# How to start a successful data science initiative, project and team

Annie Flippo PyLadies LA January 2020

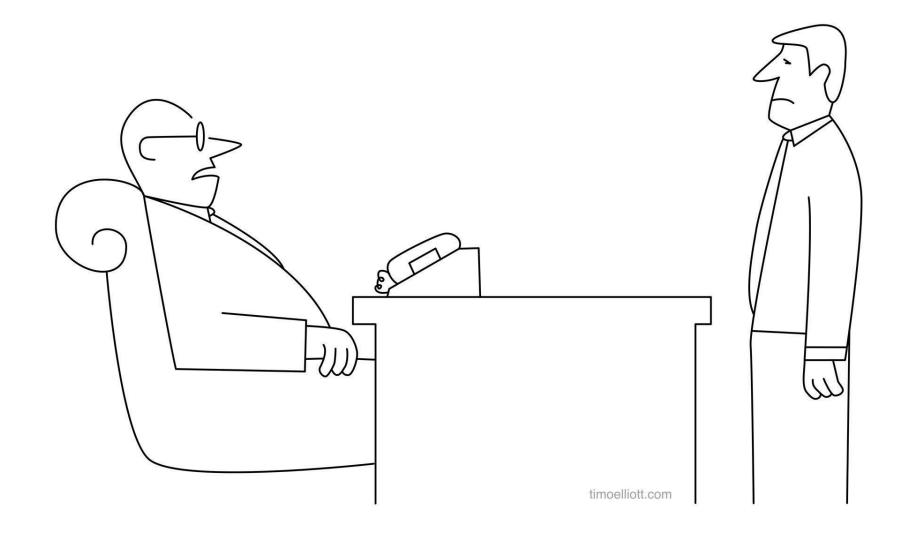
# **About Me**



Annie Flippo

Data Science Expert | Predictive Analytics | ML & AI | Skier

Annie Flippo works as the Director of Data Science & Analytics at inMarket, a mobile advertising platform. Her focus is to make data science accessible, intuitive and fun to learn for everyone. She is a tinkerer, a mentor and a robot builder in her free time.



"The only Data Science letters I care about are the four Ms – Make Me More Money!"









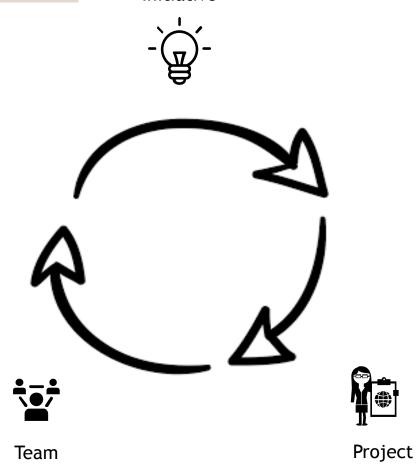
Initiative

Project

Team

# **Endeavor**

Initiative



## Initiative



- Brainstorm big ideas
- Make new qualitative research
- Want to solve problems using data
- Improve products, services or processes systematically with data

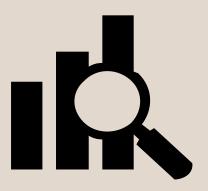


# **Opportunity Cost**

The cost is what you give up in order to engage in some activity over all other activities



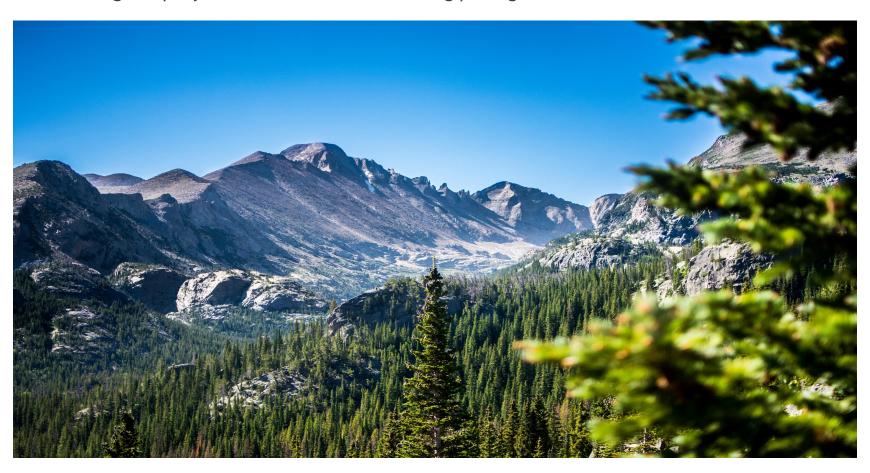
# **Comparative Advantage**



The ability to produce a better product or service than anyone else

# Initiative: Climb The Highest Mountain

Mountaineering company: want to show off our touring packages



# Project



- Realization of the initiative
- Define what you're trying to solve and less on how
- Include stakeholders, executive sponsors, product managers, financing, analysts, engineers, QA, support & more
- Deliverables
- Timelines
- What does success/failure look like?



# Project: Climb Mount Everest

What does success look like?





### Success?

Is this what we have in mind?

Did we spell out the metric for success?

Are we done?

### Success

Climb to the summit was implied

In retrospect, everyone can agree this is the measure for success



Image reference: summitclimb.com

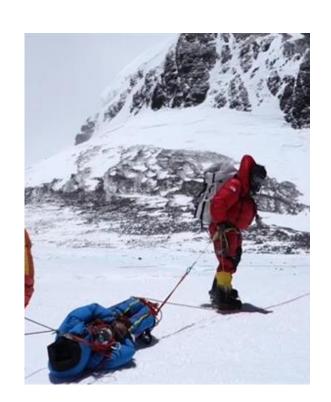
# **Failure**

### Failure 1

Know when to turn around & make a change



Image reference: vancouversun.com



Failure 2

A much harder failure

# **Team**

### Team behind the team



Image reference: Royal Geographic Society/National Geographic

### **Team**



### Team is divided into different focuses:

### Data

- Where & what is the data?
- Generated or purchased
- Data Engineers
- Cloud / DevOps / Security Teams

### Analytics / Modeling / Prediction

- Data Analysts
- Data Scientists

### **Production**

- Software / Machine Learning Engineers
- Operations Team







#### **Existing member**

Train & Grow

There will be existing members in the group, how to engage them?



#### Transfers from other team

Re-train & Grow

There will be members on other teams who will want to work on your projects?



#### Hiring new member

Process to Hire Well

You will need to hire new staff.

Hire to fit your needs now but also future needs.



#### Retention

Keep What You've Got

Now, you have a well functioning team, how do you retain your talent?



#### Succession

Who Will Come After

Who will take your place when you moved on?

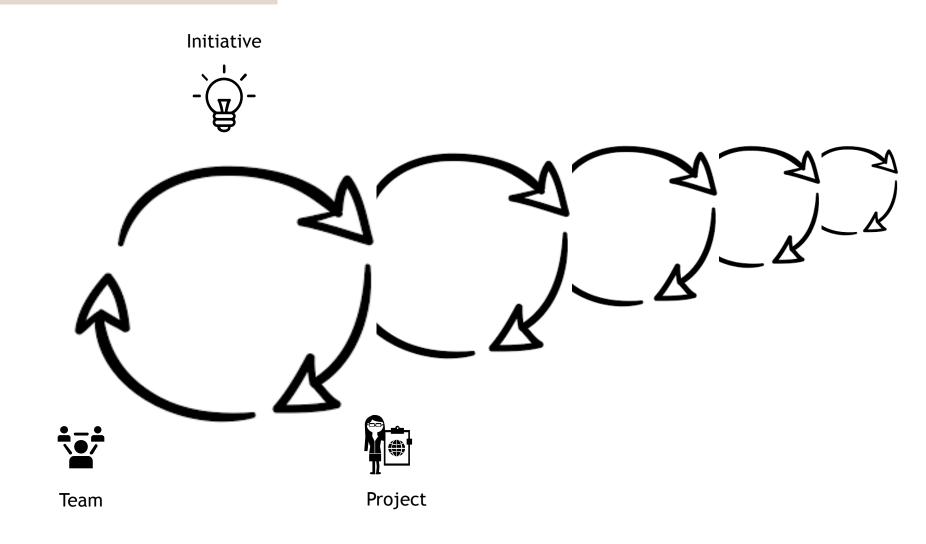


### Team Management Life Cycle

Prepare for Anything

Have a strong pipeline of colleagues. Start an internship program.

# **Endeavors**



# Thank You





