



RATE PREDICTION MODEL FOR US HEALTH INSURANCE

Team A Presentation

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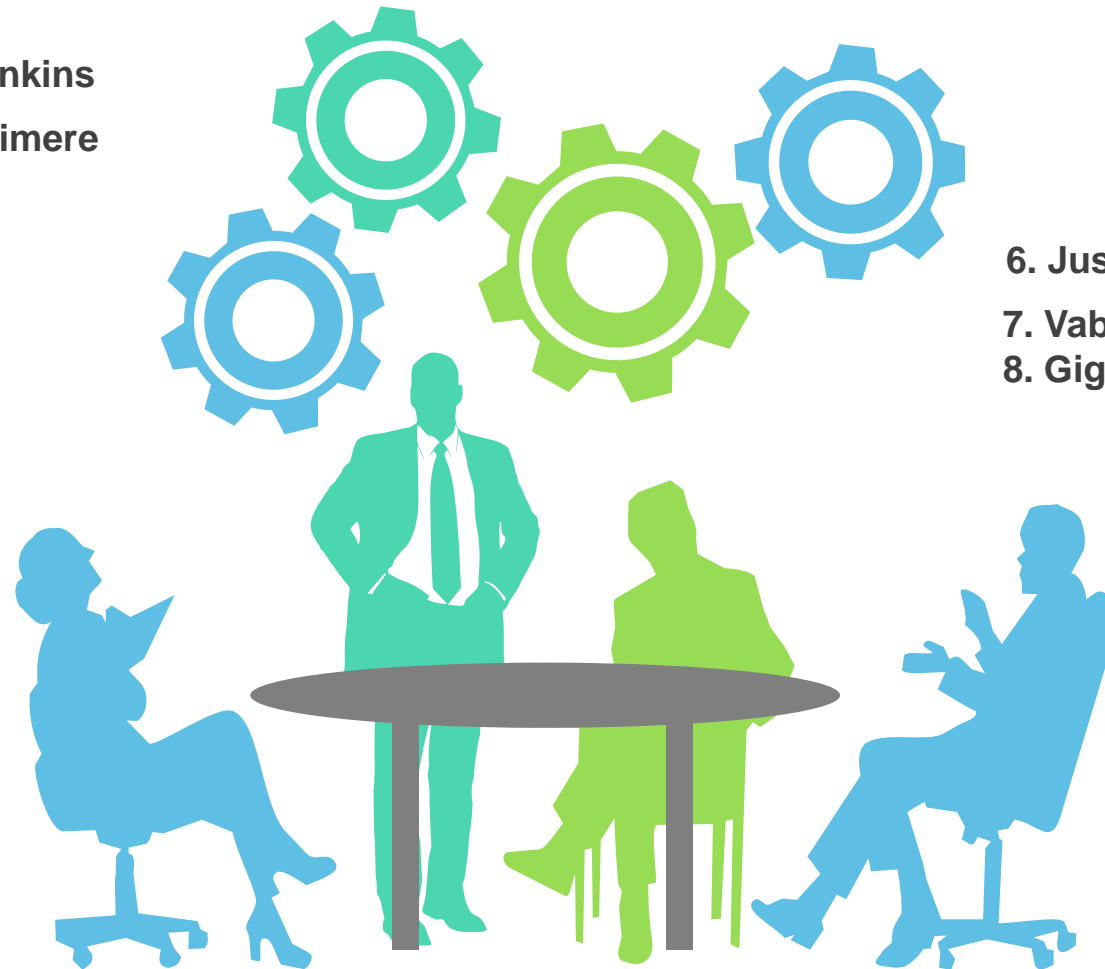
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Executive Summary



The Management of Eco Insurance (ECOI) is attempting to delve into health insurance in the United States. To make this move they intend to understand and develop a very robust business case to support their entrance to the market. Pairview Consultancy Services has been consulted to develop insight from publicly available data from the Center for Medicare and Medicaid Service (CMS) in order to advice management The Expectation from ECOI is to understand all risk factors and variables that will help the underwriters to determine the premium

Goals

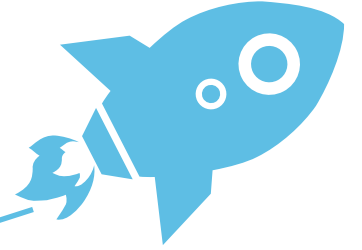


1. Develop a robust Business analysis roadmap for the implementation of the plan proposal of ECOI from the understanding and Analysis of the data available from CMS. The goal is to have a business management strategy and solution to go to support the business case.
2. Unify all data sources from CMS and other source into a relational operational system (OLTP), making sure that data is easily ingested at any update.
3. Determine and define each key variable from the data to determine rates paid for health insurance.
4. Develop a linear regression model to test each variable and the associated plan rates.
5. Develop a model that helps us predict price for underwrites to determine premium.

SWOT ANALYSIS

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">• Growing Demand for Health Insurance• Established Reputation and Expertise• Advanced Data Analysis Capabilities• Customization and Innovation	<ul style="list-style-type: none">• Limited Understanding of Health Insurance Market• Regulatory Compliance Challenges:• Initial Investment and Operational Costs
OPPORTUNITIES	THREATS
<ul style="list-style-type: none">• Technological Advancements• Population Health Management• Strategic Partnerships	<ul style="list-style-type: none">• Public Perception and Trust• Economic and Regulatory Uncertainties• Intense Competition

ECOI COMPETITORS



- Blue Cross and Blue Shield of Texas
- UnitedHealthcare
- Bright Healthcare
- Oscar Insurance Company
- Medica
- Blue Cross and Blue Shield of Illinois
- Cigna healthcare
- Anthem Blue Cross and Blue Shield
- Aetna CVS Health
- Blue Cross and Blue Shield of NC

ECO INSURANCE COMPETITOR ANALYSIS

- **Blue Cross and Blue Shield of Texas** Strengths: Established brand recognition, extensive network of healthcare providers. Weaknesses: Limited market presence outside of Texas, potentially higher premiums compared to some competitors.
- **UnitedHealthcare** Strengths: **Largest health insurer in the United States**, diverse range of insurance products and services with **large investment in technology**. Weaknesses: Can be perceived as bureaucratic and impersonal due to its size, may have higher administrative costs.
- **Bright Healthcare** Strengths: Innovative approach to healthcare insurance, focus on technology-driven solutions. Weaknesses: Limited market share and brand recognition compared to larger competitors, potential challenges in expanding their network of providers.

ECO INSURANCE COMPETITOR ANALYSIS

- **Oscar Insurance Company** Strengths: Technology-driven approach appeals to younger, tech-savvy consumers, emphasis on member experience and engagement. Weaknesses: Limited geographic presence compared to larger competitors, may struggle with profitability due to heavy investments in technology and customer experience.
- **Medica** Strengths: Strong regional presence in the Midwest, emphasis on customer service and community engagement. Weaknesses: Limited national presence, may face challenges in competing with larger insurers on pricing and innovation.
- **Blue Cross and Blue Shield of Illinois** Strengths: Established brand recognition and extensive network of providers, strong market presence in Illinois. Weaknesses: May face regulatory and legislative challenges in a highly regulated market, potential for higher premiums compared to smaller competitors.
- **Cigna Healthcare** Strengths: Diverse portfolio of health services including insurance, pharmacy benefits, and health programs, global reach with operations in multiple countries. Weaknesses: Limited market share compared to some competitors in the US, potential for integration challenges following mergers and acquisitions.

ECO INSURANCE COMPETITOR ANALYSIS

- **Anthem Blue Cross and Blue Shield** Strengths: Strong brand recognition, extensive network of providers, and diverse range of insurance products. Weaknesses: Regulatory scrutiny due to its size and market dominance, potential challenges in maintaining competitive pricing.
- **Aetna CVS Health** Strengths: Integration with CVS Health offers potential for innovative healthcare delivery models, strong market presence in pharmacy benefits management. Weaknesses: Integration challenges following the merger with CVS Health, potential for conflicts of interest between insurance and retail pharmacy businesses.

KEY VARIABLES FOR RATE DETERMINATION

- Age
- Plan Type
- Metal Level
- Tobacco User Status
- State

BUSINESS MANAGEMENT STRATEGY

LOCATION:

Alabama (AL):

The significant increase in individual rates and the positive trend in benefits make Alabama an attractive market.

Alaska (AK):

The consistent growth in individual rates and benefits suggests stability and potential demand.

AGE CONSIDERATION:

15-25 years:

- This age group includes young adults who are typically healthy and utilize less healthcare.
- ECOI can attract a large pool of policyholders with lower risk profiles by targeting this demographic.
- Younger individuals may be more open to purchasing insurance, especially if the premiums are affordable.

56-65 years (pre-retirees and retirees):

- This age group represents individuals transitioning into retirement and often have higher healthcare needs due to age-related conditions.
- ECOI can attract policyholders seeking comprehensive coverage during this critical life stage by offering tailored plans.
- Retirees may value stability and continuity in their health insurance.

BUSINESS MANAGEMENT STRATEGY

AVERAGE INDIVIDUAL & AVERAGE INDIVIDUAL TOBACCO RATE BY METAL LEVEL

Gold Level:

The Gold level has a high average individual rate and a slightly lower average individual tobacco rate.

This suggests that it's a popular choice among individuals, possibly due to the balance it offers between coverage and cost. Entering this segment could allow ECOI to cater to a large customer base.

MARKET ENTRY STRATEGY BY PLAN TYPE:

- ECOI should consider offering a mix of plan types to cater to diverse customer preferences.
- Highlight the benefits of each plan type in marketing materials.

RECOMMENDATIONS

- PPO (Preferred Provider Organization)
- HMO (Health Maintenance Organization)

BUSINESS MANAGEMENT STRATEGY

ECO Insurance should invest in technology to enhance customer experience and global expansion.

APPENDIX

Health Insurance Prediction Project

- Business Analysis Plan for Rate Prediction
- Database Requirements Documents
- Database Diagram
- Process Flow Diagram
- Process of Relational Database Design pptx
- Work Breakdown Structure
- Stakeholder Identification



THANK YOU
