

"Personal" Analytics: a game changer

28.05.2020

Arka D.

vistack



https://vistack-x.github.io/



Overview

Vistack is a data driven, personal analytics venture aimed at changing the current scenario with a question to think about – is it possible to pursue data-driven decision making in our personal lives?

Back in 2012, Stephen Wolfram--the brain behind the Wolfram site, analysed his emails, keystrokes, phone calls, meetings, events, and walking habits which helped him to draw very meaningful insights. He called out that storing personal data at the minimum provides the benefit of "memory augmentation" – the ability to recollect events, incidents, and actions from data archives as an extension of one's own memory.

For the more analytically inclined, he was able to show that more meaningful insights could be drawn from personal data. For example, analyzing his email archive helped him realize that most issues at his workplace resolved themselves by the end of the day without his intervention. His intervention would only have resulted in wastage of his time. [1]

Further, research at Karmaa Labs has conclusively determined--"We can identify activities, classify or group participants to activities, get additional insights of activity durations and patterns of individuals involved in those activities. One can exploit the rich scope such insights have to offer in developing real time human asset monitoring in highly secured installations, tracking Elderly or population with movement disability or illness for any emergencies based on movement patterns, determining if a person is under fatigue or not and so on and so forth. The application domains are as broad as from healthcare to security services and fitness monitoring." [2]

Goals

- 1. Efficient "personal data analytics", with focus on the human and *humane* face of data.
- 2. Drawing meaningful conclusions--fast and in a way that is easy for the end user.
- 3. Since personal data is involved--absolute trust has to be maintained between the end user and the venture.
- 4. Data Security has to be maintained and adhered to.

Specifications

With a huge number of Smartphone users in India, and it's ever increasing number--makes it the prime target for us.

Further, According to International Data Corporation's (IDC) Worldwide Quarterly Wearable Device Tracker, basic wearables dominated the market with a 96.2% share, up 177% YoY in 2019 while smart wearables accounted for 3.8%

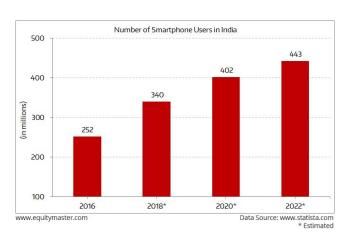
of the overall shipments rising by 49.5%.

In the last quarter of the year, wearables vendors shipped a total of 5.1 million units, making it the seventh consecutive quarter of double-digit growth in shipments, IDC said

Smartwatches continued to lead the watch category with 61.1% share in 2019 and grew 53.6% from the previous year. Fossil was the



This makes our venture rich for market penetration.



How can we go about doing it?

1. Grab Everything With An API: If you want to use data to make lives better, you need to first get the data. It isn't just your Withings scale weight or some pedometer data. If you want to find correlations to deliver insight, you need to get as much data as possible.

Every word written: email, docs, dropbox, sms, tweets, status updates.

Every piece of content created: mobile camera roll, instagram, facebook, vine.

Every piece of content consumed: amazon, itunes, netflix, spotify, rdio.

Every place you go. Every dollar you spend.

You won't start with 100 services, but you'll get there soon enough. Some people will be obsessed with adding more data. They are your super users and you just need to listen to what they want.

2. Avoid Data Entry, But Make It Easy

Things that don't have APIs still matter. It is hard to track meals, caffeine, alcohol, sugar water, nicotine, sex, sleep and exercise. It isn't a coincidence these things correspond with common goals to improve. We don't track them, which makes control harder.

Tracking apps are narrowly focused around one thing (food tracking, but not sleep or anything else). Another problem is that the interfaces dive right into details at the expense of making recording anything at all too hard. This makes habit forming and on-boarding terrible. If you need to type, the interface is already too complicated. Most food tracking apps focus on getting an accurate calorie count, which is absurdly complicated. Each layer in that sandwich is going to take 20 clicks.

I propose a simple data entry framework: click a button, and that event gets tracked. Here is an interface that would let you record caffeine, alcohol, sex, sleep, and meals. Each meal also shows portion size and goodness of food. What does good or bad mean? Whatever you want.

Short journal events are a good format too. Such entries can be short bits that will help in other areas, like annotating graphs, like the graph below.

3. Mobile Matters

You can't avoid building mobile apps. It makes connecting to valuable data sources easier. Think location tracking, messaging, movement. It makes data entry easier too, with a fast native interface a click away. Perhaps most importantly, it makes prodding users to do the right thing much easier, and that includes doing the requisite data entry.

You can get creative with what you track too. Think battery levels, phone docking, alarm clocks to help track sleep, and many other things.

4. Emphasize Insight Over Visualization

Extracting insight from a graph is actually really hard, and many people find graphs confusing. Many services in the space show graphs without highlighting what matters. This is distracting from the real goal. Remember Nicholas Feltron? Maybe I lose some design cred for saying this, but I didn't learn much from his report. Insight and beauty aren't mutually exclusive, but beauty is so compelling it can force itself into the open without utility.

You might want to try something minimal at the start. Don't. Graphs without the ability to manipulate data are worse than nothing. Control and agility means users can try to find their own insight before you're sophisticated enough to do it for them.

5. Machine Learning Matters

You're building a machine learning company if you're in this space, whether you like it or not. If you don't have a focus here, that just means you're doing a bad job. Your mission statement is to user data to improve lives, so it just isn't reasonable to avoid becoming experts in finding insight from data.

The big question here is to what degree your models need to be customized for different goals. You should seriously consider seeking out what problems many users have, and finding ways to help with diving into their data. It doesn't scale, but the point is you're building models for different situations.

6. Social Support & Distribution

Getting friends involved is an effective way to hit a personal goal.

>>This entire six points was based on the article--[http://blog.kirigin.com/personal-analytics]. Here the author Ivan Kirigin in his 2012 blog post. These six points are the watch word on which I hope--we all can build a successful business venture. Suggestions are most welcome!

References

- 1. Read more at: https://yourstory.com/2018/08/use-data-analytics-personal-life
- 2. Human Activity Prediction using ML,Dr. Anish R.C. https://www.analyticsinsight.net/human-activity-prediction-using-machine-learning/
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