**Final Presentation – Max 30 min**

* Introduction (Kandis / Ruben) 1 min each
  + Kandis
    - Kandis Lamke
    - Colorado Native living in Denver, CO
    - CPA in accounting for 20 years, grew up in small business and have always been an observer of all things business.
    - I chose the Data Science program because I saw a great way to marry my current knowledge, skills and abilities with tools that will help me bring a unique aspect to the accounting and consulting fields and to change the way small business makes strategic decisions. As a natural observer and analyzer, Data Science was a clear choice when it came to the next step in my career growth. This program has given me the opportunity to gain experience and understanding in all areas of the Data Science pipeline and has set me up for success in future opportunities to employ my skills. It has challenged me to think critically and creatively, but most importantly, objectively.
  + Ruben
    - Name
    - City
    - Background
    - Why become a Data Scientist?
* Summary of Project 2 min
  + Executive Summary:
    - We chose to do a project based on real data from an actual company. We gathered raw data and benchmarks from the Professional Employer Organization or PEO Industry. This industry was of interest due to Kandis’ employment and the opportunity to put to work our knowledge, skills and abilities learned in the Data Science program - answering real questions from real business owners making real decisions. We had conversations with the managing partners and asked questions about the answers they were seeking. We saw a need and an opportunity to transform raw data into measurements that would mean something to them and provide interactive information that can be used to predict future outcomes based on current and past data trends.
  + These are the questions the business owners were looking to answer:
    - What is the annual gross profit by worksite employee (employees the company processes payroll for outside of the internal team) and how does that compare to industry benchmarks?
    - What is the worksite employee per internal employee ratio (including sales) and how does that compare to industry benchmarks?
    - Predict how many internal employees the company will need in each department to reach either revenue goals or number of worksite employee goals.
    - Predict when the company will reach either revenue goals or worksite employee goals based on prior year growth trends.
  + For a small start-up company without a lot of extra resources, being able to answer these questions and take action based on those answers is invaluable.
* Technologies utilized 5 min
  + Technology #1 – **R Programming**
    - What it is
    - How it was applied
    - Example
    - Knowledge gained
  + Technology #2 – **Python Programming**
    - What it is
    - How it was applied
    - Example
    - Knowledge gained
* Full functionality of the Project 5 min
  + Model demonstration
  + Coding samples
  + Key findings / highlights
* Conclusion 2 min
  + What we found was

* Lessons learned 2 min
  + The lessons we learned:
    - Some information just cannot be quantified.
      * Predicting future revenue based on the number of internal employees is likely inaccurate as many other factors such as efficiency level cannot be included and are therefore not considered when making conclusions. One must assume that additional people will work as efficiently and effectively as the current workforce does, but we all know that in real life, it doesn’t always work out that way.
      * Correlation and causation are two very different things.
      * Although benchmarks are great, there are many other factors that determine the success or failure as a company that cannot be quantified.
* Next steps 2 min
* Q & A 5 min