

## InfoSphere Warehouse Pack for Customer Insight Measuring Customer Profitability

Whitepaper

## InfoSphere Warehouse for Customer Insight – Measuring Customer Profitability Page 2

## Contents

| Executive Summary   | Page 3           |
|---|------------------|
| Chapter 1   | Page 4           |
| Support for Customer Profitabili                                  | ity Analysis     |
| <b>Chapter 2</b><br>Business Questions around Cu<br>Profitability | Page 6<br>stomer |
| Chapter 3   | Page 9           |
| Components of the InfoSphere                                      | Warehouse        |

Pack for Customer Insight

### **About This Paper**

The purpose of this paper is to outline the components of the IBM InfoSphere Warehouse (IWH) Pack for Customer Insight and how these assist organizations in many business sectors to measure the profitability of their customers.

This paper is divided into the following chapters: Chapter 1, "**Support for Customer Profitability Analysis**" outlines a high level view of some of the issues facing organizations in the area of Customer Profitability and how these are addressed by the IWH Pack for Customer Insight.

Chapter 2, "**Business Questions around Customer Profitability**" describes a selection of typical business focused questions relating to Customer Profitability and how these can be answered.

Chapter 3, "Components of the InfoSphere Pack for Customer Insight" describes briefly the major components of the IWH Pack for Customer Insight.

## Who Should Read This Document

- Customer Relations Executives
- Sales and Marketing Executives
- Finance Directors and Board Directors
- IT, Operations Managers
- Business Intelligence practitioners

### **Executive Summary**

Customer Profitability

- Understanding Customer Profitability is key to an organization's commercial success. By analyzing customer generated income and profit the organization can identify areas of strength and weakness.
- The underlying goal of the organization is to grow sales income while maintaining or increasing profit margins.
- Monitoring trends in customer activity can enable an organization to react early to exploit growth areas or to respond quickly to problems.
- Consistent and timely reporting of performance against the organization's budgets and forecasts is necessary to support the implementation of common strategies.

How does the IWH Pack for Customer Insight help?

- The IWH Pack for Customer Insight provides the organization with a Business Issue focused approach.
- The IWH Packs share common atomic data and are designed to easily integrate with each other.
- The Pack includes a data model, dimensional data warehouse and sample reports all connected up.

What are the benefits?

- The IWH Pack for Customer Insight uses tried and tested concepts to ensure easy integration with other IWH Packs. This means that the organization can concentrate on its most relevant business issues while still building an enterprise data warehouse.
- The sample Cognos reports provide the organization with an accelerated path to meaningful analysis of Customer profitability.

Executive management and operations need a coherent view of performance against targets and underlying trends

## Chapter 1: Support for Customer Profitability Analysis

There are many factors which influence customer profitability and an organization may be able to control these to a greater or lesser extent. However the typical starting point is the product or service which the organization sells to a customer and the gross profit which such products or services generate.

Access to large volumes of customer transaction data allows the organization to identify customer groups who generate above or below average margins. It can also identify product groups which have a positive or negative influence on profitability. These same large volumes of data, however, can also obscure information as their very volume makes it difficult for traditional information systems to process in a timely and coherent manner.

Comparative analysis allows the organization to establish the "norm" and then work on the customers, products, locations or channels which are failing to perform.

Customer Profitability can be affected by many factors;

- The customer's spending pattern where a greater spend generates greater revenue and more profit while less spend equals less profit.
- Product mix can impact profitability. If customers cherry pick special deals and chose no added value offerings the organization will loose margin.
- Product Offerings and Pricing may enhance or reduce profitability. This can often present itself as geographic performance variances where competitive pressures, local taxes or currencies lead to different pricing and packaging policies. For example, certain goods like tobacco and liquor may be taxed at a higher rate than general merchandise and these tax rates may vary by location.

Different business users require diverse views of the same facts

What do we sell, who buys it and how much

profit do we make?

To be able to understand these factors and identify issues the organization must have a well structured data warehouse. Diverse business users need access to common data in their own language.

Understanding how the same products can deliver different levels of profitability depending on the type of customer, location or channel involved in their provision can help the organization to maximize its profit performance from existing business as well as targeting the most lucrative areas for new business. To support these requirements the IWH Pack for Customer Insight provides access to the analytical data over many business dimensions including;

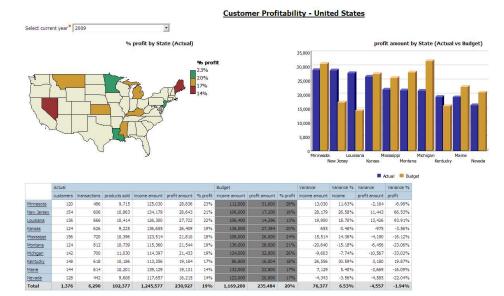
- Locations including Geographic and Organizational.
- Customer Segmentation, including Socio Economic Group, Gender, Marital Status, Age Range Nationality and Language Preference.
- Product Classification including Line of Business and Product Type.

This information is stored in a flexible data warehouse incorporating both an Atomic Data Warehouse Layer and the Data Mart Layer which supports the business analysis. Users access the information via business focused reports.

# Chapter 2: Business Questions around Customer Profitability

Consider a typical business question; "Where are our most profitable customers?"

Any marketing or operations executive will want to monitor this constantly. The IWH Pack for Customer Insight includes sample reports in this area;



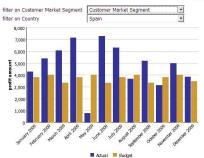
Where are our most profitable customers?

How are we performing against our budgets?

By addressing the question "Where are our most profitable customers?" we can also locate our least profitable customers. This sample also introduces performance against budgets and allows business users to identify locations which are failing to meet their budgets as well as those surpassing them.

The IWH Pack for Customer Insight database will allow the business user to "drill down" to finer detail in this type of analysis or to analyze over a completely different dimension while maintaining the integrity of the information provided.

### Consistent information across multiple dimensions



#### Income and Profit - Actual vs Budget by Year

|                | Actual    |              |                  |                  | Budget           |                  | Variance         |             |                  |          |
|----------------|-----------|--------------|------------------|------------------|------------------|------------------|------------------|-------------|------------------|----------|
|                | customers | transactions | income<br>amount | profit<br>amount | income<br>amount | profit<br>amount | income<br>amount | income<br>% | profit<br>amount | profit % |
| January 2009   | 21        | 77           | 19,569           | 4,277            | 19,000           | 3,800            | 569              | 2.99%       | 477              | 12.55%   |
| February 2009  | 25        | 138          | 24,142           | 5,389            | 21,500           | 4,000            | 2,642            | 12.29%      | 1,389            | 34.72%   |
| March 2009     | 18        | 132          | 29,896           | 6,062            | 20,000           | 3,346            | 9,896            | 49.48%      | 2,716            | 81.17%   |
| April 2009     | 26        | 64           | 22,995           | 7,125            | 19,000           | 3,800            | 3,995            | 21.03%      | 3,325            | 87.50%   |
| May 2009       | 25        | 94           | 17,550           | 763              | 21,500           | 4,000            | -3,950           | -18.37%     | -3,237           | -80.92%  |
| June 2009      | 24        | 111          | 23,150           | 7,271            | 20,000           | 3,346            | 3,150            | 15.75%      | 3,925            | 117.30%  |
| July 2009      | 21        | 77           | 21,598           | 6,306            | 19,000           | 3,800            | 2,598            | 13.67%      | 2,506            | 65.95%   |
| August 2009    | 25        | 138          | 22,435           | 3,682            | 21,500           | 4,000            | 935              | 4.35%       | -318             | -7.95%   |
| September 2009 | 18        | 132          | 29,011           | 5,177            | 20,000           | 3,346            | 9,011            | 45.06%      | 1,831            | 54.72%   |
| October 2009   | 26        | 64           | 18,992           | 3,122            | 19,000           | 3,800            | -8               | -0.04%      | -678             | -17.84%  |
| November 2009  | 25        | 94           | 21,762           | 4,975            | 21,500           | 4,000            | 262              | 1.22%       | 975              | 24.38%   |
| December 2009  | 24        | 111          | 19,734           | 3,855            | 20,000           | 3,469            | -266             | -1.33%      | 386              | 11.13%   |
| 2009 Total     | 23        | 1,232        | 270,834          | 58,004           | 242,000          | 44,707           | 28,834           | 11.91%      | 13,297           | 29.74%   |

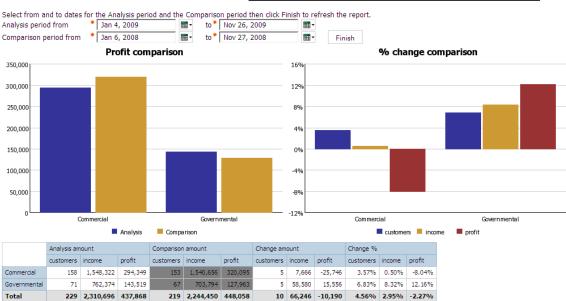
## InfoSphere Warehouse for Customer Insight – Measuring Customer Profitability Page 7

The IWH Pack for Customer Insight provides the organization with information arranged the way the business users require it; Who are we selling to, What are they buying, Where are our customers transacting business and When do they buy?

How are we performing Year on Year?

Consider another typical question; "How are we performing Year on Year?"

As well as measuring performance against budgets and forecasts, business users constantly monitor trends. The most common form of such analysis is performance against the same period last year but it can also be a month on month or any other time based comparison. The IWH Pack for Customer Insight includes sample reports in this area;

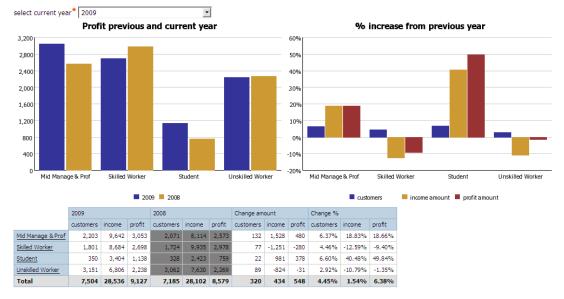


Organization - This Year To Date vs Last Year To Date

How are we performing in our customer market segments?

For example, this report compares profitability of organizational customers over two date ranges showing the increase or decrease in performance for each customer market segment.

Another similar analysis looks at the comparative performance of individual customers according to socio economic category.



Individual - Year on Year Profitability Comparison

Other reports might analyze this information or sub-sets if it by customer Age Range or Gender providing marketing executives with further insight into the developing patterns of behavior among the organization's customers.

Consistent information across multiple dimensions

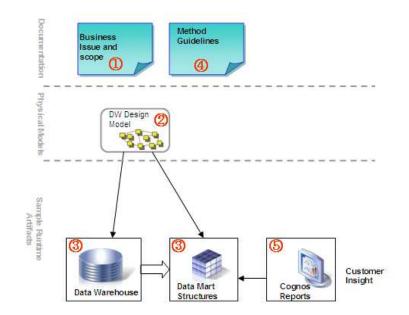
This flexibility in the use of diverse dimensions allows the organization to gain the maximum business intelligence on customer profitability from available data.

# Chapter 3: Components of the InfoSphere Warehouse Pack for Customer Insight

The IWH Pack for Customer Insight comprises the following major components;

 A document describing the Business Issues and outlining how they are addressed by the pack under 2 broad headings of Customer Profitability and Customer Profiling.

- Predefined Physical Models containing the Data Warehouse and Data Mart definitions needed for the business issues addressed by the pack
- Associated sample Runtime Artifacts being the DDL for the data warehouse and data mart.
- A Method Guidelines document outlining the proposed method and design decisions regarding the Physical, Relational and Star Schema models.
- 5. Integrated sample best-practice OLAP **Cognos Reports** and Framework Manager structures



Being based on InfoSphere Warehouse, the IWH Pack for Customer Insight provides a scalable platform for information delivery that transparently offers incremental value such as advanced data mining and scalable cubing services to any Cognos 8 BI-based solution.

The IWH Pack for Customer Insight includes a fully integrated set of components to specifically address the issues of Customer Profitability



IBM Industry Models & Assets IBM Ireland Building 6 Dublin Technology Campus Damastown Industrial Estate Mulhuddart Dublin 15 Ireland

The IBM home page can be found on the Internet at **ibm.com** 

IBM is a registered trademark of International Business Machines Corporation.

References in this publication to IBM products, programs or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program or service is not intended to imply that only IBM 's product, program or service may be used. Any functionally equivalent product, program or service may be used instead. This publication is for general guidance only.

© Copyright IBM Corp. 2010. All Rights Reserved.

Part No : Release : 8.2