Walton Supermarket

Executive Dashboard Review and

2015 Sales Growth Recommendations Report

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Executive Summary

Walton Supermarket is seen as an established player in the US grocery market food chain. With presence in the US, Mexico and Canada, the business has expanded quite rapidly over the past three years. This has resulted in the achievement of revenues of $ 121K over FY 2014, representing a 101% increase over the previous financial year.

This growth over the 2013/2014 period was anchored around a number of tactical plays:-

- the geographic expansion into Mexico and Canada over FY 2014 (47K and 11K revenues respectively)
- the take up of the loyalty program in the Discount and Busy segment which represents an additional 14K of customer revenue between 2013 and 2014
- the acceleration of product sales in the Snack foods and Vegetable category
- tripling of product unit sales from 18K to 57K

Profits have increased dramatically in-line with revenues, from 15K to 31K over this period.

Vegetables and Snack Foods represent the most profitable product lines.

The results experienced by Walton Supermarkets are broadly in-line with their overall strategy of

- Increasing revenues
- Controlling profit margin and product mix within sub 30% profit level
- Decreasing costs by driving lower margins
- Increasing cross sell opportunities via the loyalty program

The 'Uncle Sams' loyalty program has had some good success with over 3699 members joining the program in 2014, up from 1910 members the previous year. The 'Discount' and 'Busy' categories, represent the most penetrated segments of the loyalty program, yet a high percentage of customers remain non-committed to the overall program.

The Walton Supermarket board is seeking double digit revenue growth over the coming financial year 2015. To support this growth initiative, it has been identified via the performance dashboards that additional investment in the following areas are required:-

- conversion of more customers to the loyalty program in particular targeting the busy and discount category.
- targeting families with 3+ or more children which will drive unit sales and increase revenues
- targeting new cities with 3+ children which have similar demographics to the top 5 cities/states which Walton currently services (Salem, Tacoma, Los Angeles, Seattle and Portland). Focusing on the 10-30K and 30-50K income bracket.
- running marketing promotions to increase unit sales beyond 4+ per household, leading to increased revenues.

The remainder of this report discusses the reasoning behind the development of the 5 executive dashboards as well as providing recommendations to the CEO to increase sales, in particular leveraging the Uncle Sam's loyalty program.

Executive Insight - What questions are senior management interested in addressing?

The feedback from the ELT management team (CEO, Sales Director, Marketing Director, Finance Director, Logistics Director) identified a number of core questions which needed to be addressed:-

- What is the breakdown of sales revenue (quarterly, yearly and geographical coverage)
- How is the business performing year to date from a sales and profit standpoint when compared to previous financial periods?
- Ability to identify product revenue breakdown by customer segment?
- How does sales for each product category compared with overall sales?
- Where are the best and worst performing cities?
- What are the best and worst selling products from a revenue and margin standpoint?
- Ability to segment product sales by region, customer type and profitability?
- What influence does the Uncle Sams' loyalty program have on sales by customer segment?
- Does Walton Supermarket have the right product mix? Which products are moving?
- Ability to target customers based on key demographical profile?

In addressing these key questions, the strategic roadmap dashboard can be broken down into four key areas:- Sales, Profitability, Product and Customer Loyalty. As the needs of the audience (Few Page 113) are focused on providing specific KPI business details. The dashboards are designed to provide broad and different levels of visibility across these four areas for each of the executive functional heads.

Some of the design around the executive dashboard incorporates the following thinking:

- Information is organised in a logical and sequential manner
- Condensed, primarily in the form of summaries (Few 2013 Page 94)
- Dashboard reports to fit on one screen (computer desktop)
- Ensure consistency in the alignment of the charts
- Minimal use of words or non-essential graphics to ensure focus on the actual dashboard results
- Provide appropriate depth of information based on management level

With this in mind, the table below defines the respective high level dashboards approach broken down across four key business areas (Sales, Profitability, Costs and Customer Loyalty) the target audience, the data presented and the visualization option chosen.

Dashboard Report What?	**Information** What	**Details** What	**Purpose** Why these were chosen Why those attributes are present	**Key Audience** Who are key executives, the reports are addressing? The data fields and why is the data laid out in the fashion proposed
High Level KPI Dashboard	Key KPI from each area			
Sales	Sales Revenue	Sales revenue by - Month - Quarter	Track sales performance over a period of time Provide granular	All ETL Members. Provide different levels of data granularity through the combination of bar chart

		- Year - State - Region - Cities	geographical view of sales over time	(Trending) and stacked bar charts.
	Year to date sales and profit	Sales ytd Sales last year ytd Profit ytd Profit last year ytd	Provide YonY comparison focusing on revenue and profit margin	CEO, Finance Director, Sales and Marketing Director. Trending report generated via a bar chart to provide comparisons from year to year
	Sales By Customer	Sales by customer - By month - Quarter - Year - State - Region - City - Number of Children - By Income	Understand buying behaviour based on customer demographics. Provide sales over a timeframe, geographical coverage and dependents	All ELT members except CEO. Provide detailed level of information (ie cities) using a combination of bar charts and stacked column diagrams. This enables the slicing and dicing of the data for different data views.
	Sales for each product category as a portion of total sales	- Portion	Identify best and worst selling products	All ELT Members. Dependent upon the level of detail required, either a tree graph or bar chart to illustrate the split in sales across 43 products category or product department. Pie Chart was reviewed yet not selected due to the volume of products and the inability to understand the best/worst selling products.
	Sales trends	- Top 5 sales regions - Bottom 5 sales regions - Sales Trending by Day	Identify the best and worst performing regions.	Marketing Director, Sales Director. Providing day to day trending information to capture sales daily run rate via a column chart.
Profitability	Product and Region Profitability	Profitability - By region - By product - By year - By month - By Quarter - By Customer Segment	Highlight the profit margins based on product, FY periods and location	CEO, Sales Director, Finance Director, Marketing Director. Providing trending information using bar charts to show movement in profitability and margin levels.
Product	Product sales	Product Sales - By Customer Type - By region - By Volume - By profitability - By Unit Cost - By Unit Sales - By product category	Provide different revenue views based on geographical location, volume and margin	Finance Director, Sales Director, Marketing Director, Logistics Director. Data is presented at either the product department or category level due to the volume of information and audience. A combination of (tree map or heat map) and bar chart utilised to show the interrelationship between different variables.
Customer Loyalty		Customer Loyalty - By region - By segment - Income Level - Number of Children - By product category	Outline the best/worst profitable customers by location and customer loyalty segments	All ELT Members. Understand purchasing decisions based on loyalty level utilising tree chart and bar chart. Due to the volume of information heat map was used to provide a quick snapshot of product vs loyalty level purchases.

Assumptions

In preparing the dataset for analysis, a number of assumptions where made

- Financial Year is based on a calendar year
- Product Margins have been applied at the Product Department Level (ranging from 6% for Carousel to 40% for health and Hygiene products) – details located in the data spreadsheet
- 6 Loyalty Groups have been defined based on a combination of income levels, product selection, unit pricing and product margin
- Not all Walton customers are part of the Loyalty program
- Products follow a hierarchical model -> Product Family, Product Department, Product Category
- Country, State and City make up the geographical hierarchical data model
- Shelf Product information and future trending is excluded from the report, due to lack of data from the original data source

Performance Dashboards

CEO Dashboard

The purpose of this dashboard is to provide a broad view of the performance of the business across the four business areas.

The dashboard contains an executive summary, highlighting the top level financial results.

CEO Dashboard

Diagram One (CEO Dashboard)

The structure of the CEO dashboard is broken down into four sections to support the business strategies. High level details of revenue, profit, costs and unit shipment are listed at the top right to give running commentary on the top line performance figures.

In the case of the CEO, the information represented is at a macro level (ie country level instead of city level) to provide broad snapshots across the business.

The first row of charts provide revenue details from a calendar trending, country and product family perspective. The bar chart (diagram two) at a the country level was deemed a better view than the geographical map view as it provided the necessary country sales information in a straight forward way. The map view looked visually interesting, yet difficult to read within the limited space.

Diagram Two (Different CEO Country Revenue Views)

The bar chart to the far right (diagram three) covering revenue, profit and costs by product family, are kept at a high level (instead of product category), to provide a broad snapshot of the breakdown in revenues.

Diagram Three (Product Family View CEO Dashboard)

Part of the thinking with utilising the bar chart design was to provide a consistent view of information as the CEO slices and dices the information. Having a mix of chart views (stacked bar charts, column bar charts) for country and product family views would slow down the interpretation of the results.

The final row covers the loyalty program from a calendar adoption, country and product family perspective. The use of a combination of stacked and bar charts was utilised to provide consistency in the data views to help with the speedy interpretation of the results.

Looking at the results, a number of interesting observations are uncovered.

- 2014 represents a standout year with revenues of 121K. This represents a 101% increase over the previous financial year of 60K and 26% margin. (diagram four)

Test model Measures | Quarter | Total of City | Total of Customer ID | Total of Marital Status | Total of Homeowner

	2012	2013	2014	Total
Children	74	11,847	23,653	35,574
Units Sold	143	18,984	38,242	57,369
Revenue	$398	$60,531	$121,901	$182,830
Revenue per Unit	$100	$15,525	$30,717	$46,342
Cost Per Unit	$72	$11,528	$22,873	$34,473
Total Cost	$288	$44,947	$90,687	$135,922
Total Profit	$110	$15,584	$31,215	$46,909
Margin	28%	26%	26%	26%
Count	35	4,692	9,332	14,059

Diagram four (Year on Year Snapshot of Results)

- Revenues over the quarters was consistent (averaging 30K per quarter), with Q3 2014 being the largest quarter recorded (33K)
- Food category is the highest revenue earner (132K and a profit of 32K)
- The US market makes up 45K revenue and 11K profit as part of the food category group (FY 2014)
- A large number of Non members have not registered for the Uncle Sam's loyalty group. Yet steady adoption has been achieved year on year. 1910 Members to 3699 members over 2013/2014 period.
- The busy and the discount loyalty groups represent the key segments which have adopted the program.
- Supporting the top line revenue views, the majority of the loyalty customers sit within the US and the food family is the most popular group.
- Drilling down on the busy loyalty group, it is noted that the bulk of the 'Busy' revenues is derived mainly from the US market (10K), yet the Mexico market (7.7K) over 2014 has increased dramatically (diagram five).

Diagram five (Loyalty Loyal Busy vs Country Revenue)

Sales Director Dashboard

Diagram Six (Sales Director Dashboard)

The structure of the sales director dashboard (diagram six) follows a similar approach to the CEO dashboard. The high level performance metrics are listed at the top combined with the four business sections. The details of this report includes some micro level information such as revenue by city and product category. The intent with this sales dashboard is to provide more granular detail to track sales performance on a daily basis. This is reflected in the column report (diagram seven - far right) showing sales performance on a day to day basis. Supporting this view is the bar chart (second row), showing units sold by city to establish the highest city by revenue and products.

Diagram Seven (Bar Chart Showing Units Sold)

Bar Charts are utilised in the revenue, profit and cost reports (by city and product category) as it provides a base line view of the information in a concise manner. Alternative views involving revenue by city were investigated. Visually these views looked interesting yet introduced a level of complexity in the interpretation of the results (see diagram eight). In this example, it is difficult to quickly determine if Salem or Tacoma is the largest city and if Los Angeles, Seattle and Portland are achieving the same level of revenues.

Diagram Eight (revenue by city – tree chart)

From a sales perspective, this dashboard reflects the following observations

- 4/10 top cities are US based (Salem, Tacoma, Los Angeles and Seattle). Hidalgo (Mexico) with revenues of 11.3K is the highest revenue city achieved in this country (achieved over 2014). Revenues per city range from $500 to 18K over this financial periods. The bottom five cities are Guadlajara $ 523, San Francisco $ 774, Bellingham $ 992, Mexico City $ 2.4K and Walla Walla $ 1.1K
- The highest selling day was 29/4/2014 resulting in $ 574 of revenues with Merida achieving $80 as the highest selling city.
- Produce 27K, Snack Foods 21K, Household 19K, and Frozen 17.3K are the highest selling products by revenue, commanding 21% of total revenues.
- The 10-30K income bracket group represents the second highest contribution group to revenues with 39K in revenues (diagram nine)

Diagram Nine (Relationship between 10-30K income bracket and loyalty membership)

- This reflects across the loyalty group with budget and battlers making up the key membership. Within this income group, household, snack foods, produce and frozen foods represent the key selling products.
- 60K in revenues is associated with the 30-50K income bracket with the shoppers operating outside the Uncle Sam's loyalty program (43K). This represents a potential sales opportunity for increased revenues over FY 2015.

Marketing Director Dashboard

The dashboard view for the marketing director is focused on providing more demographical data to support the overall marketing strategy. This dashboard follows similar lines to the CEO and Sales Director dashboard in providing base line revenue, profit and cost trending information over time. This report differs slightly in the level of detail around the customer loyalty and shopper demographical details.

Diagram Ten (Marketing Director Dashboard)

Drilling down on the detail, 16K of the vegetables is sold within the US, with Tacoma (2.1K), San Diego (1.6K) Salem (2.3K) being the key cities. On the snack food side, a similar story unfolds as Tacoma (2.2K), Salem (2.3K) and Portland (1.5K). Walton Supermarket is managing 45 product categories making the utilisation of a bar chart or pie chart difficult to use and visualise. The tree diagram provides an interesting perspective (diagram eleven) in presenting the revenue splits across the product categories, yet for consistency and clarity the bar chart was chosen in the final dashboard design.

Diagram Eleven (revenue by product category – tree chart)

Additional Findings:-

- the highest number of children was recorded against the 30-50K income bracket in the non member category, representing 43K in revenues
- the high number of children are located across the five highest selling cities with vegetables and snack foods making up the majority of the sales
- based on the head map (diagram 12) a large percentage of non members reside in the top five cities, sitting in the lower 10-30K income bracket.
- The number of children per household combined with homemaker experiences a high level of revenues vs families who work outside the home.

Diagram Twelve (heatmap of potential Uncle Sam Members by City)

Finance Director Dashboard

Diagram Thirteen (Finance Director Dashboard)

The approach with the finance director dashboard involves providing a greater level of finance data and insight. There is a greater focus on measuring profit and costs as this functional area is primarily responsible for controlling these variables. Similar to the other dashboards, trending information on revenue, profit and costs are presented to the left in bar chart format, to enable a consistent baseline view across all the executives. Within the profit and decrease costs rows, a number of additional bar chart reports are included to enable different slice and dice views to understand the cost and profit variable relationships. Bar Charts have been utilised to enable consistency in the data views at a product category and city level. There are a number of specific reports (unit sold by product family, city growth over time, units sold by cost, units sold by loyalty level) generated for the finance director to provide additional insight of costs over time.

Some of the key financial findings are:-

- Store City growth from 2012 (10) to 2013 (21) doubled only in the US
- In 2014, revenue growth increased from 0 to 65K for Canada and Mexico
- 57K of product units was shipped in 2014 vs 18K in 2013
- Profit of 15K was achieved in 2013 vs 32K in 2014

- The most profitable transaction was 4 units in 2014 with vegetables contributing 5.5K overall
- Snack Foods represented the highest product cost at 11.5K in 2014, yet contributing only 2.8 in profits.
- Overall costs have increase year on year from 44K in 2013 to 91K in 2014 going against the overall strategy of reducing costs.
- Non Members in key cities, (in the 30-50K income range) represent the most profitable customers segment and presents an opportunity for additional growth (diagram 14)

Diagram Fourteen (most profitable customer by city and loyalty group)

Logistics Director Dashboard

In building the dashboard for the logistics director, the emphasis is around the 'running operations' of the business. Focusing on unit shipment of products by city, product category are some of the key data points captured in these dashboards. Results uncovered through the logistics dashboard include:-

- 35K of product units was shipped in 2014 vs 18K in 2013
- 34K units was shipped to non loyalty members, with 23K in 2014
- Hidalgo, Merida, Salem, Tacoma and Vancouver represent the highest cities by cost in 2014
- 4 units per transaction for revenue, profit and costs was the highest volume achieved in 2013 and 2014

Diagram Fifteen (Logistics Director Dashboard)

Increasing the Top Line – Recommendations for FY 2015

As stated by the executive management team, the goal over financial year 2015 is to significantly grow revenues. In order to help achieve this goal, analysis around leveraging the loyalty program and other revenue variables were investigated. What follows below are a number of recommendations.

Targeting Cities which have a similar demographic to the top five cities

Looking at the top five cities of Salem, Tacoma, Los Angeles, Seattle and Hidalgo they all experience similar demographics and buying patterns. Higher number of children which would drive higher unit sales in the vegetables and snack food sales. Targeting households with income levels in the 30-50K mark, located in the Discount and Busy families' category (diagram 16) would be an additional focus as part of an overall marketing campaign. Expanding the geographical reach of Walton Supermarket into similar surrounding cities or states would also be a strategic recommendation moving forward.

Diagram Sixteen (Targeting similar demographics to Top five Cities)

Product Unit Pricing aligned to Loyalty Level influences overall sales

Looking at the decision table below (diagram 17), the price range of products align to the different levels of the loyalty levels with some predictive connection (66%). Affluent and Lifestyle customers are less priced sensitive and are more interested in the quality and type of product. Introducing new products above over the $ 4.50 mark would be a consideration even though these two loyalty levels have not generated significant revenue over FY 2014.

Diagram Seventeen (Loyalty Level vs Revenue per Unit)

Target Cities with 2 or more children

When reviewing the predictive model (diagram 18) it is noted the number of children in geographical areas have some impact over future product purchases. Targeting families with 2+ children in key cites through the promotion of baked goods would be a consideration in boosting sales.

Diagram Eighteen (Increasing Revenues by targeting families with 2+ children and product category)

Extending this approach, would be to target the fastest growing cities or states by birth rate. The US states of Utah, South Dakota, Idaho, North Dakota and Alaska represent the fastest growing states by birth (Martin, Hamilton, Osterman, Michelle, Curtin, Mathews 2013). Further research would be required to align with income levels and current Walton Supermarket store locations.

Increasing the volume of Units Sold

The predictive modelling (diagram 19), shows that the number of units sold has a direct correlation to revenues. Households who purchase 4+ units across a particular basket of goods, has a direct influence on the revenues. Running sales incentives tied to the loyalty program would be an option to increase unit sales and attract new members to the program.

Diagram Nineteen (Increasing the volume of units sold)

Focus on Higher End Products with Households with 3+ children

Diagram Twenty (Focus on Higher End Products with 3+ children)

Another predictor of increased revenues is potentially targeting households with 3+ children with higher priced items. Items that fall in this price point include snack foods and vegetables which are the higher selling products (by volume and revenue).

Another recommendation would be to target the 30-50K income level to drive increase adoption of the loyalty program. Concentrating on particular food groups such as baked goods and starchy foods would help to accelerate adoption within the discount member level.

FY 2015 Recommendations – Putting this all together

In summary the recommendations to grow top line revenues for 2015, includes

- Running price based promotions aligned to loyalty levels to attract more members to the program
- Expanding into new cities which have a similar demographics to the top five cities
- Targeting cities with 2 or more children, by promoting key products such as baked goods
- Increasing the volume of units sold involving a certain basket of products (Baked goods and snack foods)
- Focusing on higher end products with households with 3 or more children
- Drive marketing campaigns at the 30-50K income bracket covering specific products to increase member adoption, in particular discount and busy segments.

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