**Should US Tech companies implement a four-day work week?**

*Evaluating the implications of a four day work week.***Research Proposal**

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**Overview**

* The year 2020 brought on a cultural shift and redefined how we work. The challenges associated with closing down offices include(d) decreased connectivity, furloughs, and even layoffs. However, the implementation of work-from-home has brought new workforce strategies to light as some firms and employees have seen increased and/or steady productivity with this change.
* As companies start to slowly come back into offices after the pandemic, some employees are hesitant to return to their previous commutes to work while also questioning the pre-2020 status quo in terms of work schedules.
* To avoid employee churn and attract top talent, companies need to come up with innovative but effective workforce strategies for flexible work schedules such as four-day work-week, 6-hour work days, staggered schedules, hybrid location models etc.
* This research will focus on quantifying the benefits of a four-day work week. The goal is to conduct an unbiased evaluation of this workforce strategy both from a management perspective as well as from a worker empowerment perspective. This research aims to provide the audiences all the information required to make an informed decision about the future of the most important asset any organization has, their work partners.
* Target Audience(s):   
  + (1) HR, leadership, hiring and line managers at tech companies who want to use a four day work-week and work location flexibility as an employee retention strategy.
  + (2) Union leaders, workers rights advocates, and community organizers concerned with the wellbeing of employees, especially employees from minority, and financially disadvantaged backgrounds, women, and single parent households.

**Research Question**

* Do four-day work weeks have a neutral to positive impact on employee productivity?   
  + Our primary metric will be worker productivity, defined by revenue generated per employee hour worked.
  + We will take this measurement across two populations; one being the population of employees working at companies with no four day work weeks, and the other being the population of employees working at companies with four day work weeks.
* Do four-day work weeks boost employee job satisfaction and employee happiness?
  + We will utilize secondary data from Iceland’s Four Day work week study, where employee job satisfaction is measured utilizing time series.
* Do four-day work weeks reduce employee attrition?
  + Our primary metric will be employee attrition, as defined by employees who have departed a place of work with no four hour work week within the past 12 months, compared to the number of employees who have not departed a place of work with no four hour work week.
  + Sub-Questions:  
    - In companies with four day work weeks, with less attrition than companies without four day work weeks; can employee retention be accurately attributed to the four day work week?

**Data**

* Primary Data:  
  + Worker Productivity With and Without Four Day Work Weeks:  
    - We will gather time series data from companies before and after the implementation of four hour work weeks.
    - We will measure worker productivity before and after the implementation of four day work weeks.
  + Worker attrition with and without four day work weeks:  
    - We will gather time series data from companies before and after the implementation of four hour work weeks.
    - We will measure whether attrition is reduced after implementation of four hour work weeks.
  + Cause of worker retention (if present) in companies with four day work weeks:  
    - The survey will be designed to capture the following:
* NPS/Likelihood to recommend scores with relation to the company.
* Rating on a scale of 0-5 to capture empirical score related to job satisfaction, happiness, worker retention  
  + - * Verbatim employee feedback related to job satisfaction, happiness, worker retention, and four-day work week
      * Employee rating and feedback specifically to gather information about role of four-day work week on employee satisfaction and retention
* Secondary Data:  
  + Starting in 2015, and ending in 2019, the Government in Iceland conducted a study on a four day work week. Their methodology is sound and their data collection exhaustive. We will make reference to both their data and their conclusions in attempting to measure employee job satisfaction and employee happiness after the implementation of four day work weeks.

**Study Design**

This research has multiple facets that can affect the validity of the final results. To create a robust study, we will employ multiple measurement techniques as necessitated by the metrics:

**Employee Productivity and Employee Attrition**

* Using time series data collected from companies that employ four-day work week, we will monitor the productivity and attrition rates for 6 months before and after the change occured. We will normalize the data to adjust for seasonality by using smoothing techniques. We will then calculate the incremental difference of  **post-change** versus **pre-change** metrics using statistical techniques described in the ‘Statistical Methods’ section below.
* Using the secondary data source (i.e. [Iceland four day work week study](https://autonomy.work/wp-content/uploads/2021/06/ICELAND_4DW.pdf)), we will also highlight the key findings that showcase the improvement in productivity for similar populations

**Employee Job Satisfaction and Employee Happiness**

We will use survey responses gathered from employees of companies offering four-day work week to evaluate impact on self reported job satisfaction, happiness and retention

* Approach 1: We will conduct a sentiment analysis on the verbatim feedback to elevate the key reasons affecting employee satisfaction, happiness, and retention. From the feedback, we will also isolate the sentiment related to the four-day work week policy and quantify the effect of the same on worker retention and job satisfaction.
* Approach 2: We will use the likelihood scores to calculate employee NPS with respect to their companies and use the ratings to measure the impact of worker satisfaction, happiness and retention on the NPS.

**Statements of Contribution**

* Vineeta Kumar: I created the original pitch and collated the information on deliverables and due dates. Created a high level skeleton for the project proposal and filled in the overview, research questions and expanded on the study design as well. With regards to the group experience, I will update my feedback for the final project submission.
* Don Irwin: Assisted in project selection. Created web page and github repository of consolidated reference material. Contributed first draft of many sections, in order to facilitate discussions. Located existing studies on this subject. The group experience thus far has been defined by a healthy exercise in the five steps of the Socratic approach: 1) Wonder, 2) Hypothesis, 3) Elenchus (refutation and cross-examination), 4) Acceptance/rejection of the hypothesis, and 5) Action. Additional feedback will be submitted at the conclusion of the project.
* Russell Ude: <First, include a brief statement of your contribution to the project. Aim for a statement that is fewer than 100 words. Second, reflect on your group’s experience. For example, what went particularly well? If you had to do it again, how could you improve the design to better answer the research question? Also aim for fewer than 100 words.>