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MGT1022 LEAN START-UP MANAGEMENT
DIGITAL ASSIGNMENT II

① The eight notorious vanity metrics to be avoided are :

- (i) Number of Hits : This is a metric from the early foolish days of the Web . If you have a site with many objects on it , this will be a big number . Count people instead .
- (ii) Number of Page Views : This is slightly better than hits , since it counts the number of times some one requests a page . Unless your business model depends on page views , count people instead .
- (iii) Number of Visits : This method is a fail since one person could be visiting a hundred times .
- (iv) Number of Unique Visitors : It tells about how many people saw the Home Page and nothing about what they did and time spent .
- (v) Number of followers/friends/likes : This is nothing more than a popularity contest , unless you know how many followers will do your bidding when asked .
- (vi) Time on site / number of pages : These are poor substitute for actual engagement or activity unless the business is tied to this behaviour .
- (vii) Emails collected : You should know how many people on the mailing list will open the email and act on what is inside them .
- (viii) Number of Downloads : This might affect the rankings in App Store but don't lead to real value measure activations or account creations .

- ② The four Rumsfeld's quadrants are :
- (i) The Known Knowns : These are facts that may be wrong and should be checked against data.
 - (ii) The Known Unknowns : These are questions we can answer by reporting, which we should baseline and automate.
 - (iii) The Unknown Knowns : These are intuitions which we should quantify and teach to improve effectiveness and efficiency.
 - (iv) The Unknown Unknowns : These are exploration which is where unfair advantage and interesting epiphanies lie.
- * In the early stages of our Startup, the quadrant of Unknown Unknowns matters the most, because they can become our secret weapons.
- ⑥ The 10 common pitfalls that entrepreneurs should avoid as they dig into the data their startups capture are :-
- (i) Assuming the data is clean : Cleaning the data is often most of the work and can reveal important patterns. Check your data at the door to be sure its valid and useful.
 - (ii) Not normalizing : While making a list of popular wedding destinations, count wedding specific air travellers or else you will get a list of cities with busy airports.
 - (iii) Excluding outliers : Do not ignore the people using your product several times a day, even if they are bots or big fans.

- (iv) Including outliers: People using product several times a day are interesting from a qualitative perspective because they can show things you didn't expect, they're not good for building a general model.
- (v) Ignoring Seasonality: Failure to consider time of day, day of week and monthly changes when looking at patterns leads to bad decision making.
- (vi) Ignoring size when reporting growth: Context is critical. Initial outburst of numbers due to support of friends and family does not count.
- (vii) Data Vomit: A dashboard isn't much use if you don't know where to look.
- (viii) Metrics that cry wolf: To be responsive, alerts should be set up to let us know when something is awry in order to fix it quickly. But if thresholds are too sensitive, people start to ignore them.
- (ix) The "Not Collected Here" Syndrome: Mashing up your data with data from other sources can lead to valuable insights. This might give you few great ideas about what experiments to run next or even influence your growth strategy.
- (x) Focusing on noise: We are hardwired and then programmed to see patterns where there are none. It helps to set aside the vanity metrics, step back and look at the bigger picture.

9 (i) Segmentation

It is a group that shares some common characteristics. On websites, the visitors are segmented according to a range of technical and demographic information, then compare one segment to another. Segmentation works for any industry and any form of marketing.

(ii) Cohort Analysis

This compares similar groups over time. As the product is built and tested, it is constantly iterated. Users who join earlier will have a different experience from the ones joining later. How did this affect the churn of later users, is it found out using Cohort Analysis. It can be done for revenue, churn, viral word of mouth, support costs or any metric that is cared upon.

(iii) A/B and Multivariate Testing

Studies in which different groups of test subjects are given different experiences at the same time are called cross-sectional studies. When we are comparing one attribute of a subject's experience and assuming everything else is equal, we are doing A/B testing.

Rather than running a series of separate tests one after the other - which will delay the learning cycle - we can analyse them all at once using the technique of Multivariate analysis. This relies on statistical analysis of the results to see which of many factors correlates strongly with an improvement in a key metric.

* These are the four ways of slicing users into subgroups and analysing or testing them.

⑦ The 3 engines that drive the growth of a startup are as follows :-

(i) Sticky Engine

- * It focusses on getting users to return and to keep using the product. Engagement is one of the best predictors of success. Stickiness is not only about retention but also frequency.. so track metrics like time since last visit.
- * The fundamental KPI for stickiness is customer retention. User stats and usage frequency are other important metrics to track.

(ii) Virality Engine

- * Virality is all about getting the word out. Virality is attractive because it compounds - if every user adds another 1.5 user, your user base will grow infinitely.
- * The fundamental KPI for this engine is the viral coefficient - the number of new users that each existing user brings with them. The actions that make up the viral growth cycle also need to be measured.

(iii) Paid Engine

- * The third engine of growth is payment. It is usually premature to turn this engine on before you know that the product is sticky or viral. Getting paid is the ultimate metric for identifying a sustainable business model.
- * The two knobs on this machine are Customer Lifetime Value (CLV) and Customer Acquisition Cost (CAC). One way to measure Cash Flow and Growth Rate is time to customer break-even that is, how much time it will take to recoup the acquisition cost of a customer.

⑨ * Cloud9 IDE interviewed their existing customers because they are close to product/market fit and it helps a great deal to speak with customers, understanding if the company is meeting their needs and how are they using the products. With the interview questions the company is trying to determine how well they are solving problems for actual customers. If many of the scores would have been low, they would have known something was wrong.

* Decisions :

Firstly, company's top active users were interviewed, to gain an in-depth knowledge of how they work. Secondly, the data warehouse was analysed which has information on how the product is being used.

* Conclusions :

Two specific segments of customers were getting significantly more value from the product. Interestingly, both of these customers groups were not the initial ones company was going after. Now the company knows where they can invest more of their time and energy.

- * Open ended discussions followed by scoring revealed a market segment that had better stickiness and was ripe for rapid growth.
- * Scoring the Interview questions helped the improvement of the interviewing over time, focussing on results that could be acted upon.

⑩ "How does Rally Software continue to be successful in building its products?"

* They establish a company Vision

The entire company aligns around the vision, which is the first waypoint in turning a big, distant goal into something more attainable. The longer term vision becomes a key input into annual planning each year. This process invites insights from all employees and provides a valuable narrative about past, present and future. Learn about each departments completed work, work in progress, planned work, specific annual metrics, the implications of the coming year and the overall mood for the year. High facilitated meeting is conducted to clearly articulate the vision for the year and how to accomplish it.

* They develop a Product Plan

The product team is actively involved in defining the company's annual strategy, by aligning the directions of the company and product. The articulation of why they're doing something, rallies everyone around one compelling vision, company and product and creates a vital emotional connection with their customers.

* They decide on what to build

Almost everyone who does product management type work is included in the decision making process, including product marketing, product owners, engineering managers, sales leadership and executives. Benefits of everyone's inputs and alignment outweigh the time spent in running the process. It leads in great execution.

- * They measure the progress
Underneath feature development process, the company is focussed on ~~the~~ measurement. The goal is to make sure the team can measure feature usage and performance. When a feature is developed, the product team form theories about how much usage warrants further development of that feature. Thus, they quickly understand the impact a feature is having on the performance and stability on production environment.
- * They learn through Experiments:
The company does not blindly build features based on internal or customer requests, instead they run experiments to learn more. Rather than guessing, this is a disciplined process of discovery. This idea of user interface plays major part of the product vision of the year.

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