

To: Company X Limited

From: Rockwall Analytics

Subject: Teleco Operator Declining Profitability - STRATEGY CONSULTING

Date: January 10, 2021

THE OVERVIEW

Market Research, Data Analysis, Understanding Consumer Needs, Client Recommendation, Next Step



Market Research

Get up to speed on a new topic

The background information

WHO IS OUR CLIENT?

Co. X is a local telecom company and is facing a decline in profits over the past few years. Rockwall Analytics has been engaged to drive improvements in profitability. One of the hypotheses under consideration is the introduction of handset leasing

HANDSET LEASING

Handset leasing works by renting new phones to customers for a monthly fee instead of selling phones to customers at a discounted upfront cost. Customers lease phones for a fixed term (usually 12 months), before they swap their used phone for a new model. Some telecom companies bundle phone leasing plans with lower-priced sim only mobile plans. This allows customers to change their phones more frequently without incurring upfront costs of buying phones through retail, or affecting their mobile plans. For the telco, this reduces their need to hold inventory, and reduces their financing costs, both of which can help profitability

CLIENT MEETING

The Principal, Elisse, held an initial team meeting with *Rockwall Analytics* to discuss the various initiatives, including handset leasing. After discussion with our team, we have identified the need to do some market research and find out the impact of handset leasing on telco profitability in other markets

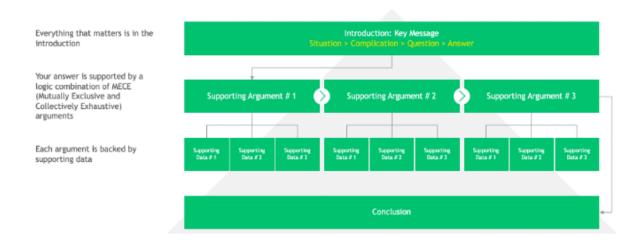
Elisse wants an memo with our recommendation on whether her team should explore this idea further

OUR TASK

Our first task is to do some research and identify markets in which handset leasing has already been introduced

Look for analyst reports on the impact on revenue and profits for the telecom companies operating in those markets, and summarise our findings in memo to Elisse, stating whether this is an attractive business model for the team to explore further

How to structure a presentation: the Minto Pyramid Principle



DATA-DRIVEN DECISION MAKING

In this multi-part task series about data-driven decision making in telco, we have argued that intelligence, not data itself, is the critical component in decision making. We have also pointed out the importance of understanding the critical data needed for a specific decision and the processes involved in collecting, organizing and storing this data. Here, we focus on what may be considered the most important step in the intelligence cycle: the processing and analysis of data and information

Rockwall Analytics analysis step transforms raw data and information into actionable intelligence. The key to this step is taking our collection of facts, figures, statistics and other quantitative data points and organizing and interpreting the data to reveal patterns, tendencies and relationships. As we've discussed, the transformation of data and information into actionable intelligence is the heart and soul of good decision making

Several concepts are fundamental in the process of transforming data into intelligence. The following concepts permeate the various tools and techniques used to achieve this transformation:

- **Inductive reasoning**: the ability to combine separate pieces of information or specific answers to problems to form general rules or conclusions. This involves the ability to think of possible reasons why things go together, as well as discovering logical explanation for series of events that seem unrelated
- **Deductive reasoning**: the ability to apply general rules to specific problems in order to discover a logical resolution. This involves an analysis to determine if the resolution makes sense
- **Pattern recognition**: the ability to identify or detect a known pattern (a figure, word or object) that is hidden in other materials

A major point to be observed here is that some of the tools used to collect, organize and store data and information may do a great deal of the heavy lifting when the time comes for analysis. Not only will these tools make this process faster, but they may also jump start the transformation. For instance, a text mining tool may help us collect textual data about a topic in a document or on a website. This same tool may also be used to analyze pre-collected content, providing, a count for how many times a word was used and its various contexts

Often, particularly in research-focused parts of organizations, there is inertia or pressure to use the latest and most complex method for transforming data into intelligence. However, it is critical to maintain a focus on using the tool that is best suited for the job at hand. You would not use a sledgehammer to tighten a screw, and you probably would not use tweezers to bring down a wall

The number of analysis tools and frameworks is practically limitless. We do not intend to present all possible analysis tools, but some examples include:

- 1. Classical analysis strategies and tools:
 - Business Matrix
 - Industry Analysis (Porter's Five Forces Model)
 - SWOT Analysis

- Financial Ratios (ROA, ROE, ROI, etc.)
- Scenario Analysis
- 2. Data mining and statistical analysis tools:
 - Class/Concept Description: Characterization and Discrimination
 - Data Mining for Frequent Patterns
 - Outlier Analysis
 - Correlation Analysis
 - Discriminate Analysis
 - Factor Analysis
 - Cluster Analysis
 - Forecasting/Time Series Analysis
 - Classification and Regression for Predictive Analysis
- 3. Visual analysis strategies and tools:
 - Tableau
 - Olikview
 - FusionCharts
 - Plotly
 - Sisense
 - Power Bi
- 4. Decision modeling tools:
 - Business Experiments
 - Sentiment Analysis
 - Monte Carlo Simulation
 - Linear Programming
 - Cohort Analysis

Additionally (and extremely important to remember), Big Data is not a thing — it is a capability. Therefore, while the dimensions of Big Data — **volume, variety and velocity** — are important descriptors of what makes data "big", the more critical dimension of Big Data is analysis, or the capability of transforming all of this data into insights. In fact, one of the most sought-after degrees in higher education today is data analytics, as this set of technical skills is what allows a firm to truly leverage its big data to create differentiation in today's marketplace

Big Data in telco is helping us to better understand the factors that drive what has happened or is currently happening the telecommunication sector. This is a powerful tool to provide insights into our decision making and help us identify areas we should research further to learn how we can better predict what may happen in the future. Combining Big Data analysis with what is known as "small data" (conducting scientific research in a systematic way) is the true essence of converting data into intelligence. For example, we have seen real-time Big Data analysis of weather patterns, soil conditions and farm management practices combined with small data associated with disciplined agronomic research improve in-season farm management practices that enhance production, improve plant health, preserve soil nutrients and maintain cleaner water systems

CONCLUSION

Regardless of the tool or strategy we decide on to transform our critical datasets, it is imperative that it achieves a simple and important goal: to answer the critical intelligence needs or questions required by the decision maker

Once the right tool or strategy is employed and data and information are transformed, the core of the intelligence cycle is done, yet far from over. There is no value in analytical efforts if they don't reach the decision maker in a timely and appropriate manner