**Suwandy wijaya - Business case study report (happy hat)**

**Articulating business metrics of case study and recommend process changes to improve revenue growth and profitability**

There are few steps to improve its revenue growth and profitability such as:

1. **Identify its problems and analyze the given of data for analysis purposes.**
2. **Identify problems.**
   * There is no growth in number of visitors across several years.
   * The revenue decreased by average of 10%.
   * Many stores are no longer profitable
   * Inventories mismanagement (wastage and insufficient quantities for some of items)
   * Increase in competition from frozen yogurt sold in 24-hour grocery stores
3. **Dataframes for analysis.**

* **Cash register data for every store:**
  + Store details.
  + transactions ID.
  + Items purchased.
  + Date and time of purchases.
  + Sales price (each times purchased).
* **Delivery data:**
  + Store details.
  + Items delivered.
  + Date and time of delivery.
* **Accounting data:**
  + Annual revenue.
  + Annual cost of goods sold.
  + Inventory on hand at the end of the year.

1. **Correctly classified its business metrics and recommend process change for improvement.**
2. **Revenue metrics.**

Revenue metrics are related to sales and marketing. In revenue metrics, it analyses on how well the company is marketing or selling its products.

* **For cases of happy hat, problem related to revenue metrics such as:**
* Growth in number of visitors potentially due to its marketing strategy.
* Decrease of revenue due to its sales decreased.
* **Recommendation on business process change:**
* Increase number of sales by:
  + - Expanding marketing endeavours.
    - Hiring more sales peoples.
    - Offering more discounts to attract new customers.
* Continuously track its total weekly revenue trend to observe its overall effectiveness on the new process changes.
* As discounts its typically varied across different items, track the total weekly revenue of respective discount items to observe its effectiveness of the discount.
* **Measurement/analysis for process change:**
* Analyze the total weekly revenue (sum of purchase) to understand the trend of revenue generated by happy hats. This can be done using cash register data.
* Moreover, analysis can be narrow down by grouping each of the items (group by) and analyze its total weekly revenue to understand on the sales of each of the items.

1. **Profitability metrics.**

Profitability metrics are related to logistic and operations. In operation, it analyses on the efficiency of the process by which company creates and delivers its products and services to customer. While in logistics, it analyzes on how well the company manage in inventory such as unsold items, insufficient items.

* **For cases of happy hat, problem related to Profitability metrics such as:**
* No profit in some of the stores potentially due its process inefficiency.
* Inventories mismanagement (wastage and insufficient quantities for some of items).
* **Recommendation on business process change:**
* Improve its inventory management such as not over-delivering the items as it will increase chances of wastage due to its short lifetime of the goods, and not under-delivering the items as it will potentially reduce customer satisfaction.

Reduce its overall inventory quantities delivered when wastage quantities of each item are considerably high. And at the same times, ensuring total inventory quantities do not reach 0. Inventory level are recommended to be continuously monitored weekly.

* **Measurement/analysis for process change:**
  + Analyze its total weekly profit/gross margin and total weekly profit/gross margin of each of item (gross margin= ) to understand the trend of its profitability.
  + Total weekly wastage quantities to understand on trend of quantities of item being wastages. However, additional data required as given data do not provide wastage quantities.
  + The total weekly inventory quantities of each items (inventory quantities= sum of item delivered-sum of item purchased- sum of wastage quantities). Although, inventory level data are given, it is insufficient as reporting are done annually instead of weekly.

Note: (Sum of each item delivered from “delivery data”) , (sum of each item purchase from “cash register data”).

1. **Risk metrics.**

Risk metric are related to risk managers and creditors such as track and mitigate dangers, churn rate, financial risk, leverage, and debt.

* **For cases of happy hat, problem related to risk metrics such as:**
  + - Increase in competition from frozen yogurt sold in 24-hour grocery stores.
* **Recommendation on business process change:**
  + - To conduct competitive analysis as well as comparison analysis of companies performance between happy hats and the competitors.
    - Opening few happy hats stores that opens 24 hours and analyze on how these stores are performing before deciding on whether to proceed on opening more 24 hours store
* **Measurement/analysis for process change:**
  + - Weekly comparison performances between happy hats and the competitors. If the competitors are public listed, information of competitors performance could typically be obtained from their public filing.

Currently, there are insufficient current data given to analyze the potential thread from the competitor.

* + - Weekly comparison performances (revenue from item purchased) of happy hats between normal morning shift and night shift. This analysis helps in understanding the treads from customers as well as effectiveness in operating 24 hours.

1. **Dynamic/Traditional metrics.**

Traditional metrics include standard financial and managerial accounting categories such as quarterly statements of net cash flows, profit and loses, and changes to balance sheet items. As the duration of statement report in considerably long, business decision will happen after long deliberation.

In contrast with traditional metrics, Dynamic metrics financial statement report are usually less than a month frequency. Thus, dynamic metrics are typically used for fast and urgent business decision.

In this happy hat financial statement are reported annually, they are adopting traditional metrics in which business decision can only be implement in considerably longer period of times.

* **Recommendation on business process change:**
* Adopting dynamic metrics for financial reporting systems. This enable happy hats to make a fast inform decisions.