WALTON SUPERMARKETS

PROPOSAL FOR PROVISION OF BI PERFORMANCE REPORTING SOLUTION

CONTENTS

Context to this engagement 2
Our understanding of your requirements 3
Industry Challenges 3
Emerging Technologies 3
Customer Insights 3
Our approach 4
Overview 4
Phase Two 4
BI and Reporting Solution 5
Information Consumers 6
Data Transformation Notes 6
Design Considerations 7
Interaction 8
Corporate Performance Focus 9
Proposed Framework 10
Improving revenue performance 16
Revenue Performance Overview 17
Increase customer visits 18
Increase average units sold 20
Increase average sale amount ($) 23
Maintain a gross margin of 10% 25
Implementing improvements 29
References 30

CONTEXT TO THIS ENGAGEMENT

Walton Supermarket chain is currently facing a number of challenges due to increased competition from competitors. To survive in this environment Walton needs to ensure that it is able to not only sustain, but grow its revenue. As a chain that operates in limited areas within three countries Walton must ensure that it is able to effectively position the business in the market. Walton understands that it will not be able to compete with competitors purely on a cost basis and knows that understanding their customers will give them a strategic edge.

To promote sales growth Walton will focus on four key areas; increasing customer visits, increasing average units sold per customer visit, increasing average sales per customer's visit, whilst maintaining a gross margin of 10%

The Business Intelligence Group (BIG) will assist Walton in undertaking a transformation to establish a solid foundation for the business to achieve sales growth and exploit current and future opportunities arising from change within the supermarket retail industry.

At the heart of our offering is a focus on 4 key objectives

- Ensuring that the business is understood
- Ensuring that performance measures are aligned through the organization
- Ensuring that an insights program is in place to enable identification and analysis of key areas of the business
- Ensuring that insights are leveraged to improve customer loyalty

OUR UNDERSTANDING OF YOUR REQUIREMENTS

The increased competition and changing market conditions has presented an opportunity to embed a Business Intelligence (BI) analytics and reporting solution that will enable Walton to develop strategic responses to improving performance. The first phase of the solution will focus on delivering insights and information to the business to support revenue growth.

INDUSTRY CHALLENGES

Industry changes are significantly and permanently transforming the role of supermarkets in the retail sector. As customers in the supermarket sector are now provided with more choice in the cost and range of products available and the customer experience provided, they are demanding change. Core to remaining competitive in the industry is understanding and responding to the changing tastes, preferences and sentiment of customers to ensure their loyalty.

EMERGING TECHNOLOGIES

Online environments have changed the way in which supermarkets are able to connect with their customers. Customers now have more price and product information available to them to inform their choices. The additional of online shopping channels has also given customers choice in the way that they choose to interact with supermarkets.

The increase of customer data available to supermarkets has driven a significant rise in customer analytics which is being used to attract and retain customers.

CUSTOMER INSIGHTS

Walton will need to better understand its customers, their changing expectations and the emerging technologies on offer to ensure the ongoing viability of the business. This will involve greater levels of service offering and innovation, and a greater level of insight and analysis of existing customer data. This will be used to deliver the targeted customer experience with the aim of improving customer loyalty.

OUR APPROACH

Overview

One of the fundamental principles guiding Walton's change across the target BI solution should start with a highlight visible and easy to implement solution. Phase one of the solution implementation will focus on much needed information to support the achievement of the targeted revenue growth. This is a high profile target within the business at this point in time. Focusing on this area and leveraging some of the existing business tools (such as Cognos) will enable BIG to gain support from management and end users. Building familiarity and sustained business confidence in the solution is of paramount importance.

A "Next Generation" analytics platform underpins the technical component of our proposal. Using scalable technologies, best of breed applications and progressive data architecture the approach can be cost effective to setup and operate, responsive to change, adhere to strong governance principles, extendible for other business services, future proof and deliver a rapid delivery framework for BI and Analytics at Walton Supermarkets.

PHASE TWO

A number of other candidate subject domains not included in this proposal have been identified and BIG will work with the business to prioritise and develop enhanced capabilities in phase two of the solution implementation.

These include

- HR/Payroll reporting
- Workforce productivity analysis
- Customer satisfaction and customer loyalty tracking
- Customer acquisition and retention enhancements
- Operations efficiency analysis - including cost efficiency modelling, spoilage
- Sales enhancements – incremental and organic growth, sales per sq ft of retail space
- Online Challenge Analytics
- HR/Payroll Reporting
-

BI AND REPORTING SOLUTION

We understand the importance of the right design and ensure that the information delivery is designed to provide the most efficient and effective value to users. The aim is to provide management and operations staff with reports and dashboards to facilitate their understanding of the business.

The solution will utilise Cogonos and Watson to provide operational reporting in the form of static and dynamic reporting, but will also facilitate data discover and analytics through making Watson available to end users. This will empower users to understand their business, respond in a timely manner, and assist them with their decision making leading to a more profitable outcome

This automated and interactive solution will ensure that all reporting and analytics leverages the enterprise data warehouse as the single source of truth. The solution will provide additional benefits in the reduction of manual data handling and information gather which will enable resources to be diverted to higher value work.

The continued utilization of Cognos with the organization to report on the Corporate Performance Metrics will leverage the Cognos capability within the organization and speed up the roll out. The introduction of Watson will enable end users to undertake data discover and product insights in an easy and readily available manner.

We will adopt agile practices to assist in gaining momentum as the focus shifts towards delivering business value quickly and iteratively. Agile practices foster closer working relationships with the business and will facilitate business engagement early and actively to enable business-led innovation and development.

Information Consumers

We provide a solution that is not just for the senior executive team but one that will allow information users at all levels of the organization to understand and respond to challenges and opportunities. The solution is designed with three key user groups in mind; senior management, who will mostly be ad hoc consumers of the information and who are responsible for undertaking decision making, middle management who will be called upon by the executives to understand the information, who will interact with the tools and are responsible for limited decision making and operations staff who although they are not responsible for decision making are key consumers of information and play a hand in analyzing, manipulating and preparing the information.

The solution will be designed and built to deliver business value at different levels in the organization. High level corporate dashboards will be supported by more detailed dashboards and discovery environments addressing key areas of the business. Interactive environments and report drill down functions will ensure that end users have their desired level of information available to them.

BIG will train end users on how to use the tools, data and information provided to enable Walton to fully exploit the value within the solution

Data Transformation Notes

As the data set provided to BIG did not have the customer loyalty segment identified for display purposes BIG has tagged each customer record with a customer segmented based upon their average earnings. We understand that this may not be in line with the Segmentation methodology utilized by the Uncle Sam program, however it has enabled us to prepare the mock dashboards detailed below.

Similarly, a product cost base reflective of industry average costs has been added to each product category to enable the presentation of cost and gross margin reports and dashboards. This data will be updated upon receipt of the actual data from Walton.

Design Considerations

The visualisations have been designed to facilitate the communication of the data information to the end user. An overview of the key considerations of the design process is detailed below

Objectives: Information has been displayed in a way that will enable Walton Supermarkets to understand the key attributes and performance of its business. This will enable targeted strategies to be developed

Information: The visualisations have been developed to facilitate information gathering for users. To enable information gathering a number of elements have been included. Available data is displayed in charts that communicate the data elements clearly and enable the user to select, drill down and explore the information provided

Design: Important information has been positioned in a way to draw maximum attention from the user. Sequencing and position has been used to enable the user to gather the location information in one section and the individual's information in another. Colour has been used through to assist in communicating elements, their scale and to draw the user's attention. Charts have been selected to enable easy communicates of the data elements to the user

Engagement: A number of interactive elements are included. The use of filters has been incorporated to enable the user to navigate, explore, drill down and understand the relationships between the information. Colours and chart variety have been used to engage the user.

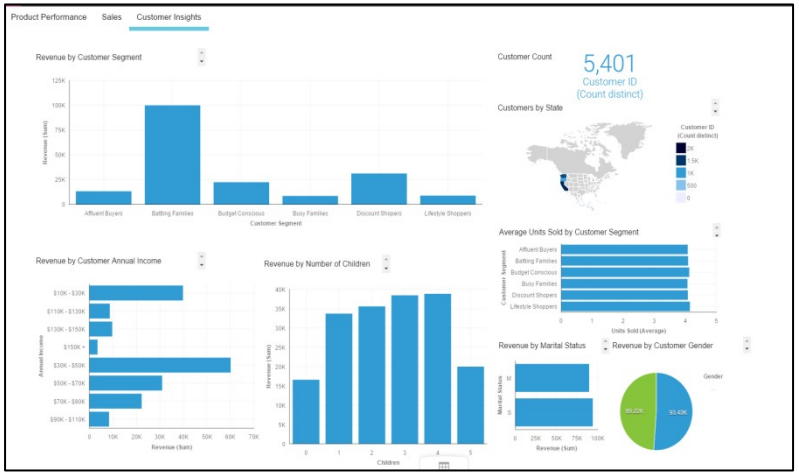
Interaction

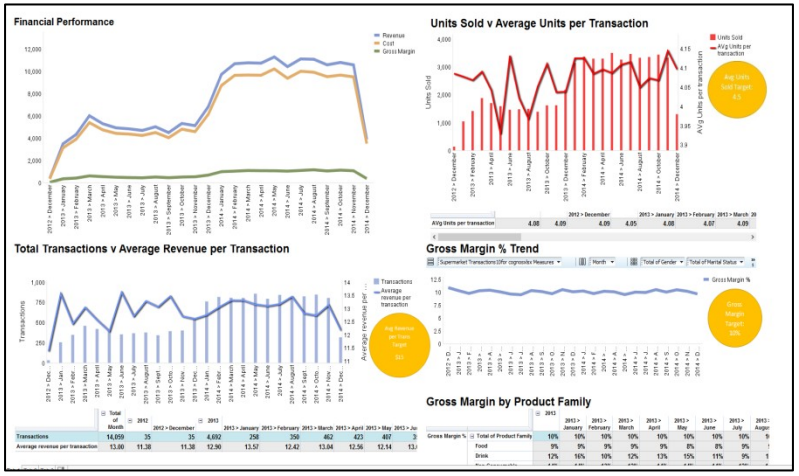
To enable the user to interact with the dashboard a number of interactive elements have been included.

All charts are interactive and enable the user to filter the information as required.

Linked filters/explore points have been incorporated in all dashboards to allow the user to drill down on data and clearly see the relationship throughout the various charts.

These interactive elements will engage the user and enable the user to segment, drill down and understand the information as required. This will provide the user with the information required to understand the requirement for the various support services.





Corporate Performance Focus

Increase Revenue whilst retaining Gross Margin

The proposed solution has been designed to facilitate performance improvement within Walton Supermarkets. Corporate performance will be driven by providing clarity, visibility, understanding and tracking of the key measures and metrics of the business. This will assist in aligning organizational initiatives and effort to achieve the goal of increasing revenue.

The solution will provide Walton with the tools for users to turn data into information which will be utilized to support decision making and improve business agility. Information led decision making will support the execution of the organizations strategy through more accurate forecasting, early identification of sales opportunities and targeted campaigns to improve customer loyalty

The solution focusses on five key performance areas within the organization.

PROPOSED FRAMEWORK

Below is an overview of the proposed BI and reporting framework. As detailed above during the build phase BIG will work closely with the business gaining continuous feedback to ensure that the solution delivered is understood by the business and meets the business needs. This will provide greater engagement and ownership for Walton end users.

	FINANCIAL PERFORMANCE	SALES PERFORMANCE	PRODUCT PERFORMANCE	CUSTOMER INSIGHTS
KEY MEASURES AND METRICS	• Total Revenue by state • revenue generated per State • Revenue generated per product • Cost and Gross • Gross Margin % • Gross Margin Contribution by product Department	• Total Revenue • Revenue per year • Revenue per State • Average Revenue per Transaction • Revenue by Product	• Revenue by product department • Gross Margin (profit) by product department • Revenue contribution by product department • Units sold by product department • Units sold by state • Units sold by state or province	• Revenue by customer segment • Customer Counts • Customer count by state • Revenue by customer annual income • Revenue by number of children • Average units sold by customer segment • Revenue by Marital Status • Revenue b customer gender

CORPORATE KPI's

The corporate KPI visualization has been prepared for use by all levels of end users at Walton Supermarkets. The visualization provides users with information regarding the performance trends for each of the four organizational target areas. The organizational goal is to increase revenue whilst maintaining gross margin. Five key performance indicators are used to measure the success of this, revenue, gross margin, total transactions, average units sold per transaction and average revenue per transaction. The dashboard has been kept simple to facilitate communication of each of the key areas and only has the four key charts.

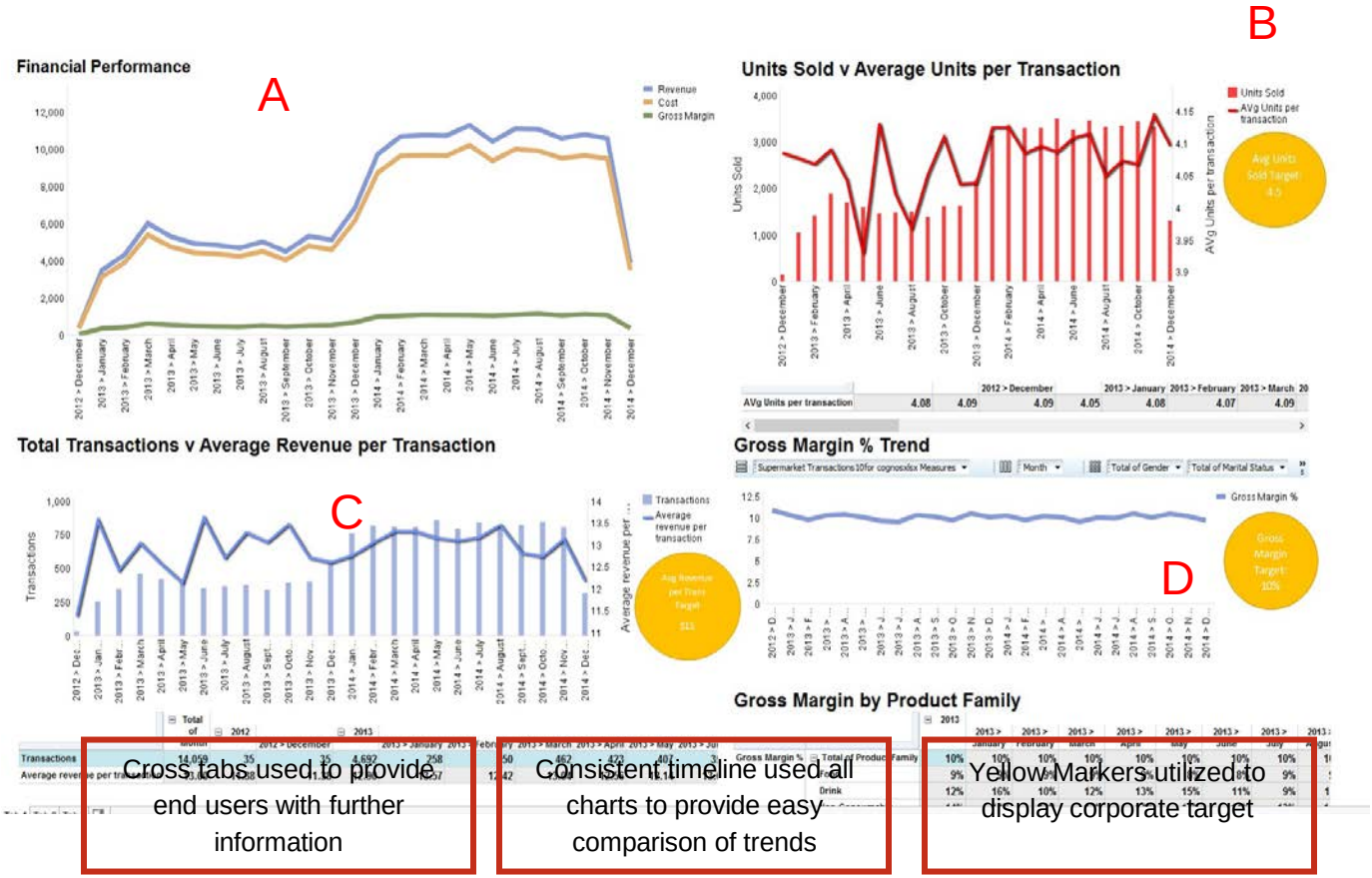


Chart Overview

A – Line chart showing the trend of revenue, cost and gross margin by month

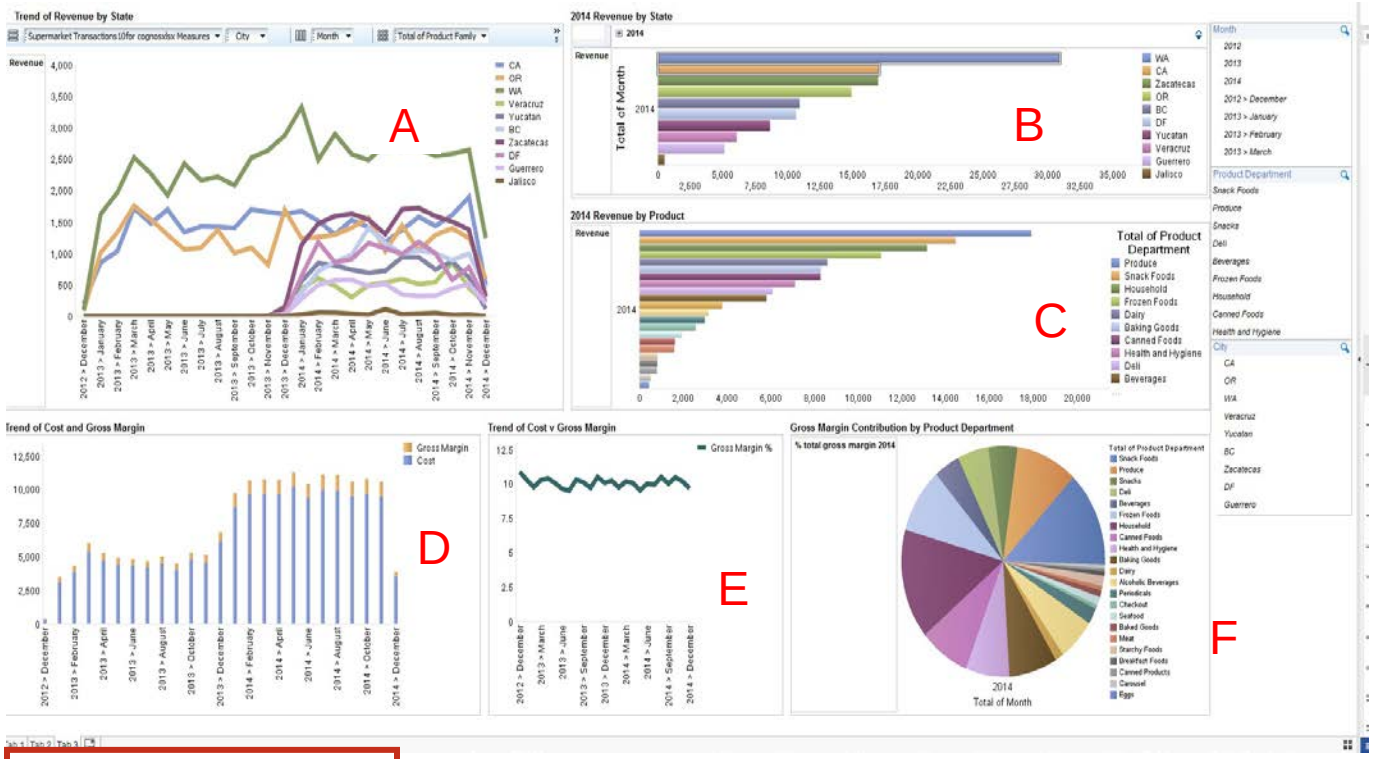
B – Combination chart showing the trend and relationship of total units sold and average units per transaction per month. Cross tab used to provide additional information

C – Combination chart showing the trend and relationship of total transactions and average revenue per transaction. Cross tab used to provide additional information

D – Line chart showing the trend of gross margin. Cross tab used to provide additional information

FINANCIAL PERFORMANCE

The financial performance dashboard is designed to facilitate the communication of key areas contributing to financial performance Revenue, Cost and Gross Margin. To facilitate an understanding of what is driving the revenue and gross margin performance the additional detail of revenue by state and revenue and gross margin by product have been include. The main users of this dashboard are middle management and finance operations staff.



Consistent timeline used across all charts to provide easy comparison of trends

Chart Overview

A – Line chart showing the trend of revenue by state by month

B – Bar chart (arranged in sequence) showing revenue by State

C – Bar Chart (arranged in sequence) showing the revenue by product

D – Stacked bar used to display total cost and total gross margin.

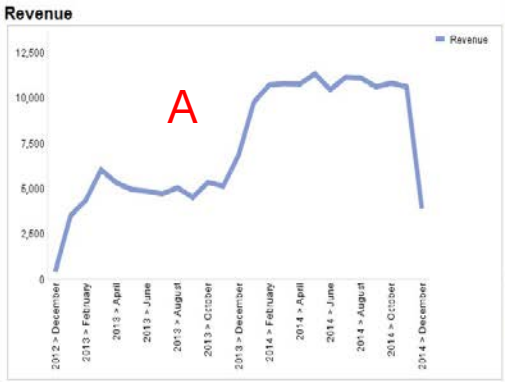
E – Line chart showing the gross margin % trend per month

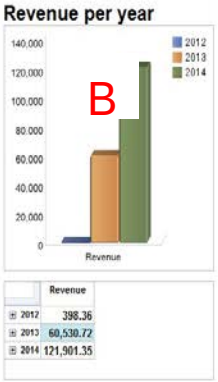
F – Pie chart showing the contribution of gross margin contribution by product department

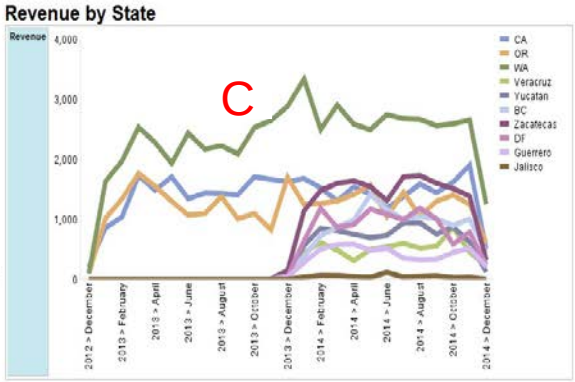
SALES PERFORMANCE

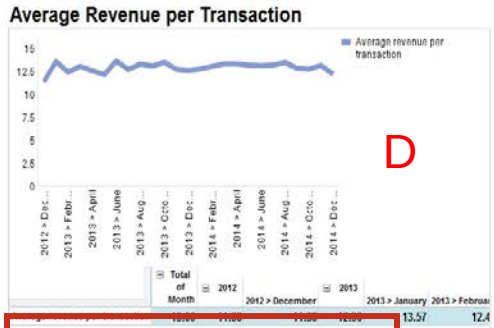
The sales performance dashboard is designed to facilitate the communication and exploration of sales behaviors and trends.

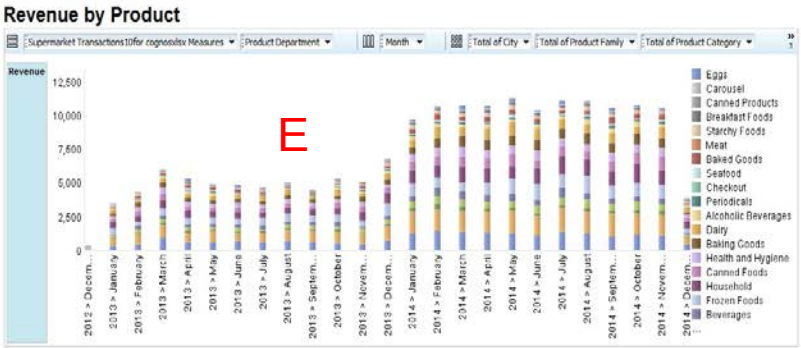
Sales performance is key to tracking trends in product demand an identifying opportunities in sales. Sales analytics can help to the effectiveness of campaigns and targeted promotions. Understanding the relationship of where revenue is being generated (State) and from what (product) is included to inform end users. The main users of this dashboard are middle management and the sales and marketing operations staff











Consistent timeline used all charts to provide easy comparison of trends

Chart Overview

A – Line chart showing the revenue trend per month

B – Bar chart comparison showing total revenue per year for the past 3 years. Cross tab used to provide additional information

C – Line chart showing the revenue trend and relationship of each trend per month for each State

D – Line chart showing average revenue per transaction. Cross tab used to provide additional information

E - Stacked bar to show composition displaying the trend of revenue composition by product

PRODUCT PERFORMANCE

The product dashboard provides detailed information on product sales in revenue and volume terms and product gross margin. Additional detail of product department and product sales volumes by location are included.

The dashboard has been developed in Watson and has been setup to be both an operational dashboard and an analytical space. The main users of the dashboard are the marketing and customer insights department and the procurement department

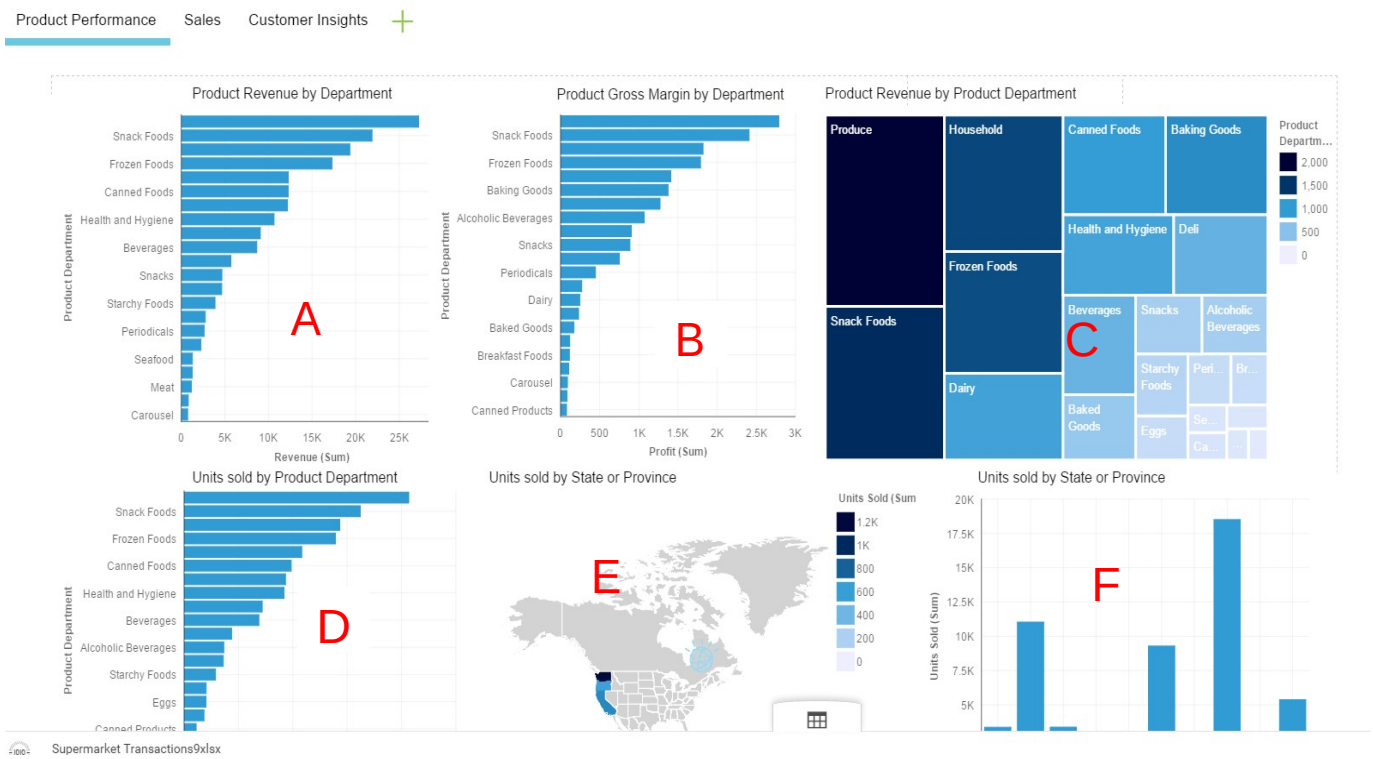


Chart Overview

A – Bar chart (arranged in sequence of highest to lowest to allow easy comparison) showing product revenue by department

B – Bar chart (arranged in sequence of highest to lowest to allow easy comparison) showing product gross margin by department

C – Tree Map to display proportion showing product revenue by product

D – Bar chart (arranged in sequence of highest to lowest) showing units sold by product department

E – Geological chart showing location indicating number of units sold by State

F Bar chart showing units sold by State or Providence

CUSTOMER INSIGHTS

The Customer insights dashboard provides users with valuable information to facilitate an understanding of the customer. The dashboard has been developed in Watson and has been setup to be both an operational dashboard and an analytical space

Being able to segment and understand customers is key to aligning strategy with tactics. This information assists Walton in responding to changing customer behaviors, developing targeted campaigns and delivering the targeted customer experience. The main users of this dashboard are middle management and the operations staff in the marketing and customer experience departments.

Chart Overview

A - Bar chart (arranged in sequence of highest to lowest to allow easy comparison) showing revenue by customer segment

B – Count of unique customer ID's showing customer numbers. Number utilized for ease of communication

C – Geolocation chart showing the number of customers by State

D - Bar chart (arranged in sequence of highest to lowest to allow easy comparison) showing revenue by customer annual income

E – Bar chart showing revenue by number of children

F – Bar chart showing the average units sold by customer segment

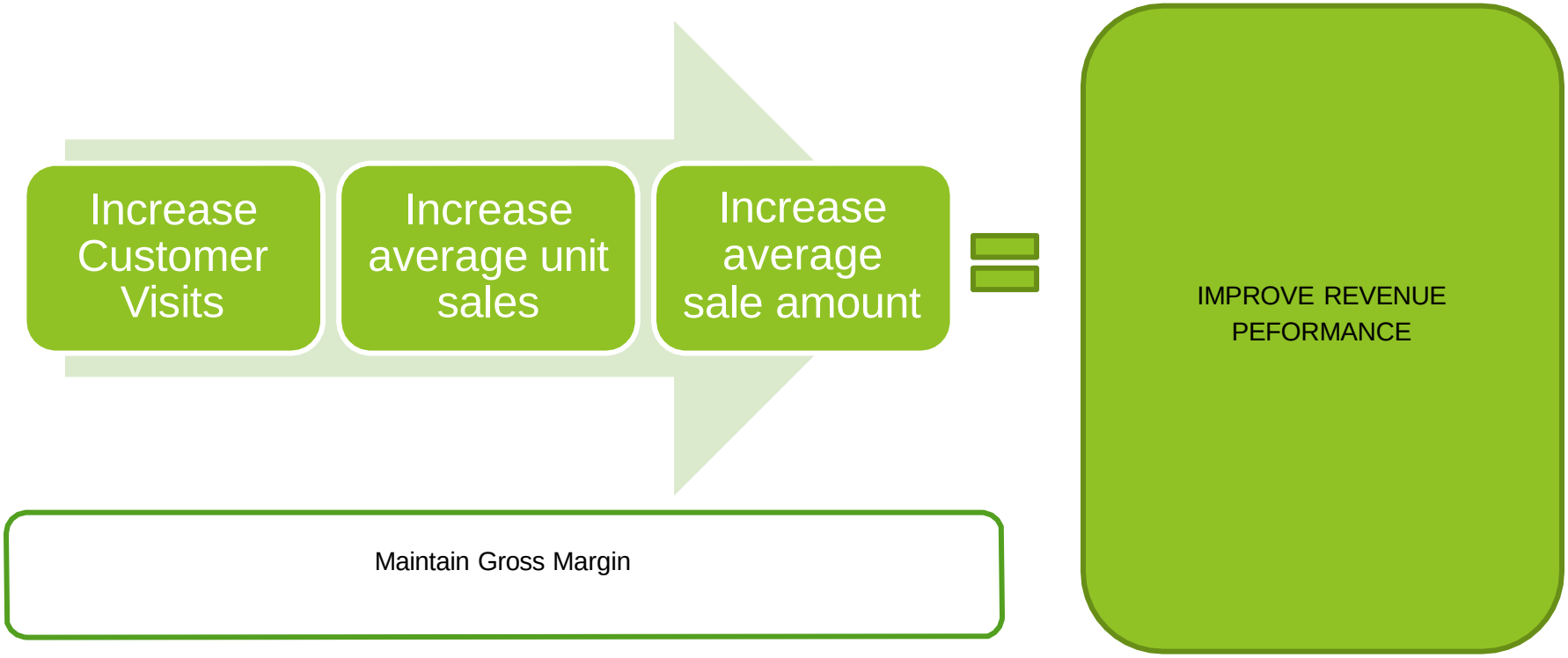
G – Bar chart showing revenue by marital status

H – Pie chart showing revenue by customer gender. Dichotomous variable is easily displayed with a pie chart.

IMPROVING REVENUE PERFORMANCE

The target for Walton Supermarkets is improving revenue performance. Through discussion with management four key initiatives have been identified to improve revenue performance.

- Increase customer visits (transactions)
- Increase the average of units solder per customer visit
- Increase the average sale amount per customer visit
- Maintain a gross margin of 10%

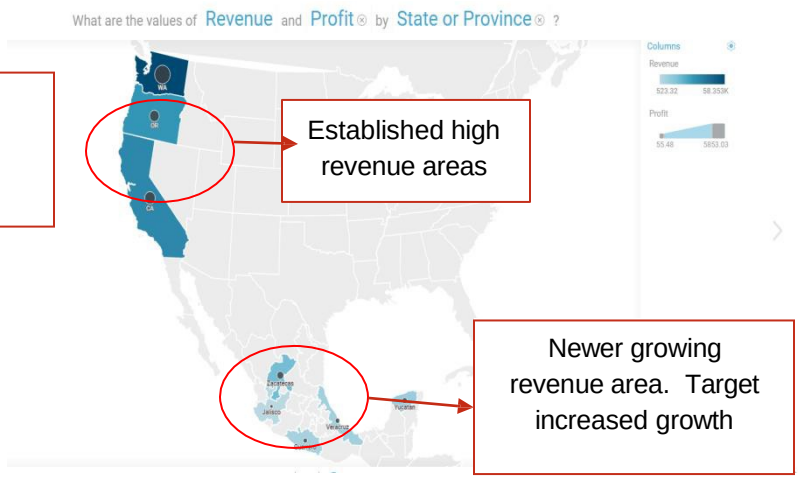


Revenue Performance Overview

Figure 1.1 Revenue Trend

Figure 1.2 Revenue by customer segment

Figure 1.3 Revenue and Profit by state



Increase customer visits

Key to driving revenue improvements is increasing customer visits, both in store and online. Increasing visits (transactions) requires several layers of targeted strategies. For existing customers, the aim is to get them to be loyal to your brand and increase their repeat visits, for new customers advertising, store placement, web presence and promotion from existing customers is critical.

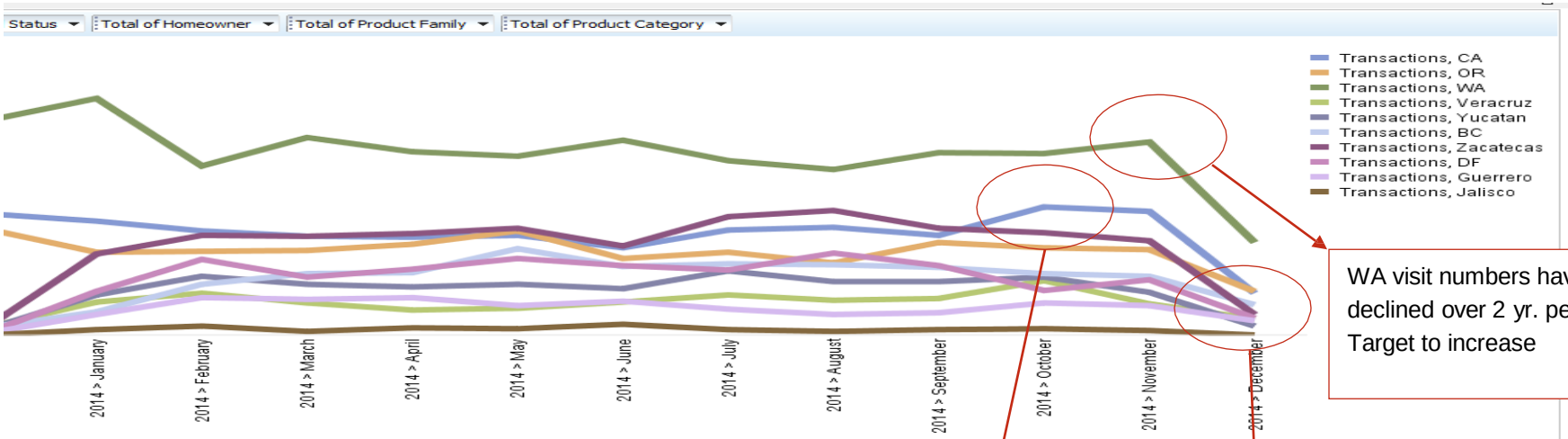
To enable targeted strategies it is crucial that Walton Supermarkets understands its customers. The data generated from the Uncle Sam loyalty program is an important asset that needs to be exploited. It can be utilized to understand both the current customer base, but can also be used to draw inferences about potential customers in the market and to profile churning customers. The customer Insights analytics area developed by BIG is designed to assist Walton in this pursuit.

Segmented marketing campaigns for both new and potential customers will require a thorough understanding of customer preferences and what drives customer behaviors. Targeted campaigns can be driven on price, such as using loss leader products to drive up visits or can be targeted to appeal to customer's preferences. To target customer preferences an understanding of what customer's buy, when they buy it and how they want to buy it enables the design and delivery of targeted customer discounts, rewards and delivery of customer experience.

Walton supermarkets current utilizes segmented campaigns for customers, such as specials for the budget conscious and loyalty rewards for more affluent segments. A key opportunities exists for Walton Supermarkets to also utilize this approach to deliver a tailored customer experience.

Our solution will provide enhanced insights to Walton to support the development of segmented customer's campaigns. BIG will work with Walton to ensure that the available data (both internal and external data sets) are utilized to gain customer insights and to track campaign effectiveness.

Figure 1.4: Number of Customer Transactions



2014 > January	2014 > February	2014 > March	2014 > April	2014 > May	2014 > June	2014 > July	2014 > August	2014 > September	2014 > October	2014 > November	2014 > December
764	820	810	808	860	797	845	825	827	849	807	320
128	117	111	110	112	98	118	121	112	144	139	47
93	94	95	102	117	86	93	81	104	98	96	49
266	190	222	206	201	219	196	186	205	204	217	104
37	47	36	28	30	37	45	39	41	61	35	18
45	66	57	54	57	52	72	60	60	65	48	10
26	57	69	70	97	77	80	79	76	69	66	34
91	112	111	114	120	100	133	140	120	115	106	23
49	85	65	74	86	78	73	92	78	50	62	19
23	42	40	42	33	38	29	23	25	36	33	16
6	10	4	8	7	12	6	4	6	7	5	

WA visit numbers have declined over 2 yr. period. Target to increase

California growth potential for visits numbers. Understand and target growth

Customer visits dramatically decreased in all areas

Increase average units sold

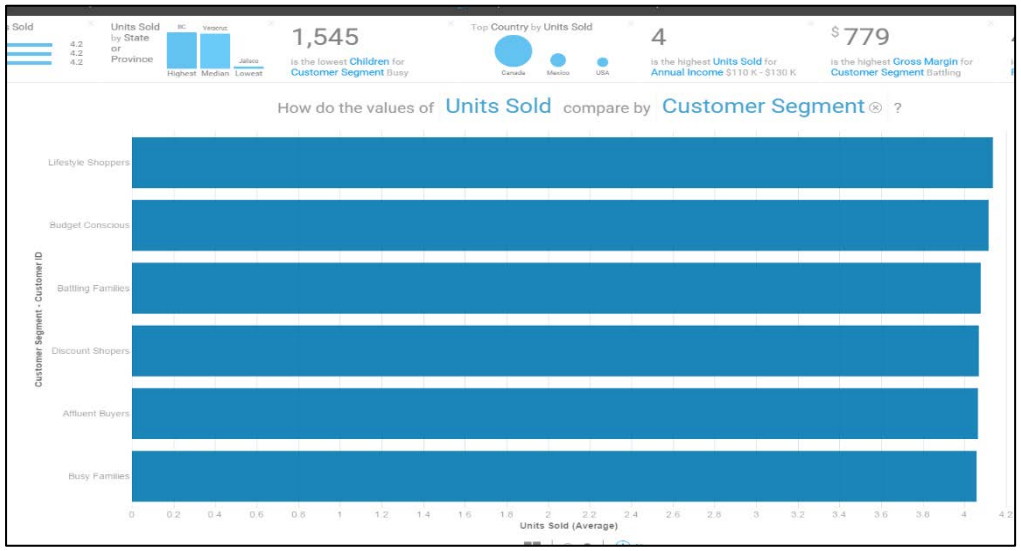
A key component of increasing revenue is the ability to increase average units sold. Opportunities exist for Walton Supermarkets to increase average unit sales by utilizing product placement tactics such as making sure that goods are stocked and displays are eye catching and strategically placed. Display spaces can also be utilized for in store promotions.

However, leveraging the same strategy detailed above in increasing customer visits, targeted campaigns for products that appeal to the customer can also effectively increase product sales. In order for these campaigns to be successful, we must first understand the customer insights. The customer insights dashboard provided in the BIG solution is designed to support this need. Understanding and tracking units sold is key for assessing the success of any campaigns that are undertaken. Being able to react to decreasing units sold in all areas will also be off immense benefit.

As figure 1.5 and 1.6 display Walton Supermarkets at a country level and a customer segment level there is little variance in the average units sold, also at a customer segment level there is little variance in the average units sold. Strategies to increase average units sold in the more affluent customer segments will be beneficial to Walton Supermarkets.

Figure 1.5: Average Units Sold by Country

Figure 1.6: Average Units Sold by Customer Segment



As figure 1.7 and 1.6 display there are opportunities for Walton to target some of the cities where average unit sold is below par. Again segmented targeted campaigns can be developed to achieve this. An understanding of the customer insights and demographics in these cities will be advantageous when developing these strategies.

Figure 1.7: Average Units Sold by city

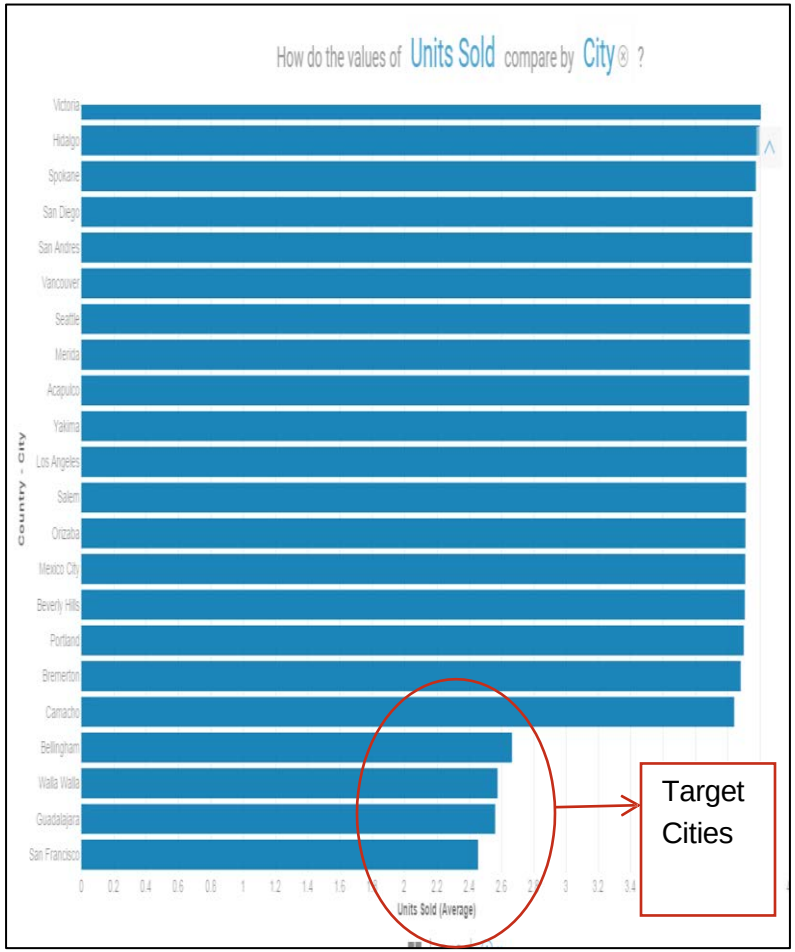


Figure 1.8: Total revenue by city

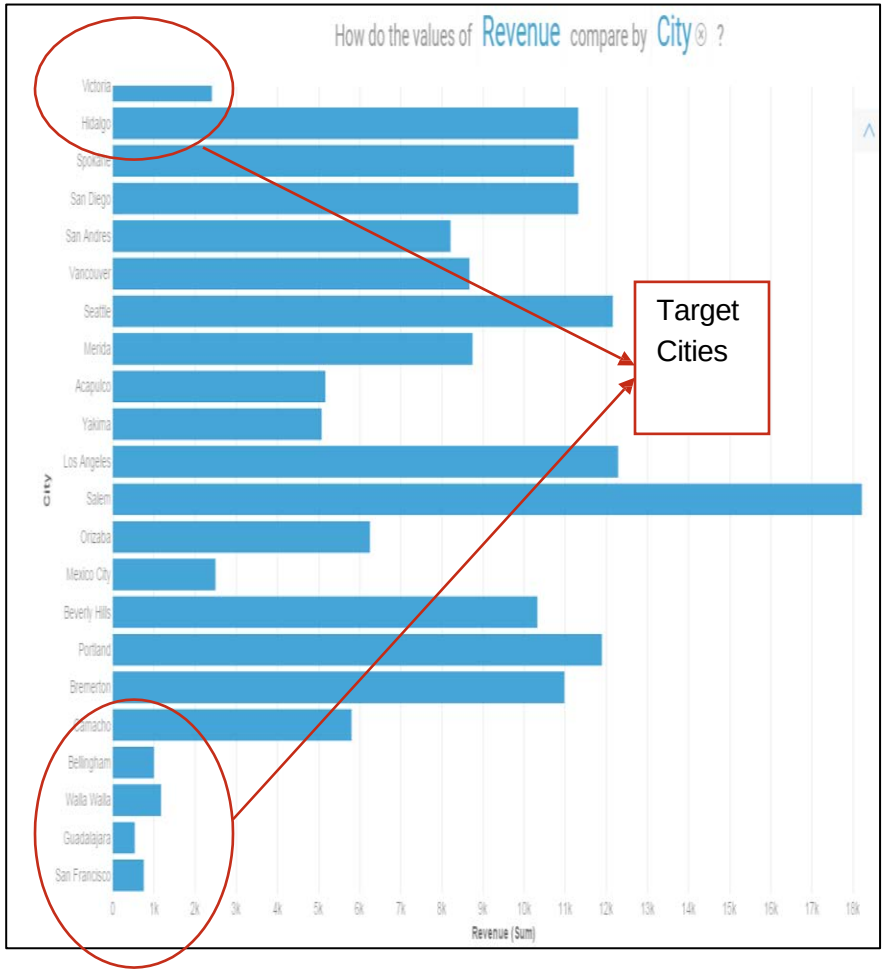
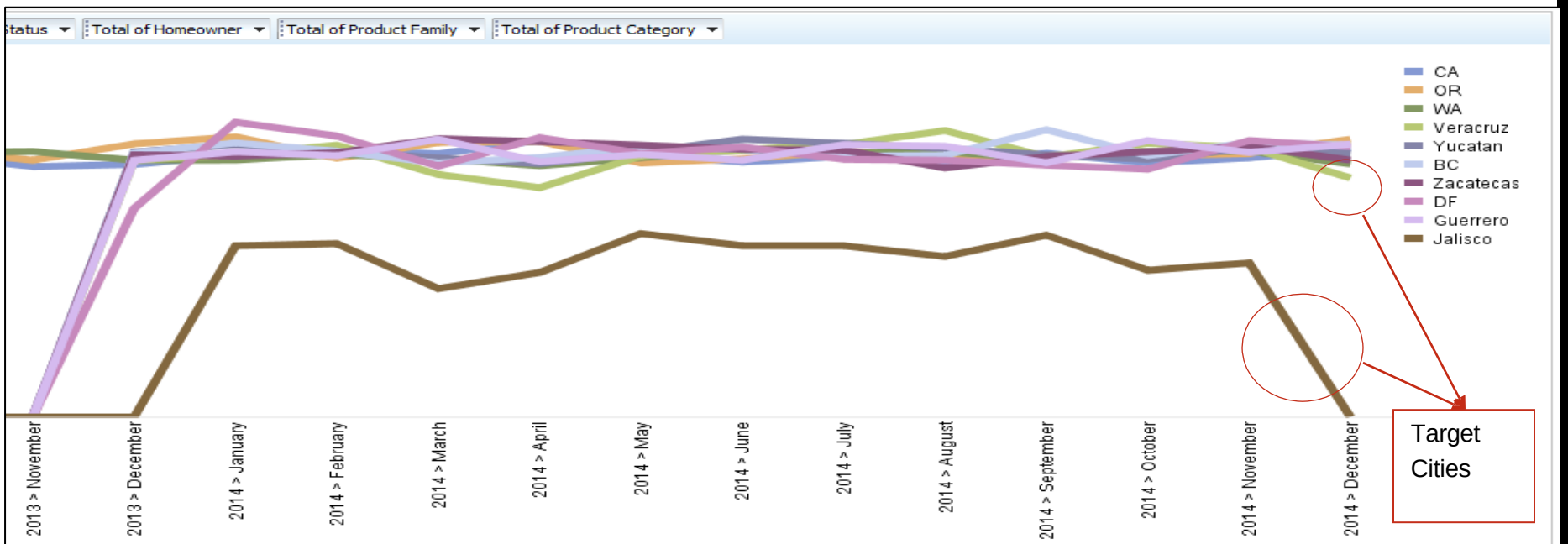


Figure 1.9: Average Units sold by City Trend



2014 > January	2014 > February	2014 > March	2014 > April	2014 > May	2014 > June	2014 > July	2014 > August	2014 > September	2014 > October	2014 > November	2014 > December
4.13	4.13	4.09	4.10	4.09	4.11	4.12	4.05	4.07	4.07	4.14	4.10
4.08	4.17	4.10	4.31	4.10	3.97	4.06	3.97	4.11	3.96	4.04	4.19
4.37	4.03	4.27	4.29	3.96	4.02	4.14	4.05	4.08	4.07	4.10	4.33
4.00	4.09	4.02	3.91	4.04	4.16	4.11	4.13	4.02	4.14	4.14	3.94
4.08	4.23	3.78	3.57	4.07	4.16	4.24	4.46	4.05	4.26	4.20	3.72
4.24	4.14	4.04	3.94	4.12	4.33	4.26	4.18	4.08	4.02	4.19	4.10
4.27	4.14	3.96	4.04	4.21	4.17	4.06	4.08	4.47	4.07	4.27	4.24
4.07	4.12	4.33	4.29	4.23	4.17	4.16	3.88	4.06	4.13	4.22	4.00
4.59	4.38	3.91	4.35	4.10	4.21	4.01	4.00	3.92	3.86	4.31	4.21
4.13	4.07	4.33	3.98	4.09	4.00	4.24	4.22	3.96	4.31	4.12	4.25

Increase average sale amount ($)

Key to driving revenue performance is not just increasing customer numbers and unit sales but also increasing the average sales amount. In order to develop strategies to increase this, Walton must first understand what is driving the average (what is the range of sales values) and who are the customers that are spending. The KPI dashboard, finance dashboard and product sales dashboards provided in the solution will assist in understanding these behaviors.

Again, by running targeted campaigns appealing to customer's tastes average sales amount can be increased. Product placement and displays play a key role in both average unit and average dollar sales as customers are driven to buy items that they may not necessarily have on their shopping list.

The addition of higher priced specialty products that appeal to certain customer segments (such as the affluent segment) can be added to product offering as a key strategy to increasing the average sales amounts. Bundling of offers such as buy two and get a discount can be targeted to customer segments to increase their spend amount.

Targeted displays and in store campaigns (such as tastings and demonstrations) can assist in driving add on sales. The "do you want fries with that" approach can be utilized and then tracked through the data and dashboards. Targeted add on sales campaigns linked to incentives for staff members achieving success may also be considered to drive sales behaviors amongst staff.

Figure 1.10: Average Units Sold by Customer

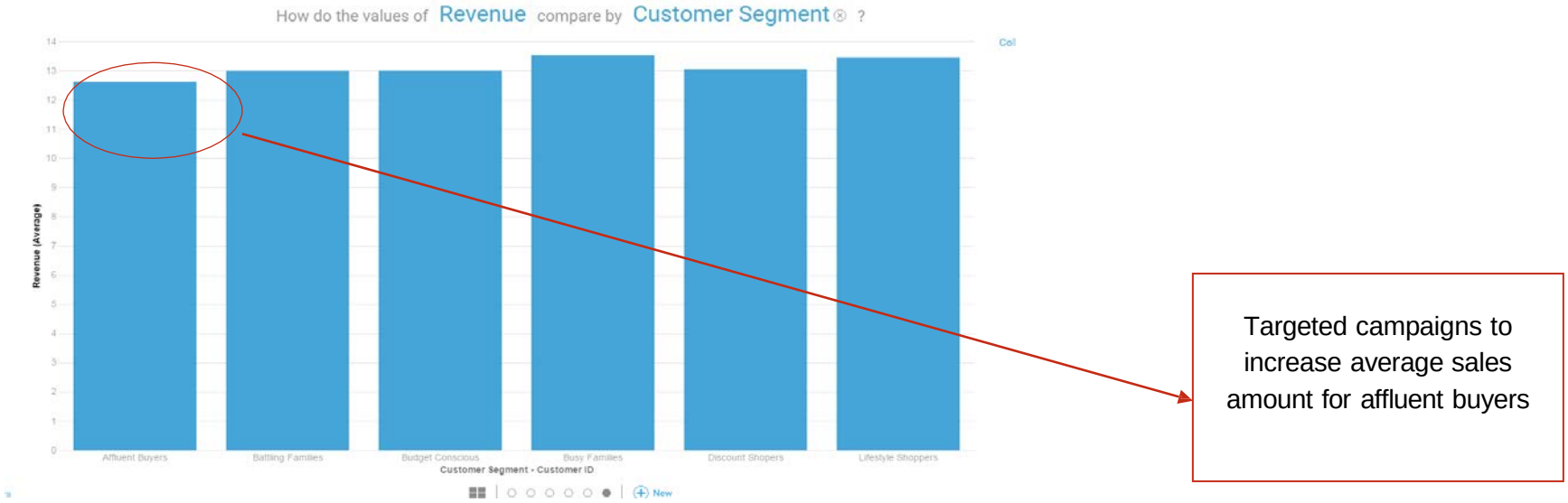
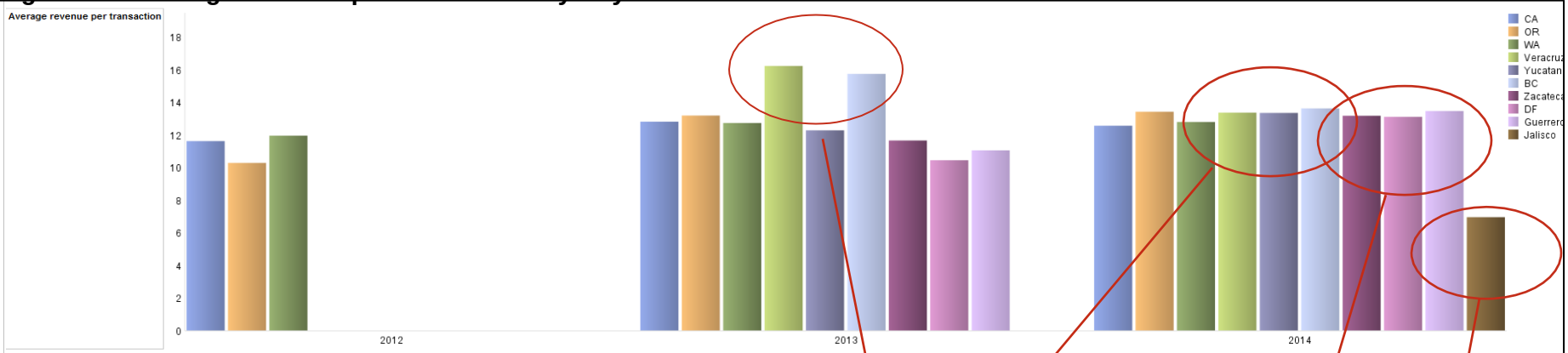


Figure 1.11 Average Revenue per Transaction by City



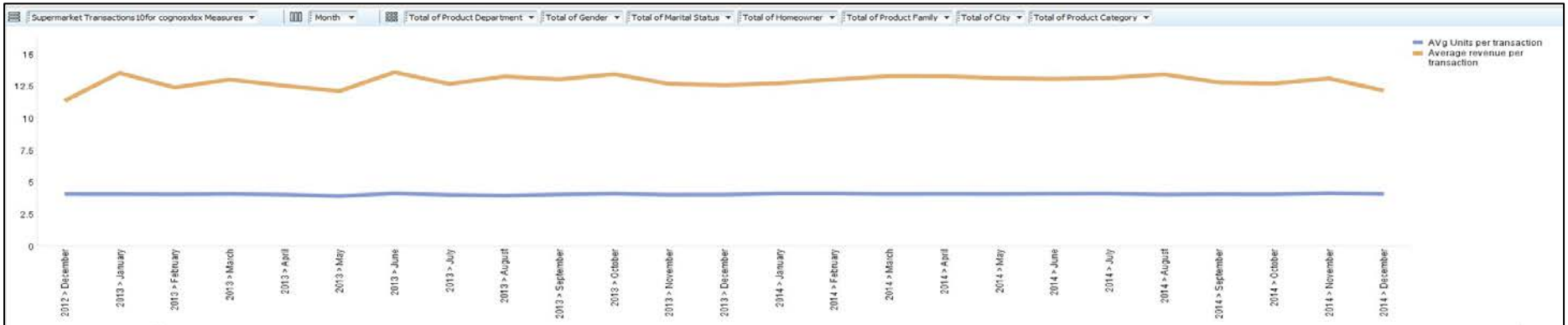
Average revenue per transaction	Total of Month	2012	2013	2014
Total of City	13.00	11.38	12.90	13.06
CA	12.71	11.65	12.84	12.59
OR	13.32	10.31	13.22	13.46
WA	12.79	11.98	12.76	12.82
Veracruz	13.46	0.00	16.27	13.40
Yucatan	13.36	0.00	12.31	13.38
BC	13.68	0.00	15.77	13.66
Zacatecas	13.19	0.00	11.69	13.21
DF	13.12	0.00	10.47	13.13
Guerrero	13.48	0.00	11.08	13.49
Jalisco	6.98	0.00	0.00	6.98

Target due to Decrease in average

Improvement in average. Target further improvement

Target due low average

Figure 1.12 Average units per transaction v Average revenue per transaction



	2013 > June	2013 > July	2013 > August	2013 > September	2013 > October	2013 > November	2013 > December	2014	2014 > January	2014 > February	2014 > March	2014 > April	2014 > May	2014 > June	2014 > July	2014 > August	2014 > September	2014 > October	2014 > November	2014 > December
AVg Units per transaction	4.13	4.02	3.97	4.05	4.11	4.04	4.04	4.10	4.13	4.13	4.09	4.10	4.09	4.11	4.12	4.05	4.07	4.07	4.14	4.10
Average revenue per transaction	13.63	12.71	13.29	13.07	13.47	12.71	12.61	13.06	12.76	13.05	13.31	13.31	13.16	13.10	13.17	13.46	12.82	12.74	13.14	12.18

Maintain a gross margin of 10%

Key to understanding how to maintain gross margin at 10% is understanding the contribution to gross margin by product, location and customer segment. Monitoring gross margin is exceptionally important if loss leader product campaigns are developed to attract customers. Important to loss leader strategies is ensuring that profit is increased and that higher margin items offset the loss leader products. . The product dashboard provided in the solution will assist Walton in analyzing and responding to gross margin composition and trends.

Analysis of margins is also a key input into developing targeted strategies for retaining high margin customers.

Figure 1.14 shows that Walton has managed to maintain a steady gross margin of around 10% throughout the past two years and maintaining this margin is key to the survival of the business. As can be seen from the figure 1.13 the range of gross margin by dollar amount fluctuates (in line with sales activity) so for comparative purposes it is important to ensure that the percentage gross margin is measured and not the dollar value.

Figure 1.13 Total Gross Margin ($) Trend)

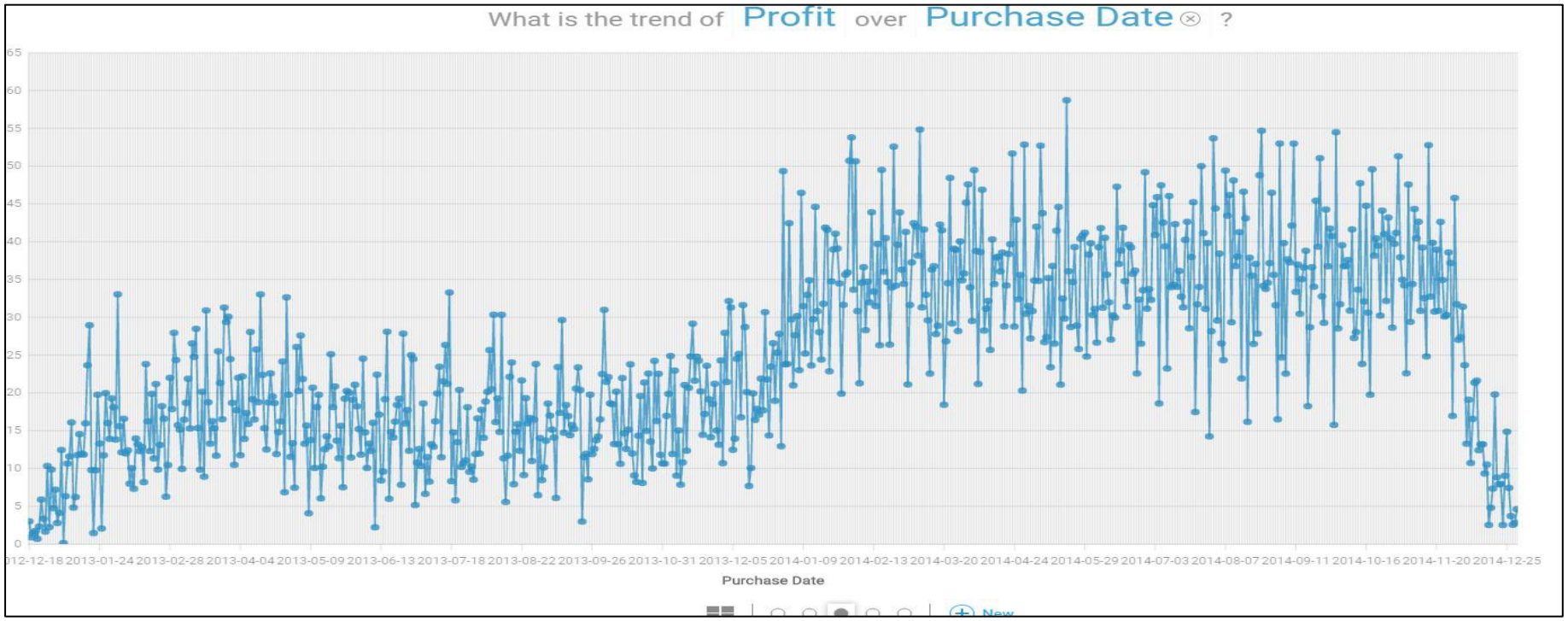
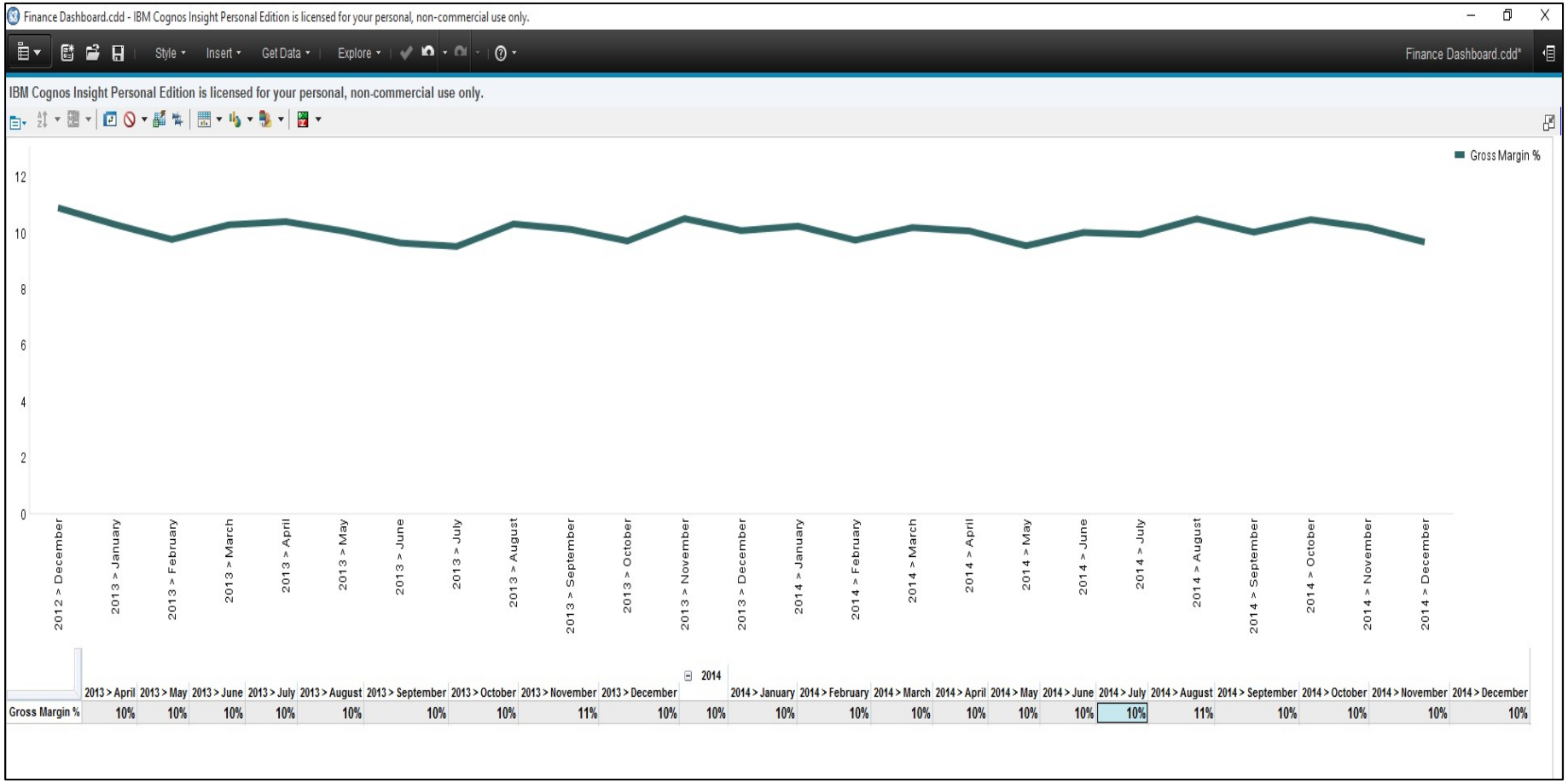


Figure 1.14 Gross Margin %



	2013 > April	2013 > May	2013 > June	2013 > July	2013 > August	2013 > September	2013 > October	2013 > November	2013 > December	2014	2014 > January	2014 > February	2014 > March	2014 > April	2014 > May	2014 > June	2014 > July	2014 > August	2014 > September	2014 > October	2014 > November	2014 > December
Gross Margin %	10%	10%	10%	10%	10%	10%	10%	11%	10%	10%	10%	10%	10%	10%	10%	10%	10%	11%	10%	10%	10%	10%

Figure 1.15 Products Profitability Gross Margin %

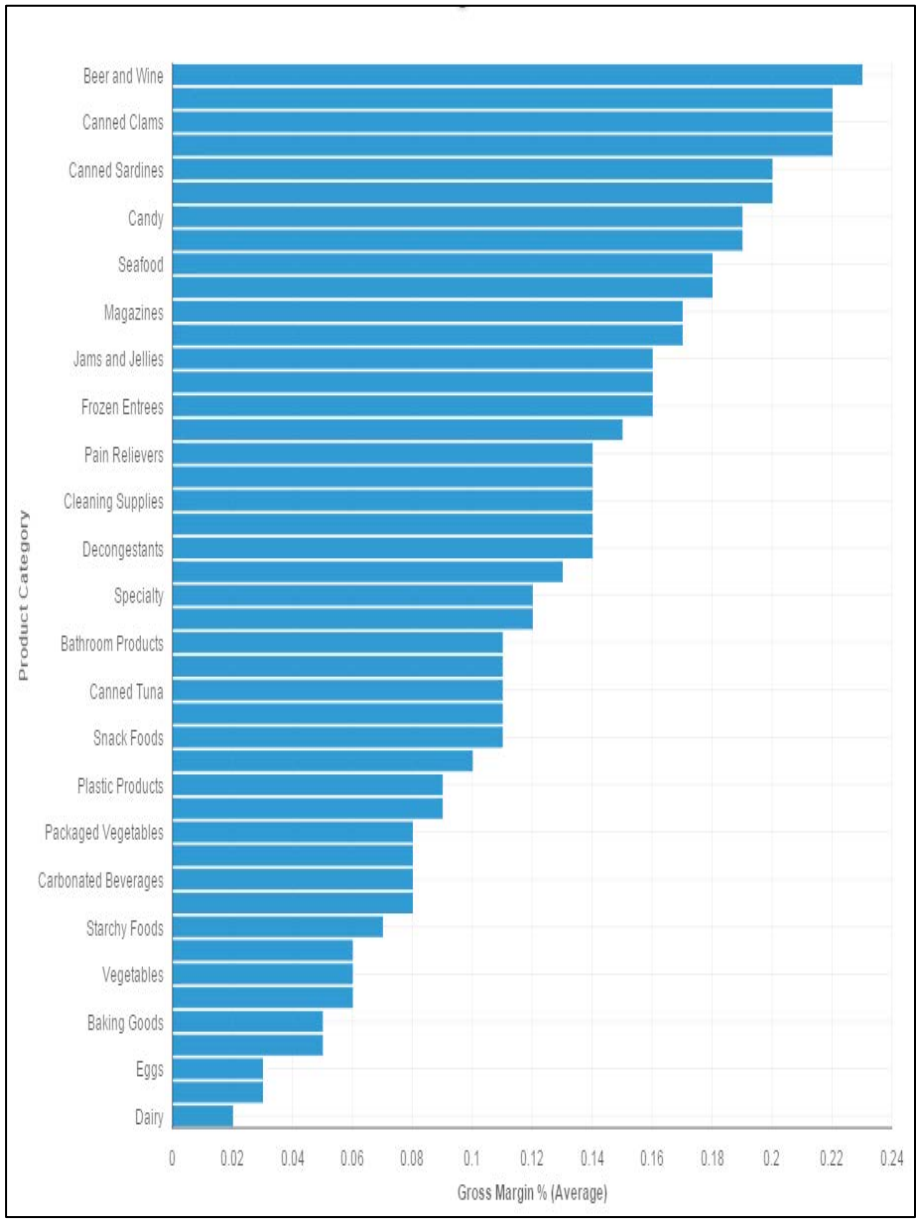


Figure 1.16 Product Profitability ($)

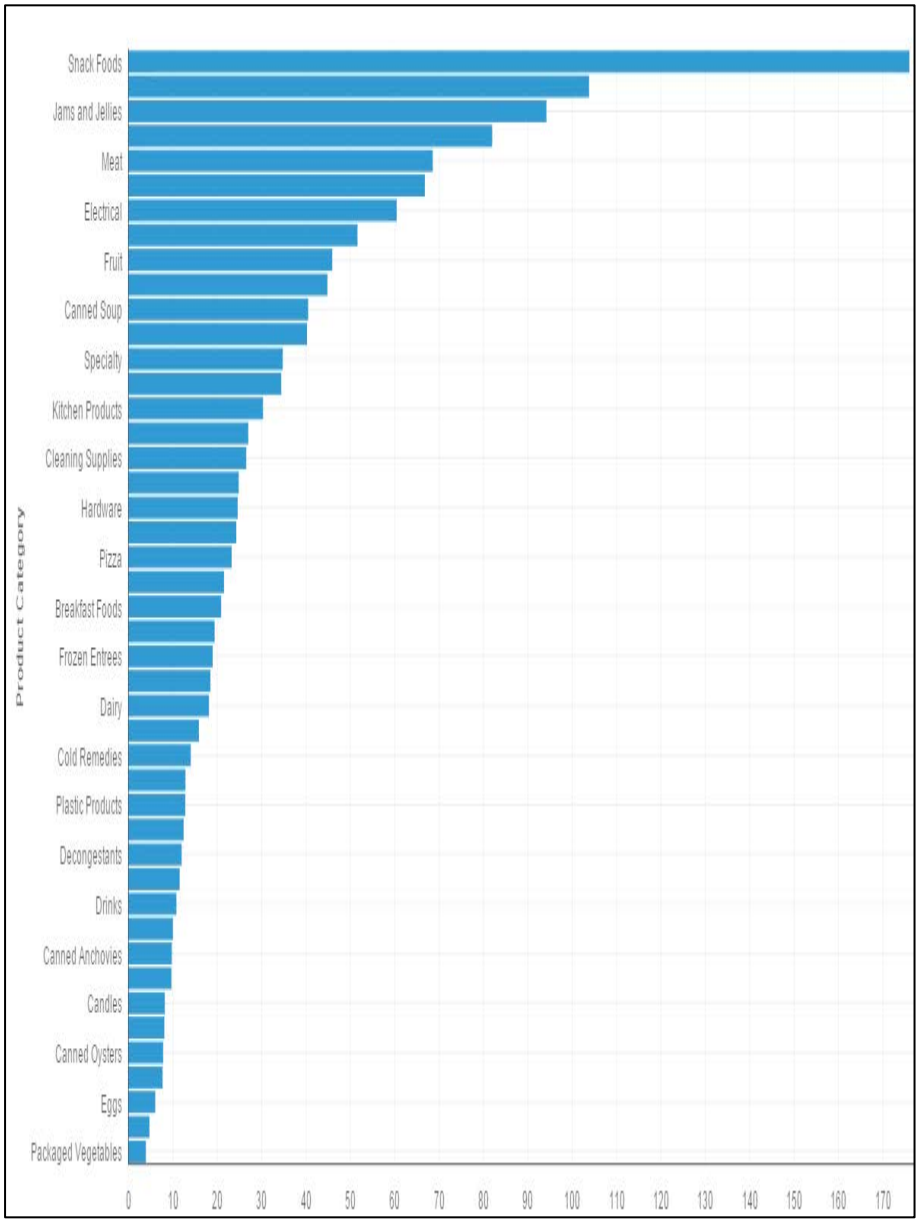
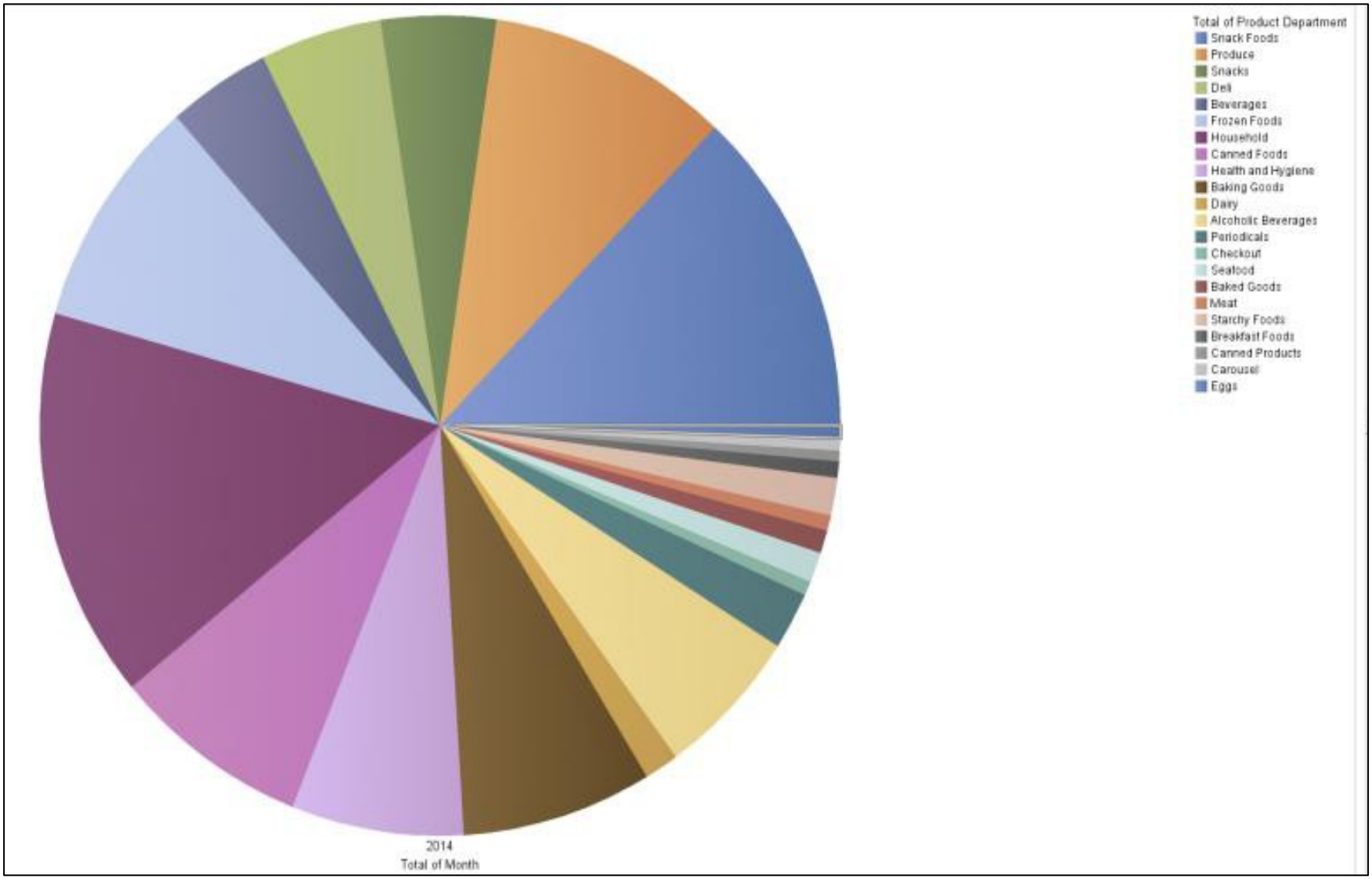


Figure 1.17 Gross Margin Contribution (2014 Gross Margin) by product department



IMPLEMENTING IMPROVEMENTS

Critical to the success of this solution is ensuring that Walton Supermarkets is able to turn the generated insights into actions. BIG has proven experience in not only designing and implementing BI and reporting solutions but in working with the business to translate these into key focus areas and measurable tactics.

We understand that strategy execution is what delivers long term benefits and we look forward to working with Walton Supermarkets to implement this solution and begin to translate it into actionable insights.

REFERENCES

Entrepreneur, *8 Tips for increasing your average sale,* Entrepreneur, retrieved 03 September 2015, <http://www.entrepreneur.com/article/191978>

eHow 2013, *How to Increase Grocery Store Sales*, eHow, retrieved 29 August 2015, < http://www.ehow.com/how_7516198_increase-grocery-store-sales.html>

Freshtight designs, *15 cost effective ways of getting more customers in the door,* Freshtight Designs, retrieved 03 September 2015, <http://freshtightdesigns.com/cost-effective-marketing-strategies/>

Tableau 2015, *6 Best Practices for Creating Effective Dashboards*, Tableau, retrieved 29 August 2015, <http://www.tableau.com/sites/default/files/media/whitepaper_6bestpracticesforcreatingeffectivedashboards_engfinal.pdf?ref=lp&signin=60c58bd460dd79d7199ad0fce29ad978&1[os]=windows>

Tableau 2015, *Visual Analysis Guidebook*, Tableau, retrieved 29 August 2015, <http://www.tableau.com/sites/default/files/media/whitepaper_visual-analysis-guidebook.pdf>