**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:**
* Set a goal that is specific and measurable within certain specific time-bound. As the key goals are in improving the revenue, analyze independent variable of certain process changes and compare the effects on revenue metrics (dependent variable).

Example: In 3 months, analyze additional number of sales peoples (example of process changes) that increase revenue growth by 5% on month-by-month basis compared to the same month last year.

* Process changes for consideration such as:
  + - Expanding marketing endeavours.
    - Hiring more sales peoples.
    - Offering more discounts to attract new customers.
* **Measurement/analysis for process change:**
* Thus, analyze process changes mention above and compare the effect on total monthly revenue (revenue= sum of purchased) and compared to the same month last year for specific time-bound. Subsequently, determine on whether it meets the goals that is set by management

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:**
* Similarly, set a goal that is specific and measurable within certain specific time-bound. As the key goals are in improving the Profitability, analyze independent variable of certain process changes and compare the effects on profitability metrics (dependent variable).

Example: In 3 months, analyze the inventory level (example of process changes) that increase profitability by 5% margin on month-by-month basis compared to the same month last year.

* Process changes consideration such as:
  + - 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:**
  + Thus, analyze the inventory level and compare the effect on total monthly profit/gross margin (gross margin= ) and compared to the same month last year for specific time-bound. Subsequently, determine on whether it meets the goals that is set by management
  + Unfortunately, the assume table given are insufficient to measure the inventory level (inventory quantities= sum of item delivered-sum of item purchased- sum of wastage quantities) as the assume table given, does not data on wastage quantities.

Thus, it is required to start tracking its wastage quantities.

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:**
  + - Risk metric are indirectly affecting the sales revenue as it potential losing its competitive advantages and subsequently losing its customer.

Testing the process improvement from competitors (operating at 24 hours) and analyze its benefit in comparison with current process. Subsequently, setting a goal (expected benefit in comparison to current process) from this improvement process that is specific and measurable within certain specific time-bound.

Analyze and conduct comparison study between current process and improvement process in which the effects using revenue metrics (dependent variable).

Example: In 3 months, analyze the improvement process has resulted in increase of 5% revenue in comparison to current process on month-by-month basis compared to the same month last year.

* + - Analyze on whether operating on 24 hours are meeting the goals. Subsequently, determine on whether operarting on 24 hours should be implement across all the stores.
* **Measurement/analysis for process change:**
  + - Measure the monthly total revenue of store operating and not operating at 24 hours. Compare the revenue metrics.

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. The dynamic metrics such as:
  + Revenue, cost of goods sold, and inventory on hand to be report monthly instead of annually.