, columns, or scripts]

- Yes
- No

20. Posterior Beliefs: Individual Productivity of ChatGPT [all tasks]

Time savings from ChatGPT in your own job

Now, consider your own job, given your individual experience and expertise as a [journalist]. Assume that you have access to ChatGPT, the internet, a computer with existing software, and other tools you typically use to complete the task.

Specify the following tasks according to the description below. Equivalent quality means someone reviewing the work would not be able to tell whether you have completed it with or without assistance from ChatGPT.

Large time savings from ChatGPT

Specify the task's time savings as "Large" if **access to ChatGPT *can halve the time*** it takes for you to complete the task with equivalent quality.

Small or no time savings from ChatGPT

Specify the task's time savings as "Small or no" if **access to ChatGPT *cannot* halve the time** it takes for you to complete the task with equivalent quality.

Please provide your best estimates even if you are unsure of them.

[Write commentaries, columns, or scripts]

- Small or no time savings from ChatGPT
- Large time savings from ChatGPT

21. Uncertainty of Individual Productivity Prior

How certain are you about your previous assessments of the time savings from ChatGPT for yourself?

- Very uncertain
- Uncertain
- Certain
- Very certain

22. Final Questions: Introduction

We will now ask you some follow-up questions about your assessment of ChatGPT in the job tasks.

23.a Task Substitution

If ChatGPT saves time in completing a task, do you then expect to complete more of that type of tasks during your workday?

Please provide your best estimate, even if you are unsure.

- Yes
- No

23.b Task Substitution [if 23.a='Yes']

If ChatGPT saves time in completing a task, do you expect that type of tasks to occupy more of your workday, while other kinds of tasks occupy less?

The task can occupy more if the larger number of tasks completed outweighs the time saved in each individual task solution.

- Yes
- No

Block 5: Frictions

24. Beliefs Frictions [tasks with 12!=20]

Your assessment of the time savings from ChatGPT for an average [journalist] and yourself differed in the following job tasks.

Please indicate for each of the tasks the reasons why your assessments differed from one another.

[Write commentaries, columns, or scripts]

- I changed my view on the time savings from ChatGPT.
- The time savings for an average [journalist] are not relevant given my expertise.
- I don't know how to use ChatGPT.
- I use specialized software that does integrate with ChatGPT.
- I am concerned about the correctness of ChatGPT's responses.
- I am concerned about ChatGPT's lack of capabilities in Danish.
- Other, please specify: [open text field]

S25: Adoption Frictions [tasks with 19='No' and 20='Large time savings from ChatGPT']
You indicated for the following job tasks that:

1. ChatGPT can offer you a large time savings in completing the task.
2. You do not expect to use ChatGPT for the task in the next two weeks.

Please state the reasons why you do not expect to use ChatGPT in the job task despite its time savings.

[Write commentaries, columns, or scripts]

- I do not expect to encounter the task in the next two weeks.
- I am subject to restrictions on using ChatGPT in my job.
- I am concerned about how ChatGPT will handle my data confidentially.
- It would require training before I can benefit from ChatGPT.
- I fear that ChatGPT will eventually make me redundant in my job.
- ChatGPT will reduce my joy of performing the task.
- I am concerned about becoming dependent on ChatGPT in the task.
- Other, please specify: [open text field]

26. Information Sheets
Are you interested in receiving additional material with examples of how a [journalist] can use ChatGPT? The material has been prepared by researchers from the University of Copenhagen and the University of Chicago in collaboration with industry experts in Denmark. You can access the material at the end of the survey.

- Yes
- No

Side 27.(a) End of Survey [if 26='Yes']
Thank you for participating in the survey.
You can download the material prepared by researchers from the University of Copenhagen and the University of Chicago in collaboration with Danish industry experts, here: **ChatGPT for [journalists]**
If you win one of the prizes, you will be notified directly in your e-Boks.
We may contact you again in two weeks with a short follow-up survey. We hope very much that you are willing to participate in this brief follow-up.

Side 27.(b) End of Survey [if 26='No']
Thank you for participating in the survey.
If you win one of the prizes, you will be notified directly in your e-Boks.
We may contact you again in two weeks with a short follow-up survey. We hope very much that you are willing to participate in this brief follow-up.

Survey Questionnaire – Danish Version

1. Introduction

ChatGPT er en chatbot, der bruger kunstig intelligens. Du er blevet udvalgt til at deltage i denne undersøgelse, fordi du arbejder i et erhverv, hvor det kan være relevant at bruge ChatGPT.
Din deltagelse er vigtig uanset dit kendskab til kunstig intelligens eller ChatGPT.

Block 1: Adoption

2.a Occupation

Er du beskæftiget med [journalistik]?

- Ja
- Nej

2.b Occupation [if 2.a='Nej']

Er du beskæftiget inden for et af følgende områder?
Hvis du er beskæftiget indenfor flere områder, vælg da dit primære arbejdsområde.

- HR-arbejde
- IT-support
- Kontor- og sekretærarbejde
- Kundesupport
- Juridisk arbejde
- Marketing
- Revisions- og regnskabsarbejde
- Softwareudvikling
- Undervisning
- Økonomisk rådgivning
- Jeg er ikke beskæftiget inden for ovenstående arbejdsområder

2.c Screen Out [if 2.b = 'Jeg er ikke beskæftiget inden for ovenstående arbejdsområder']

Mange tak for at deltage i undersøgelsen.
Du er desværre ikke i målgruppen for undersøgelsen, og vi har derfor ikke flere spørgsmål.

3. Task Importance [all tasks]

Vi vil først spørge ind til nogle typiske arbejdsopgaver blandt [journalister].
Til hver opgave bedes du vurdere, hvor **vigtig opgaven er for dit arbejde**.
Ekstremt vigtig betyder, at opgaven er kritisk for varetagelsen af dit nuværende job.
[Skrive kommentarer, klummer eller artikler.]

- Ikke vigtig
- Lidt vigtig
- Vigtig
- Meget vigtig
- Ekstremt vigtig

4. Task Expertise [all tasks]
Til hver arbejdsopgave bedes du vurdere din **egen ekspertise** i opgaven.
Ekspertise kan f.eks. komme fra tidligere erfaring med eller naturlige evner for at løse opgaven.
[Skrive kommentarer, klummer eller artikler.]

- Lille ekspertise
- Gennemsnitlig ekspertise
- Stor ekspertise

5. Awareness of ChatGPT
Vi vil nu spørge ind til dine erfaringer med ChatGPT.
Havde du hørt om ChatGPT før denne undersøgelse?

- Ja
- Nej

6. Prior Use of ChatGPT [if 5='Ja']
Har du benyttet ChatGPT?

- Ja
- Nej

7. Purposes of Prior Use [if 6='Ja']
Til hvilke formål har du benyttet ChatGPT?

- Kun arbejde
- Kun fritid
- Både arbejde og fritid

8. Prior Use in Job Tasks [if 7='Kun arbejde' or 7='Både arbejde og fritid'; all tasks]
Har du benyttet ChatGPT til at udføre følgende arbejdsopgaver?
Markér alle opgaver, hvor du har benyttet ChatGPT.
[Skrive kommentarer, klummer eller artikler.]

9. Current Use of ChatGPT [if 6='Ja']
Har du benyttet ChatGPT i løbet af de seneste to uger?

- Ja
- Nej

10. Plus Subscription [if 6='Ja']
Har du et aktivt Plus-abonnement på ChatGPT?

- Ja
- Nej

Block 2: Prior Beliefs

11. Prior Beliefs: Productivity Introduction

Tidsbesparelser fra ChatGPT

Vi vil i det følgende spørge til din vurdering af, om ChatGPT kan spare tid i forskellige arbejdsopgaver. Bemærk: Dine svar er vigtige uanset dit kendskab til ChatGPT. Hvis du ikke kender til ChatGPT, beder vi dig give dit bedste gæt. Du vil senere få mulighed for at angive hvor sikker du er i dine vurderinger.

12. Prior Beliefs: Productivity of ChatGPT [all tasks]

Tænk på **en [journalist] med en gennemsnitlig erfaring og ekspertise**, der vil udføre en given arbejdsopgave. Vedkommende har adgang til ChatGPT, internettet, en computer med eksisterende programmer samt andre hjælpemidler, der typisk anvendes i arbejdsopgaven.

Specificér de følgende arbejdsopgaver ud fra beskrivelsen nedenfor. Tilsvarende kvalitet betyder, at hvis andre tjekker arbejdet, vil de ikke kunne vurdere, om opgaven er løst med eller uden hjælp fra ChatGPT.

Stor tidsbesparelse fra ChatGPT

Angiv tidsbesparelse i arbejdsopgaven som "Stor", hvis **ChatGPT mindst *kan halvere den tid***, det tager for en gennemsnitlig [journalist] at løse arbejdsopgaven med tilsvarende kvalitet.

Lille eller ingen tidsbesparelse fra ChatGPT

Angiv tidsbesparelse i arbejdsopgaven som "Lille eller ingen", hvis ***ChatGPT ikke kan halvere tiden***, det tager for en gennemsnitlig [journalist] at løse arbejdsopgaven med tilsvarende kvalitet.

Angiv venligst dine bedste vurderinger, også selvom du er usikker på dem.

[Skrive kommentarer, klummer eller artikler.]

- Lille eller ingen tidsbesparelse fra ChatGPT
- Stor tidsbesparelse fra ChatGPT

13. Uncertainty of Productivity Prior

Hvor sikker er du i dine forrige vurderinger af tidsbesparelse fra ChatGPT for en gennemsnitlig [journalist]?

- Meget usikker
- Usikker
- Sikker
- Meget sikker

14. Prior Beliefs: Complementarity Introduction
Vi beder dig nu vurdere, hvordan eventuelle tidsbesparelser fra ChatGPT relaterer sig til [journalisters] ekspertise i de givne arbejdsopgaver.

15. Prior Beliefs: Expertise Complementarity of ChatGPT [all tasks]
Forestil dig to [journalister] med gennemsnitlig erfaring og ekspertise, men som har forskellig ekspertise indenfor én given arbejdsopgave.

En [journalist] med større ekspertise indenfor opgaven: Vedkommende har stor erfaring indenfor netop dén opgave, har indgående kendskab til arbejdsopgavens nuancer og har tidligere løst opgaven effektivitet med stor nøjagtighed.

En [journalist] med mindre ekspertise indenfor arbejdsopgaven: Vedkommende har en bred forståelse for arbejdsopgavens principper, men mangler ekspertise i den konkrete opgave.

De to [journalister] er sammenlignelige i alle andre sammenhænge end deres ekspertise indenfor den specifikke arbejdsopgave.

Specificér følgende arbejdsopgaver ud fra, om brug af ChatGPT kan spare mindre, tilsvarende eller mere tid for medarbejderen med større ekspertise sammenlignet med medarbejderen med mindre ekspertise indenfor opgaven.

Angiv venligst dine bedste vurderinger, også selvom du er usikker på dem.

[Skrive kommentarer, klummer eller artikler.]

- Mindre tidsbesparelse for [journalisten] med større ekspertise
- Samme tidsbesparelse for [journalisten] med større ekspertise
- Større tidsbesparelse for [journalisten] med større ekspertise

16. Uncertainty of Complementarity Prior
Hvor sikker er du i dine forrige vurderinger af, hvordan tidsbesparelse fra ChatGPT relaterer sig til [journalisters] ekspertise?
Meget usikker
Usikker
Sikker
Meget sikker

Block 3: Treatment

17.a Productivity Treatment [if randomized into productivity treatment group; all tasks]
Vi bad dig tidligere vurdere tidsbesparelsen fra ChatGPT i forskellige arbejdsopgaver.

University of Pennsylvania og OpenAI (udvikleren af ChatGPT) foretog i august 2023 en ekspertvurdering af tidsbesparelsen fra ChatGPT i samme opgaver. Forskere fra Københavns Universitet har valideret og udvidet ekspertvurderingerne i samarbejde med danske brancheeksperter.

Tag dig venligst tid til at gennemgå tabellen, da informationen kan blive nyttig for dig i resten af spørgeskemaet.

Bemærk: Du kan fortsætte ved at klikke på "næste" knappen efter 15 sekunder på denne side. Når du går videre, kan du ikke klikke tilbage til denne tabel.

Skrive kommentarer, klummer eller artikler.	
Spørgsmål: Kan man spare tid med ChatGPT?	
Din vurdering	Lille eller ingen tidsbesparelse fra ChatGPT
Ekspertvurdering	Stor tidsbesparelse fra ChatGPT
Forklaring til **ekspertvurderingen**	ChatGPT kan generere udkast, foreslå ændringer og give idéer til artikler mv.
Spørgsmål: Kan en med større ekspertise spare mere tid?	
Din vurdering	Samme tidsbesparelse for [journalisten] med større ekspertise

17.b Complementarity Treatment [if randomized into complementarity treatment group; all tasks]
Vi bad dig tidligere vurdere tidsbesparelsen fra ChatGPT i forskellige arbejdsopgaver.

University of Pennsylvania og OpenAI (udvikleren af ChatGPT) foretog i august 2023 en ekspertvurdering af tidsbesparelsen fra ChatGPT i samme opgaver. Forskere fra Københavns Universitet har valideret og udvidet ekspertvurderingerne i samarbejde med danske brancheeksperter.

Tag dig venligst tid til at gennemgå tabellen, da informationen kan blive nyttig for dig i resten af spørgeskemaet.

Bemærk: Du kan fortsætte ved at klikke på "næste" knappen efter 15 sekunder på denne side. Når du går videre, kan du ikke klikke tilbage til denne tabel.

Skrive kommentarer, klummer eller artikler.	
Spørgsmål: Kan man spare tid med ChatGPT?	
Din vurdering	Lille eller ingen tidsbesparelse fra ChatGPT
Spørgsmål: Kan en med større ekspertise spare mere tid?	
Din vurdering	Samme tidsbesparelse for [journalisten] med større ekspertise
Ekspertvurdering	Mindre tidsbesparelse for [journalisten] med større ekspertise
Forklaring til **ekspertvurderingen**	En kompetent [journalist] kan nemmere udarbejde udkast til og revidere artikler mv. og har derfor mindre gavn af ChatGPT i opgaven.

17.c Control [if randomized into control group; all tasks]
Vi bad dig tidligere vurdere tidsbesparelsen fra ChatGPT i forskellige arbejdsopgaver.

Tag dig venligst tid til at gennemgå tabellen, da informationen kan blive nyttig for dig i resten af spørgeskemaet.

Bemærk: Du kan fortsætte ved at klikke på "næste" knappen efter 15 sekunder på denne side. Når du går videre, kan du ikke klikke tilbage til denne tabel.

Skrive kommentarer, klummer eller artikler.	
Spørgsmål: Kan man spare tid med ChatGPT?	
Din vurdering	Lille eller ingen tidsbesparelse fra ChatGPT
Spørgsmål: Kan en med større ekspertise spare mere tid?	
Din vurdering	Samme tidsbesparelse for [journalisten] med større ekspertise

Block 4: Intended Adoption and Posterior Beliefs

18. Intentions to Use ChatGPT

Forventer du at benytte ChatGPT i løbet af de næste to uger?

- Ja
- Nej

19. Intentions to Use in Job Tasks [if 18='Ja']

Forventer du at benytte ChatGPT i de følgende arbejdsopgaver de næste to uger?
[Skrive kommentarer, klummer eller artikler.]

- Ja
- Nej

20. Posterior Beliefs: Individual Productivity of ChatGPT [all tasks]
Tidsbesparelse fra ChatGPT i eget job

Tag nu udgangspunkt i **dit eget job**, givet din egen erfaring og ekspertise som [journalist]. Antag, at du har adgang til ChatGPT, internettet, en computer med eksisterende programmer, samt andre hjælpemidler, du typisk anvender til at udføre en given arbejdsopgave.

Specificér de følgende arbejdsopgaver ud fra beskrivelsen nedenfor. Tilsvarende kvalitet betyder, at hvis andre tjekker arbejdet vil de ikke kunne vurdere, om du har løst opgaven med eller uden hjælp fra ChatGPT.

Stor tidsbesparelse fra ChatGPT
Angiv tidsbesparelse i arbejdsopgaven som "Stor", hvis ***ChatGPT mindst kan halvere tiden***, det tager for dig at løse arbejdsopgaven med tilsvarende kvalitet.

Lille eller ingen tidsbesparelse fra ChatGPT
Angiv tidsbesparelse i arbejdsopgaven som "Lille eller ingen", hvis ***ChatGPT ikke kan halvere tiden***, det tager for dig at løse arbejdsopgaven med tilsvarende kvalitet.

Angiv venligst dine bedste vurderinger, også selvom du er usikker på dem.

[Skrive kommentarer, klummer eller artikler.]

- Lille eller ingen tidsbesparelse fra ChatGPT
- Stor tidsbesparelse fra ChatGPT

21. Uncertainty of Individual Productivity Posterior
Hvor sikker er du i dine forrige vurderinger af tidsbesparelsen fra ChatGPT for dig selv?

- Meget usikker
- Usikker
- Sikker
- Meget sikker

22. Final Questions: Introduction
Vi vil her til sidst stille dig nogle opfølgende spørgsmål om din vurdering af ChatGPT i de forskellige arbejdsopgaver.

23.a Task Substitution
Hvis ChatGPT sparer tid i løsningen af en opgave, forventer du så at løse flere af den type opgaver i løbet af din arbejdsdag?
Angiv venligst din bedste vurdering, også selvom du er usikker på den.

- Ja
- Nej

23.b Task Substitution [if 23.a='Ja']
Hvis ChatGPT sparer tid i løsningen af en opgave, forventer du så, at den type opgaver vil fylde mere i din arbejdsdag, mens andre slags opgaver vil fylde mindre?
Opgaven kan fylde mere, hvis det større antal løste opgaver opvejer tidsbesparelsen i den enkelte opgaveløsning.

- Ja
- Nej

Block 5: Frictions

24. Beliefs Frictions [tasks with 12!=20]
Din vurdering af tidsbesparelserne fra ChatGPT for en gennemsnitlig [journalist] og dig selv var forskellige fra hinanden i de følgende arbejdsopgaver.

Angiv til hver af opgaverne årsagerne til, at dine vurderinger adskilte sig fra hinanden.

[Skrive kommentarer, klummer eller artikler.]

- Jeg ændrede mit syn på tidsbesparelsen fra ChatGPT.
- Tidsbesparelsen for en gennemsnitlig [journalist] er ikke relevant givet min ekspertise.
- Jeg tror ikke, at jeg kan finde ud af at bruge ChatGPT.
- Jeg anvender specialiseret software, der ikke kan integreres med ChatGPT.
- Jeg er bekymret for, om ChatGPTs svar er korrekte.
- Jeg er bekymret for ChatGPT's manglende evner på dansk.
- Andet, skriv venligst: [open text field]

S25: Adoption Frictions [tasks with 19='Nej' and 20='Stor tidsbesparelse fra ChatGPT']
Du angav for følgende arbejdsopgaver, at
1. ChatGPT kan give dig store tidsbesparelser i opgaveløsningen.
2. Du ikke forventer at benytte ChatGPT i opgaven de næste to uger.

Angiv årsager til, at du ikke forventer at benytte ChatGPT i arbejdsopgaven på trods af dens tidsbesparelser

[Skrive kommentarer, klummer eller artikler.]

- Jeg forventer ikke at stå over for opgaven de næste to uger.
- Jeg er pålagt restriktioner om brugen af ChatGPT i mit job.
- Jeg er bekymret for, om ChatGPT varetager mine data fortroligt.
- Det vil kræve oplæring, før jeg kan få gavn af ChatGPT.
- Jeg frygter, at ChatGPT på sigt vil gøre mig overflødig i jobbet.
- ChatGPT vil mindske min fornøjelse ved at udføre opgaven
- Jeg er bekymret for at blive afhængig af ChatGPT i opgaveløsningen
- Andet, skriv venligst: [open text field]

26. Information Sheets
Er du interesseret i at modtage uddybende materiale med eksempler på, hvordan en [journalist] kan anvende ChatGPT?
Materialet er udarbejdet af forskere fra Københavns Universitet og University of Chicago i samarbejde med danske brancheeksperter. Du kan tilgå materialet i slutningen af spørgeskemaet

- Ja
- Nej

Side 27.(a) End of Survey [if 26='Ja']
Mange tak for at deltage i undersøgelsen.
Du kan hente materialet, der er udarbejdet af forskere fra Københavns Universitet og University of Chicago i samarbejde med danske brancheeksperter, her: **ChatGPT for [journalister]**
Hvis du vinder en af præmierne, vil du få direkte besked i din e-Boks.
Vi vil muligvis kontakte dig igen om to uger med en kort opfølgningsundersøgelse. Vi håber meget, at du er villig til at deltage i denne korte opfølgning.

Side 27.(b) End of Survey [if 26='Nej']
Mange tak for at deltage i undersøgelsen.
Hvis du vinder en af præmierne, vil du få direkte besked i din e-Boks.
Vi vil muligvis kontakte dig igen om to uger med en kort opfølgningsundersøgelse. Vi håber meget, at du er villig til at deltage i denne korte opfølgning.

H Expert Assessments

This section shows the expert assessments and explanations for each job task in our survey. Table H.1 provides the English translations and Table H.2 is the original Danish versions.

Table H.1: Expert Assessments of Time Savings from ChatGPT (English Translation)

Occupation	Job Task	Time Savings	Explanation
Accountants & Auditors	Prepare detailed reports on audit findings.	Large	ChatGPT can draft and structure reports based on audit findings.
Accountants & Auditors	Supervise auditing of establishments, and determine scope of investigation required.	Small or no	The task requires human interaction and decision-making, which is beyond ChatGPT's capabilities.
Accountants & Auditors	Examine and evaluate financial and information systems, recommending controls to ensure system reliability and data integrity.	Large	ChatGPT can compile reports on financial and IT systems from provided data and text, identifying potential issues and suggesting controls for system reliability and data integrity.
Accountants & Auditors	Confer with company officials about financial and regulatory matters.	Small or no	The task requires human interaction, which is beyond ChatGPT's capabilities.
Accountants & Auditors	Prepare, examine, or analyze accounting records, financial statements, or other financial reports to assess accuracy, completeness, and conformance to reporting and procedural standards.	Large	ChatGPT can draft accounting documents and analyze accounting information and financial reports.
Accountants & Auditors	Compute taxes owed and prepare tax returns, ensuring compliance with payment, reporting, or other tax requirements.	Large	ChatGPT can provide guidance on tax legislation, calculate tax liabilities, and generate drafts of tax returns.
Customer Service Rep.	Confer with customers by telephone or in person to provide information about products or services, take or enter orders, cancel accounts, or obtain details of complaints.	Small or no	ChatGPT cannot speak with customers in person or over the phone.
Customer Service Rep.	Keep records of customer interactions or transactions, recording details of inquiries, complaints, or comments, as well as actions taken.	Large	ChatGPT can assist with logging and reporting customer contacts based on data from customer support.
Customer Service Rep.	Check to ensure that appropriate changes were made to resolve customers' problems.	Large	ChatGPT can prepare a structured report on whether the actions taken resolved the customer complaint.
Customer Service Rep.	Contact customers to respond to inquiries or to notify them of claim investigation results or any planned adjustments.	Large	ChatGPT can suggest responses to customer inquiries and complaints.
Customer Service Rep.	Determine charges for services requested, collect deposits or payments, or arrange for billing.	Small or no	ChatGPT cannot collect payments or deposits without additional software, but it can help set prices and issue invoices.
Customer Service Rep.	Review claims adjustments with dealers, examining parts claimed to be defective, and approving or disapproving dealers' claims.	Small or no	ChatGPT cannot inspect physical products or make final decisions regarding dealers.
Financial Advisors	Interview clients to determine their current income, expenses, insurance coverage, tax status, financial objectives, risk tolerance, or other information needed to develop a financial plan.	Small or no	The task requires human interaction, which is beyond ChatGPT's capabilities.
Financial Advisors	Recommend to clients strategies in cash management, insurance coverage, investment planning, or other areas to help them achieve their financial goals.	Large	ChatGPT can develop and formulate financial strategies and plans based on a client's financial situation and goals.
Financial Advisors	Manage client portfolios, keeping client plans up-to-date.	Small or no	ChatGPT cannot load financial data in real-time or make portfolio management decisions. However, it can generate reports on client portfolios and suggest strategies for portfolio management.
Financial Advisors	Implement financial planning recommendations, or refer clients to someone who can assist them with plan implementation.	Large	ChatGPT can provide step-by-step instructions for implementing a client's financial plan and suggest agents who can assist with the implementation.
Financial Advisors	Analyze financial information obtained from clients to determine strategies for meeting clients' financial objectives.	Large	ChatGPT can suggest and describe suitable financial strategies based on clients' financial situations and goals.
Financial Advisors	Answer clients' questions about the purposes and details of financial plans and strategies.	Large	ChatGPT can suggest answers to typical questions about financial plans and strategies.

Table H.1 (Continued): Expert Assessments of Time Savings from ChatGPT (English Translation)

Occupation	Job Task	Time Savings	Explanation
HR Professionals	Interpret and explain human resources policies, procedures, laws, standards, or regulations.	Large	ChatGPT can interpret and explain complex HR policies and regulations in easily accessible language.
HR Professionals	Hire employees and process hiring-related paperwork.	Small or no	The task requires human interaction and decision-making, which is beyond ChatGPT's capabilities, but it can automate employment-related paperwork.
HR Professionals	Inform job applicants of details such as duties and responsibilities, compensation, benefits, schedules, working conditions, or promotion opportunities.	Large	ChatGPT can generate detailed descriptions of jobs and employment terms.
HR Professionals	Prepare or maintain employment records related to events, such as hiring, termination, leaves, transfers, or promotions, using human resources management system software.	Small or no	ChatGPT cannot interact with HR software, but it can assist with text descriptions in contracts and similar documents.
HR Professionals	Address employee relations issues, such as harassment allegations, work complaints, or other employee concerns.	Small or no	The task requires human interaction and decision-making, which is beyond ChatGPT's capabilities.
HR Professionals	Schedule or conduct new employee orientations.	Small or no	The task requires human interaction and decision-making, which is beyond ChatGPT's capabilities.
IT Support	Answer user inquiries regarding computer software or hardware operation to resolve problems.	Large	ChatGPT can provide step-by-step instructions for solving typical hardware and software problems.
IT Support	Oversee the daily performance of computer systems.	Small or no	The task requires real-time monitoring and decision-making, which is beyond ChatGPT's capabilities, but it can analyze log files.
IT Support	Read technical manuals, confer with users, or conduct computer diagnostics to investigate and resolve problems or to provide technical assistance and support.	Large	ChatGPT can summarize technical manuals and assist with technical support by suggesting questions to users and possible solutions.
IT Support	Set up equipment for employee use, performing or ensuring proper installation of cables, operating systems, or appropriate software.	Small or no	The task requires physical work, which is beyond ChatGPT's capabilities, but it can provide instructions for the work.
IT Support	Enter commands and observe system functioning to verify correct operations and detect errors.	Small or no	ChatGPT cannot monitor or interact with other computer systems in real-time.
IT Support	Maintain records of daily data communication transactions, problems and remedial actions taken, or installation activities.	Large	ChatGPT can structure log files and notes into coherent reports.
Journalists	Write commentaries, columns, or scripts.	Large	ChatGPT can generate drafts, suggest changes, and provide ideas for articles, etc.
Journalists	Coordinate and serve as an anchor on news broadcast programs.	Small or no	The task requires human interaction, presence, and decision-making, which is beyond ChatGPT's capabilities.
Journalists	Examine news items of local, national, and international significance to determine topics to address, or obtain assignments from editorial staff members.	Large	ChatGPT can analyze and summarize news content and suggest topics to cover.
Journalists	Analyze and interpret news and information received from various sources to broadcast the information.	Large	ChatGPT can analyze, summarize, and translate news from various sources.
Journalists	Arrange interviews with people who can provide information about a story.	Small or no	ChatGPT cannot interact with people or manage calendars, but it can draft interview invitations.
Journalists	Present news stories, and introduce in-depth videotaped segments or live transmissions from on-the-scene reporters.	Small or no	The task requires physical presence, which is beyond ChatGPT's capabilities.
Legal Professionals	Prepare affidavits or other documents, such as legal correspondence, and organize and maintain documents in paper or electronic filing system.	Large	ChatGPT can suggest templates and drafts for legal documents and provide guidance on filing.
Legal Professionals	Prepare legal documents, including briefs, pleadings, appeals, wills, contracts, and real estate closing statements.	Large	ChatGPT can deliver drafts of legal documents based on entered details.
Legal Professionals	Prepare for trial by performing tasks such as organizing exhibits.	Small or no	The task requires human interaction, physical work, and decision-making, which is beyond ChatGPT's capabilities.
Legal Professionals	Investigate facts and law of cases and search pertinent sources, such as public records and internet sources, to determine causes of action and to prepare cases.	Small or no	ChatGPT cannot interact with databases, registries, or the internet without additional software.
Legal Professionals	Meet with clients and other professionals to discuss details of case.	Small or no	The task requires physical presence and human interaction, which is beyond ChatGPT's capabilities.
Legal Professionals	File pleadings with court clerk.	Small or no	The task requires the submission of physical documents or interaction with other online systems, which is beyond ChatGPT's capabilities.

Table H.1 (Continued): Expert Assessments of Time Savings from ChatGPT (English Translation)

Occupation	Job Task	Time Savings	Explanation
Marketing Professionals	Prepare reports of findings, illustrating data graphically and translating complex findings into written text.	Large	ChatGPT can write and structure reports from data and text, and can also suggest presentation forms for data.
Marketing Professionals	Collect and analyze data on customer demographics, preferences, needs, and buying habits to identify potential markets and factors affecting product demand.	Small or no	ChatGPT cannot collect data or interact with databases, but it can summarize and analyze text describing data.
Marketing Professionals	Conduct research on consumer opinions and marketing strategies, collaborating with marketing professionals, statisticians, pollsters, and other professionals.	Small or no	ChatGPT cannot conduct surveys or interact directly with people, but it can suggest survey questions and draft reports.
Marketing Professionals	Measure and assess customer and employee satisfaction.	Small or no	ChatGPT cannot conduct surveys or collect data, but it can suggest questionnaires and generate drafts of summary reports for the survey.
Marketing Professionals	Measure the effectiveness of marketing, advertising, and communications programs and strategies.	Small or no	ChatGPT cannot measure the effectiveness of marketing strategies without additional software, but it can suggest strategies for the study and generate draft reports.
Marketing Professionals	Attend staff conferences to provide management with information and proposals concerning the promotion, distribution, design, and pricing of company products or services.	Small or no	The task requires human interaction, which is beyond ChatGPT's capabilities.
Office Clerks	Operate office machines, such as computers, voice mail systems, photocopiers, and scanners.	Small or no	The task requires physical work, which is beyond ChatGPT's capabilities.
Office Clerks	Answer telephones, direct calls, and take messages.	Small or no	ChatGPT cannot operate telephones.
Office Clerks	Communicate with customers, employees, and other individuals to answer questions, disseminate or explain information, take orders, and address complaints.	Large	ChatGPT can suggest responses to typical inquiries, complaints, and orders.
Office Clerks	Compile, copy, sort, and file records of office activities, business transactions, and other activities.	Large	ChatGPT can prepare records following complex instructions and assist with filing and sorting documents by summarizing and editing text.
Office Clerks	Open, sort, and route incoming mail, answer correspondence, and prepare outgoing mail.	Small or no	The task requires physical work, which is beyond ChatGPT's capabilities.
Office Clerks	Compute, record, and proofread data and other information, such as records or reports.	Large	ChatGPT can prepare and check records and reports based on predefined guidelines.
Software Developers	Write, analyze, review, and rewrite programs, using workflow chart and diagram, and applying knowledge of computer capabilities, subject matter, and symbolic logic.	Large	ChatGPT can assist with writing code and analyzing errors in programs based on software developers' preferences and program outputs.
Software Developers	Correct errors by making appropriate changes and rechecking the program to ensure that the desired results are produced.	Large	ChatGPT can identify code errors and suggest corrections and checks based on error messages and other program outputs.
Software Developers	Perform or direct revision, repair, or expansion of existing programs to increase operating efficiency or adapt to new requirements.	Large	ChatGPT can provide code suggestions for auditing, debugging, and extending programs, and can also suggest ways to optimize the code.
Software Developers	Consult with managerial, engineering, and technical personnel to clarify program intent, identify problems, and suggest changes.	Small or no	The task requires human interaction, which is beyond ChatGPT's capabilities.
Software Developers	Conduct trial runs of programs and software applications to be sure they will produce the desired information and that the instructions are correct.	Large	ChatGPT can suggest code changes and debug programs, as well as explain program output in a reader-friendly format.
Software Developers	Consult with and assist computer operators or system analysts to define and resolve problems in running computer programs.	Large	ChatGPT can identify code errors and suggest corrections based on error messages, program output, and user input.
Teachers	Prepare students for later grades by encouraging them to explore learning opportunities and to persevere with challenging tasks.	Small or no	The task requires human interaction and understanding of the student's needs, which is beyond ChatGPT's capabilities.
Teachers	Adapt teaching methods and instructional materials to meet students' varying needs and interests.	Large	ChatGPT can tailor teaching methods and materials based on each student's learning style and interests.
Teachers	Establish and enforce rules for behavior and procedures for maintaining order among students.	Small or no	The task requires human interaction and understanding of students' behavior, which is beyond ChatGPT's capabilities.
Teachers	Prepare objectives and outlines for courses of study, following curriculum guidelines or requirements of states and schools.	Large	ChatGPT can suggest and structure learning objectives and courses in accordance with curricula or similar requirements.
Teachers	Prepare, administer, and grade tests and assignments to evaluate students' progress.	Small or no	Administering exams requires physical work, which is beyond ChatGPT's capabilities. ChatGPT can help formulate and assess exams and assignments, but automating many assessments would require additional software.
Teachers	Prepare materials and classrooms for class activities.	Small or no	The task requires physical work, which is beyond ChatGPT's capabilities.

Table H.2: Expert Assessments of Time Savings from ChatGPT (Original Danish Version)

Faggruppe	Opgave	Tidsbesparelse	Forklaring
Revisions- og regnskabsmedarbejder	Udarbejde detaljerede revisionsrapporter.	Stor	ChatGPT kan levere udkast til og strukturere rapporter baseret på revisionsresultater.
Revisions- og regnskabsmedarbejder	Overvåge revision af virksomheder og fastsætte omfanget af en sådan undersøgelse.	Lille eller ingen	Opgaven kræver menneskelig interaktion og beslutningstagning, hvilket er uden for ChatGPT's evner.
Revisions- og regnskabsmedarbejder	Undersøge finansielle systemer eller IT-systemer og anbefale kontroller af systemers pålidighed og dataintegritet.	Stor	ChatGPT kan udarbejde rapporter om finansieller og IT-systemer baseret på inputdata og -tekst. ChatGPT kan derudfra identificere potentielle problemer med og foreslå kontroller af systemers pålidighed og dataintegritet.
Revisions- og regnskabsmedarbejder	Rådføre sig med virksomhedsledelsen om økonomiske og regulatoriske forhold.	Lille eller ingen	Opgaven kræver menneskelig interaktion, hvilket er uden for ChatGPT's evner.
Revisions- og regnskabsmedarbejder	Forberede, undersøge eller analysere regnskabsdokumenter eller andre finansielle rapporter for at vurdere nøjagtighed, fuldstændighed samt overholdelse af rapporterings- og proceduremæssige standarder.	Stor	ChatGPT kan udarbejde udkast til regnskabsdokumenter samt analysere regnskabsoplysninger og finansielle rapporter.
Revisions- og regnskabsmedarbejder	Beregne skatteforpligtelser og udarbejde selvangivelser i overensstemmelse med skatteregler.	Stor	ChatGPT kan vejlede om skattelovgivning, beregne skatteforpligtelser og generere udkast til selvangivelser.
Kundesupporter	Tale med kunder personligt eller telefonisk for at informere om produkter eller tjenester, modtage ordrer, opsige konti eller indhente detaljer om kundeklager.	Lille eller ingen	ChatGPT kan ikke tale med kunder personligt eller telefonisk.
Kundesupporter	Registrere kontakt eller transaktioner med kunder vedrørende detaljer om forespørgsler, klager eller kommentarer samt besluttede foranstaltninger.	Stor	ChatGPT kan hjælpe med registrering og afrapportering af kundekontakt baseret på data fra kundesupporteren.
Kundesupporter	Kontrollere at passende foranstaltninger blev foretaget for at løse kunders problemer.	Stor	ChatGPT kan sammenholde aftalte foranstaltningerne med kundeklagen samt udarbejde en struktureret rapport for om foranstaltningerne løste kundens problemer.
Kundesupporter	Kontakte kunder for at besvare forespørgsler eller informere dem om udfaldet af klageundersøgelser eller planlagte foranstaltninger.	Stor	ChatGPT kan foreslå svar på kundeforespørgsler og klagesager.
Kundesupporter	Fastlægge pris på efterspurgte ydelser, udstede fakturaer, eller indsamle deposita og betalinger.	Lille eller ingen	ChatGPT kan ikke indsamle betalinger eller deposita uden yderligere software. ChatGPT kan dog fastsætte priser samt udstede fakturaer.
Kundesupporter	Gennemgå reklamationer med forhandlere, undersøge hævdede fejl i produkter, og godkende eller afvise forhandleres krav.	Lille eller ingen	ChatGPT kan ikke inspicere fysiske produkter eller tage endelige beslutninger over for forhandlere.
Økonomisk rådgiver	Interviewe klienter for at afgøre deres nuværende indkomst, udgifter, forsikringsdækning, skattestatus, økonomiske mål, risikotolerance eller andre oplysninger, der er nødvendige for at udvikle en økonomisk plan.	Lille eller ingen	Opgaven kræver menneskelig interaktion, hvilket er uden for ChatGPT's evner.
Økonomisk rådgiver	Anbefale klienter strategier inden for likviditetsstyring, forsikringsdækning, investeringsplanlægning eller andre områder for at hjælpe dem med at opnå deres økonomiske mål.	Stor	ChatGPT kan udvikle og formulere finansielle strategier og planer baseret på klientens økonomiske situation og mål.
Økonomisk rådgiver	Forvalte klientporteføljer og holde klientplaner opdaterede.	Lille eller ingen	ChatGPT kan ikke indlæse finansielle data i realtid eller træffe beslutninger om porteføljeforvaltning. ChatGPT kan dog generere rapporter om klientporteføljer samt foreslå strategier til porteføljeforvaltningen.
Økonomisk rådgiver	Gennemføre anbefalinger fra en økonomisk plan eller henvise klienter til nogen, der kan hjælpe dem med implementeringen.	Stor	ChatGPT kan give trinvise instruktioner, der implementerer en klients økonomiske plan. ChatGPT kan desuden foreslå aktører, der kan hjælpe med implementeringen.
Økonomisk rådgiver	Analysere økonomiske oplysninger om klienter for at fastlægge strategier, der opfylder klienters økonomiske mål.	Stor	ChatGPT kan foreslå og beskrive passende økonomiske strategier baseret på kunders finansielle situation og mål.
Økonomisk rådgiver	Besvare klienters spørgsmål om formålet for og detaljerne i økonomiske planer og strategier.	Stor	ChatGPT kan foreslå svar på typiske spørgsmål om økonomiske planer og strategier.

Table H.2 (Continued): Expert Assessments of Time Savings from ChatGPT (Original Danish Version)

Faggruppe	Opgave	Tidsbesparelse	Forklaring
HR-medarbejder	Fortolke og forklare politikker, procedurer, love, standarder eller reguleringer inden for HR-området.	Stor	ChatGPT kan fortolke og forklare komplekse HR-politikker og -reguleringer i et let tilgængeligt sprog.
HR-medarbejder	Ansætte medarbejdere og behandle ansættelsesrelateret papirarbejde.	Lille eller ingen	Opgaven kræver menneskelig interaktion og beslutningstagen, hvilket er uden for ChatGPT's evner. ChatGPT kan dog automatisere ansættelsesrelateret papirarbejde.
HR-medarbejder	Informere jobansøgere om ansættelsesvilkår, såsom jobindhold og -ansvar, løn og goder, arbejdstider og -forhold samt muligheder for forfremmelse.	Stor	ChatGPT kan generere detaljerede beskrivelser om jobbet og ansættelsesvilkår.
HR-medarbejder	Opbygge eller vedligeholde ansættelsesregistre i forbindelse med ansættelse, fratrædelse, orlov, omplacering eller forfremmelser ved hjælp af HR-software.	Lille eller ingen	ChatGPT kan ikke interagere med HR-software. ChatGPT kan dog hjælpe med tekstbeskrivelser i kontrakter mv.
HR-medarbejder	Håndtere medarbejderrelationer, herunder sager om chikane, arbejdsrelaterede klager eller andre bekymringer fra medarbejdere.	Lille eller ingen	Opgaven kræver menneskelig interaktion og beslutningstagning, hvilket er uden for ChatGPT's evner.
HR-medarbejder	Planlægge eller gennemføre introduktioner for nye medarbejdere.	Lille eller ingen	Opgaven kræver menneskelig interaktion og beslutningstagning, hvilket er uden for ChatGPT's evner.
IT-supporter	Besvare brugerhenvendelser vedrørende drift af computerhardware eller -software for at løse problemer.	Stor	ChatGPT kan give trinvise instruktioner til løsninger på typiske hardware- og softwareproblemer.
IT-supporter	Overvåge daglig performance af computersystemer.	Lille eller ingen	Opgaven kræver realtidsmonitorering og beslutningstagning, hvilket er uden for ChatGPT's evner. ChatGPT kan dog analysere logfiler.
IT-supporter	Læse tekniske manualer, kommunikere med brugere eller udføre computerdiagnostik for at undersøge og løse problemer eller yde teknisk hjælp og support.	Stor	ChatGPT kan opsummere tekniske manualer samt hjælpe med teknisk support ved at foreslå spørgsmål til brugeren og mulige løsninger.
IT-supporter	Opsætte udstyr til medarbejdere og udføre eller sikre korrekt installation af kabler, operativsystemer eller software.	Lille eller ingen	Opgaven kræver fysisk arbejde, hvilket er uden for ChatGPT's evner. ChatGPT kan dog give instruktioner til arbejdet.
IT-supporter	Indtaste kommandoer og observere computersystemers funktion for at bekræfte korrekt drift eller registrere fejl.	Lille eller ingen	ChatGPT kan ikke monitorere eller interagere med andre computersystemer i realtid.
IT-supporter	Føre log over daglige dataoverførsler, installationer og tekniske problemer samt afhjælpende foranstaltninger.	Stor	ChatGPT kan strukturere logfiler og noter til sammenhængende rapporter.
Journalist	Skrive kommentarer, klummer eller artikler.	Stor	ChatGPT kan generere udkast, foreslå ændringer og give idéer til artikler mv.
Journalist	Være vært på og tilrettelægge nyhedsudsendelser.	Lille eller ingen	Opgaven kræver menneskelig interaktion, tilstedeværelse og beslutningstagning, hvilket er uden for ChatGPT's evner.
Journalist	Gennemgå nyheder af lokal, national og international betydning for at fastlægge hvilke emner, der skal behandles eller få tildelt historier fra redaktionen.	Stor	ChatGPT kan analysere og opsummere nyhedsindhold samt foreslå emner til behandling.
Journalist	Analysere og fortolke nyheder og information fra forskellige kilder for at videreformidle informationen.	Stor	ChatGPT kan analysere, opsummere og oversætte nyheder fra forskellige kilder.
Journalist	Arrangere interviews med personer, der kan give information om en historie.	Lille eller ingen	ChatGPT kan ikke interagere med mennesker eller administrere kalendere. ChatGPT kan dog formulere interviewinvitationer.
Journalist	Præsentere nyhedshistorier og introducere dybdegående videosegmenter eller live transmissioner fra journalister på stedet.	Lille eller ingen	Opgaven kræver fysisk tilstedeværelse, hvilket er uden for ChatGPT's evner.
Juridisk medarbejder	Forberede erklæringer eller andre dokumenter såsom juridisk korrespondance, organisere og vedligeholde dokumenter i et papirbaseret eller elektronisk arkivsystem.	Stor	ChatGPT kan foreslå skabeloner og udkast til juridiske dokumenter samt give vejledning til arkivering.
Juridisk medarbejder	Forberede juridiske dokumenter, herunder processkrifter, forsvars- og anklageskrifter, appeller, testamenter, kontrakter og ejendomshandelsdokumenter.	Stor	ChatGPT kan levere udkast til juridiske dokumenter baseret på indtastede detaljer.
Juridisk medarbejder	Forberede en retssag såsom at udarbejde bevismateriale.	Lille eller ingen	Opgaven kræver menneskelig interaktion, fysisk arbejde og beslutningstagning, hvilket er uden for ChatGPT's evner.
Juridisk medarbejder	Undersøge fakta, omstændigheder og lovgivning i sager og søge relevante kilder, såsom offentlige registre og internetkilder, for at afklare årsager til søgsmål og forberede sager.	Lille eller ingen	ChatGPT kan ikke interagere med databaser, registre eller internettet uden yderligere software.
Juridisk medarbejder	Møde klienter og fagfolk for at drøfte sagsdetaljer.	Lille eller ingen	Opgaven kræver fysisk tilstedeværelse og menneskelig interaktion, hvilket er uden for ChatGPT's evner.
Juridisk medarbejder	Indsende processkrifter til retssekretæren.	Lille eller ingen	Opgaven kræver indsendelse af fysiske dokumenter eller interaktion med andre online systemer, hvilket er uden for ChatGPT's evner.

Table H.2 (Continued): Expert Assessments of Time Savings from ChatGPT (Original Danish Version)

Faggruppe	Opgave	Tidsbesparelse	Forklaring
Marketing medarbejder	Udarbejde rapporter, der illustrerer data grafisk og formidler komplekse sammenhænge i tekst.	Stor	ChatGPT kan skrive og strukturere rapporter ud fra data og tekst. ChatGPT kan tilmed foreslå præsentationsformer for data.
Marketing medarbejder	Indsamle og analysere data om kundeoplysninger, præferencer, behov og købsvaner for at identificere potentielle markeder og faktorer, der påvirker produkters efterspørgsel.	Lille eller ingen	ChatGPT kan ikke indsamle data eller interagere med databaser. ChatGPT kan dog opsummere og analysere tekst, der beskriver data.
Marketing medarbejder	Undersøge forbrugerholdninger og marketingstrategier i samarbejde med marketingmedarbejdere, statistikere, meningsmålere og andre fagfolk.	Lille eller ingen	ChatGPT kan ikke udføre undersøgelser eller interagere direkte med mennesker. ChatGPT kan dog foreslå undersøgelsesspørgsmål og udarbejde rapporter.
Marketing medarbejder	Måle og vurdere kunde- og medarbejdertilfredshed.	Lille eller ingen	ChatGPT kan ikke udføre undersøgelser eller indsamle data. ChatGPT kan dog foreslå spørgeskemaer samt generere udkast til opsummerende rapporter for undersøgelsen.
Marketing medarbejder	Måle effekten af marketing, reklame og kommunikationsindsatser og -strategier.	Lille eller ingen	ChatGPT kan ikke måle effekten af marketingstrategier mv. uden yderligere software. ChatGPT kan dog foreslå strategier for undersøgelsen samt generere udkast til rapporter.
Marketing medarbejder	Deltage i medarbejdermøder for at give information og forslag vedrørende markedsføring, distribution, design og prissætning af virksomhedens produkter eller tjenester.	Lille eller ingen	Opgaven kræver menneskelig interaktion, hvilket er uden for ChatGPT's evner.
Kontoransat eller sekretær	Betjene kontormaskiner såsom computere, telefonsvarere, kopimaskiner og scannere.	Lille eller ingen	Opgaven kræver fysisk arbejde, hvilket er uden for ChatGPT's evner.
Kontoransat eller sekretær	Besvare telefonopkald, viderestille opkald og modtage beskeder.	Lille eller ingen	ChatGPT kan ikke betjene telefoner.
Kontoransat eller sekretær	Kommunikere med kunder, brugere, medarbejdere og andre for at besvare spørgsmål, formidle eller forklare information, modtage ordrer og håndtere klager.	Stor	ChatGPT kan foreslå svar på typiske forespørgsler, klager og ordrer.
Kontoransat eller sekretær	Udarbejde, sortere og arkivere optegnelser over kontor-, forretnings- og andre aktiviteter.	Stor	ChatGPT kan udarbejde optegnelser efter komplekse instruktioner samt assistere arkivering og sortering af dokumenterne ved at opsummere og redigere tekst.
Kontoransat eller sekretær	Åbne, sortere og videresende indgående post, besvare henvendelser og forberede udgående post.	Lille eller ingen	Opgaven kræver fysisk arbejde, hvilket er uden for ChatGPT's evner.
Kontoransat eller sekretær	Bearbejde, registrere og tjekke data og anden information såsom optegnelser eller rapporter.	Stor	ChatGPT kan udarbejde og tjekke optegnelser og rapporter baseret på foruddefinerede retningslinjer.
Softwareudvikler	Skrive, analysere, gennemgå og ændre programmer, fx. ved hjælp af rutediagrammer samt ved anvendelse af viden om emnet, computers kapacitet og symbolsk logik.	Stor	ChatGPT kan hjælpe med at skrive kode og analysere fejl i programmer baseret på softwareudviklerens ønsker og programoutput.
Softwareudvikler	Rette fejl i programmer og kontrollere, at ønskede resultater opnås.	Stor	ChatGPT kan identificere kodefejl samt foreslå rettelser og kontroller ud fra fejlmeddelelser og andet programoutput.
Softwareudvikler	Udføre eller lede revision, fejlretning eller udvidelse af eksisterende programmer for at øge driftseffektiviteten eller møde nye krav.	Stor	ChatGPT kan give kodeforslag til revision, fejlretning og udvidelse af programmer. ChatGPT kan desuden foreslå måder at optimere koden.
Softwareudvikler	Konsultere ledelses-, ingeniør- og teknisk personale for at afklare målet for et computerprogram, identificere problemer og foreslå ændringer.	Lille eller ingen	Arbejdsopgaven kræver menneskelig interaktion, hvilket er uden for ChatGPT's evner.
Softwareudvikler	Teste programmer og softwareapplikationer for at sikre, at de genererer det ønskede output og at instruktionerne er korrekte.	Stor	ChatGPT kan foreslå kodeændringer og debugge programmer samt forklare programoutput i et læsevenligt format.
Softwareudvikler	Konsultere og hjælpe IT-teknikere eller systemanalytikere med at identificere og løse problemer i forbindelse med kørsel af computerprogrammer.	Stor	ChatGPT kan identificere kodefejl samt foreslå rettelser ud fra fejlmeddelelser, programoutput samt input fra brugeren.
Lærer	Forberede eleverne til senere klassetrin ved at motivere dem til at udforske læringsmuligheder og støtte dem i at løse udfordrende opgaver.	Lille eller ingen	Opgaven kræver menneskelig interaktion samt forståelse for elevens behov, hvilket er uden for ChatGPT's evner.
Lærer	Tilpasse undervisningsmetoder og -materialer for at imødekomme elevers forskellige behov og interesser.	Stor	ChatGPT kan målrette undervisningsmetoder og -materialer baseret på den enkelte elevs læringsstil og interesser.
Lærer	Fastlægge og håndhæve regler for adfærd og procedurer for at opretholde orden blandt eleverne.	Lille eller ingen	Opgaven kræver menneskelig interaktion samt forståelse for elevers adfærd, hvilket er uden for ChatGPT's evner.
Lærer	Forberede undervisningsmål og -forløb i overensstemmelse med læseplaner eller krav fra stat, kommune eller skole.	Stor	ChatGPT kan foreslå og strukturere læringsmål og -forløb i overensstemmelse med læseplaner eller lignende krav.
Lærer	Formulere, afholde og bedømme prøver og opgaver for at vurdere elevers udvikling.	Lille eller ingen	Afholdelse af prøver kræver fysisk arbejde, hvilket er uden for ChatGPT's evner. ChatGPT kan hjælpe med at formulere og bedømme prøver og opgaver, men automatisering af mange bedømmelser vil kræve yderligere software.
Lærer	Indrette klasseværelser og fysiske materialer til undervisningsaktiviteter.	Lille eller ingen	Opgaven kræver fysisk arbejde, hvilket er uden for ChatGPT's evner.

I Information Sheets

We create information sheets for each of the 11 occupations, containing three ChatGPT prompts that exemplify use cases in their exposed job tasks. We use GPT to generate example prompts for the exposed job tasks, which we then manually reviewed and tested. In the survey, workers may sign up for the sheets, thus revealing their interest in information about using ChatGPT. We also track participants' eventual clicks on the hyperlinked materials. The following page shows the information sheet for journalists (original Danish version). The remaining information sheets are available at `www.andershumlum.com/s/sheets.zip`.

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ChatGPT for journalister

ChatGPT er en chatbot med kunstig intelligens. Arket her hjælper dig i gang med at bruge værktøjet.

Tilgå ChatGPT

1. Besøg **chat.openai.com**.
2. Følg instruktionerne på skærmen for at oprette en gratis konto.

Hjemmesiden er på engelsk, men chatbotten kan forstå og skrive dansk.

Sådan kan du bruge ChatGPT

ChatGPT bruges ved at skrive forespørgsler ("prompts") i chatten. Vi har nedenfor samlet eksempler på, hvordan ChatGPT kan anvendes i typiske arbejdsopgaver for en journalist.

Arbejdsopgave: Skrive kommentarer, klummer eller artikler.

Prompt: "Jeg arbejder på en klumme om den stigende tendens til fjernarbejde. Kan du skrive et udkast, der diskuterer fordele og ulemper ved stigende fjernarbejde?"

Arbejdsopgave: Gennemgå nyheder af lokal, national og international betydning for at fastlægge hvilke emner, der skal behandles eller få tildelt historier fra redaktionen.

Prompt: "Jeg har samlet disse avisartikler om ny teknologi på arbejdsmarkedet. Kan du opsummere artiklernes indhold og foreslå tre debatemner? [Indsæt artikler]"

Arbejdsopgave: Analysere og fortolke nyheder og information fra forskellige kilder for at videreformidle informationen.

Prompt: "Jeg har modtaget reportager fra tre forskellige kilder om en politisk begivenhed i [Land Y]. Kan du analysere reportagerne, opsummere deres vigtigste punkter og foreslå en vinkel til et indslag i en nyhedsudsendelse? [Indsæt reportager]"

Gode råd til brug af ChatGPT

- ✓ **Vær specifik:** Jo mere præcist dit spørgsmål er, desto mere nøjagtigt og relevant bliver svaret.
- ✓ **Gennemgå svar:** Tjek altid om svarene er korrekte, især ved kritiske beslutninger.
- ✓ **Bevar fortrolighed:** Del ikke personlige, fortrolige eller følsomme oplysninger i chatten.

Denne guide er udarbejdet af forskere ved Økonomisk Institut (KU) i oktober 2023. For spørgsmål, kontakt venligst aph@econ.ku.