RFM
A business analytics case for all; No statistics required

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ABSTRACT

Businesses and other organizations across the globe are becoming more and more data-driven, using a combination of descriptive, diagnostic, predictive and prescriptive analytics to gain a strategic advantage through understanding the past, what we hope to happen in the future, and the ability to accurately predict future outcomes. These forms of analytics span from basic statistical summaries and data visualization to artificial intelligence models. Many organizations are now requiring new job applicants, new hires, and existing employees to be data literate. As such, it is becoming incumbent on teachers, students, and practitioners to possess some basic knowledge or experience in business analytics, at least within their educational and functional domains. Current best-practice in business school curriculum embeds some form of analytics across the curriculum. Unfortunately, many business colleges do not have the experience or resources to do so, hence teachers are unprepared to teach, and students are not prepared to enter the business world being data literate. While higher levels of analytics can be statistically intimidating, there are numerous applications of analytics that do not require statistics or higher-level models. This paper introduces one such technique practiced within marketing education and industry since 1995 and is called RFM. RFM has long been known in marketing curriculum and practice but has seen virtually no exposure in business schools outside of marketing major courses. This reflects an unintended consequence of teaching and learning within "functional" silos. It is hoped that teachers and students across the business curriculum, as well as workforce participants, can use this case to gain an appreciation of data literacy and analytics toward application within any functional area of business. The purpose of this paper is to avail those outside of marketing education and practice with an effective, easy to understand, easy to apply model, with no statistics involved. The goal is to facilitate increased data literacy and interest in understanding and/or applying analytics to other functional arear of business. RFM is not unique to this paper but is aimed at broadening teacher, student and workforce participant experience and knowledge of business analytics.

Keywords: Business Analytics, RFM Analytics, Case Study

INTRODUCTION

A primary objective of this paper is to reflect that while business analytics covers a large range of simple and sophisticated models and methods, one can still understand and appreciate business analytics methods without the burden of statistical complexity. Simple analytics methods also exist in marketing, accounting, finance, and supply chain, among other business functional areas. As such, the reader and participant can improve their data literacy through a simple analytics model in marketing, called RFM analysis, discussed below. Other simple analytics models are discussed in section 7.

DATA LITERACY

The first requirement of understanding business analytics is data literacy. Data is at the core of information, and information is the foundation of effective decision making. Data are simply the raw facts and figures resulting from a process or experiment. Business analytics can be used to organize, summarize and analyze data with the goal of producing information. The role of information includes understanding past business processes (what happened), diagnosing outcomes of business processes (why it happened), predicting future outcomes (what might happen in the future), and prescribing a future course of action (what should be done next) (Business Insights Blog. (2021, November 2)). All business processes result in the production of data. As such, there are likely few (if any) functional areas of a business that do not produce or consume data as a result of a process. Hence, all business college teachers, students, and workforce participants are encouraged to be familiar with data and information within their functional domain, meaning they are data literate. What's more, data literacy within or across functional areas can aid in becoming a domain expert or subject matter expert (Wikimedia Foundation, 2022, December 30)).

Data literacy is also an important component of business education and workforce skills. According to Gartner Inc (n.d.), "Data literacy is the ability to read, write and communicate data in context, including an understanding of data sources and constructs, analytical methods and techniques applied, and the ability to describe the use case scenario, application, and resulting value." As such data literacy improves decision-making and can increase efficiency and competitiveness.

DataCamp (n.d.) explains that while data literacy is a crucial skill for organizations to succeed, there is a lack of executive sponsorship toward the objective of workforce data literacy, and this has become one of the greatest obstacles faced by many organizations. Additionally, an unfortunate consequence of decades of teaching statistical atypical methods is, that much of what is being taught has little resemblance to what is used in practice in a data-literate workforce. Basic descriptive statistics and charts alone are very important as they provide data summaries within a specific functional area of a business. But it can be debated that topics such as the multitude of discrete probably models, ANOVA, non-parametrics, etc., contribute significantly to improving data literacy among the workforces. Another unfortunate result is that many students (and teachers) have the opinion that their statistics course was their worst course taken in college. This opinion likely results in biasing persons who hear or read anything with the word "analytics" in it, to assume it is just statistics by another name. As such, the first inclination after hearing or reading "… analytics" might be that analytics is uninteresting and difficult (at a minimum,) hence hampering data literacy toward a goal of empowering affected persons with

skills in business analytics.

RFM ANALYSIS

RFM is a marketing analytics model for scoring customers across three metrics to increase sales and revenue through specialized targeting of existing customers, that is, customer segments. RFM enables businesses to increase revenue by targeting specific groups of customer segmentation using actionable campaigns, that is, campaigns with tailored messages and offers are more likely to be relevant based on data about a particular set of behaviors (Delval, F. (2022, October 31)). RFM is a simple predictive modeling tool that helps forecast the likelihood that an existing customer purchases in the future. While avoiding statistical complexity, the method scores every customer on the Recency of the last purchase, the Frequency of the customer's purchases, and the Monterey value of how much money the customer spends, or the amount of profit.

The method of RFM was born out of a direct marketing paper in 1995 (Bult, J. and Wansbeek, T. (1995)). The model confirmed what many marketing professionals already assumed, that the Pareto Principle (80/20 rule) applied to existing customers, wherein 80% of the sales came from 20% of the customers. As such, it was important to identify the segment(s) of at least the top 20% of customers. RFM is used to increase sales and revenue through specialized targeting of groups of existing customers through customer segmentation and related segment grouping.

When originally proposed, the internet (as it is now known) was non-existent, and the technique was applied to mail-order customers. As such, RFM was performed using spreadsheet applications. While spreadsheets are a great tool for RFM, many software vendors have sprung up selling very high-powered software systems that include not only RFM, but scores of other statistically intensive models for customer and market segmentation. Many traditional Customer Relationship Management (CRM) software vendors include RFM with a suite of more advanced segmentation and predictive modeling tools. Excellent overviews of RFM are available at Express Analytics (2022, June 10), Jain, R. (2023, January 6), Nishadha (2023, January 5), and Delval, F. (2022, October 31).

METRICS OF RFM: RECENCY, FREQUENCY, AND MONETARY VALUE

As suggested in the previous section, RFM seeks to score customers across three metrics, where varying ranges of scores place existing customers into segments for which the company can devise specific marketing strategies and campaigns to target the different similar segments divided into groups. The higher the score, the better the customer. The three metrics are discussed below.

Recency calculates the last time a customer purchased a product or used a service from the business. For example, if a company provides a ridesharing service like Uber, many customers might use the service one or more times a week, or one or more times in a two-week period, and so on. The best customers in this segment are those that have hailed the ridesharing service at least once in the past week. One then assumes that customers that have used the service more recently are more likely to repeat than customers who haven't used the service for a long time.

There is no fixed scoring rubric, and experience gained over time might help in homing in on the best scoring rubric to use. Using the last example, customers are scored either 1, 2, or 3, where 3 reflects customers that rode in the past week, and 1 for those that last rode over a month ago. The larger the score, the more recent the customer's purchase.

Frequency indicates how often the customer buys a product or uses a service from the business. Again, customers that ride, say three to five times a week, are scored 3, while those that only rode a very few times in the last month receive a 1. The larger the score, the more frequently the customer used the service. One then assumes that customers that use the service frequently are more likely to do so again soon, relative to those who rarely use the service.

Monetary value indicates how much money a customer spends on products or services from the business, over a fixed period. It is easiest to score the customer relative to an average revenue per customer (ARC) over a fixed period. Customers spending in the top 20th percentile above the ARC receives a 3, while those near the bottom receive a 1. The larger the score, the more money the customer has spent. One then assumes that customers that spend more on the service are more likely to spend more in the future, relative to those who spend little.

One should note that the range of scores used determines how many possible customer segments will be formed. If the maximum score per metric is 3, then there are 3x3x3 = 27 possible segments. Scores up to 4 produce 4x4x4 = 64 segments, and scores up to 5 produce 125 possible segments. Best practices suggest using the 1, 2, 3 scores or 1, 2, 3, 4 score, as scores ranging from 1 to 5 are tedious and might overly segment customers. Usually, best practices and experience help discover what the best scoring rubric will be, as higher scoring models may not result in a marginal increase. Additionally, similar RFM scores should be combined into about only 8 to 10 groups that have reasonable actionable plans for a marketing campaign. One might likely consider a customer with a 1-1-1 score as lost and not worth the limited resources required to regain the customer.

In a perfect business world, using scores from 1 to 3, all customers would score a 3-3-3, in which case, business is great, and there's no need to segment customers and target specific groups of customers. In reality, customer scores range from 1-1-1 to 3-3-3, so the business should create effective marketing campaigns that maximize their return on marketing. Marketing comes with high costs; hence, the resources need to be focused on the most profitable customer groups. The primary benefit of the RFM scoring model is that it isn't based on high-level statistics, as it simply groups similar customers into respective actionable groups with simple plotting and visualization of scores. RFM is considered inherently simple, effective, affordable, and largely "do-it-yourself," so there is no need to employ expensive software or advanced analytics. Although there are many advanced statistical models available for segmentation, exposing these models in the context of this paper would defeat the purpose of exemplifying the simplicity of RFM toward increasing awareness of data literacy and non-complex business analytics.

CUSTOMER SEGMENTS AND GROUPS

Although there is no fixed number of customer groups, Jain, R. (2023, January 6) suggests that several groups of similar segments should be created. Recall that using the 3-point

rubric results in 27 possible combinations of scores, like 1-1-1, 2-3-2, 3-3-3, etc. These can be further summarized by adding together or averaging each customer's scores to calculate an aggregate value. Other scoring techniques include using a conditional weighted-average relative to what is considered the most important metric of RFM. Considering the 1, 2, 3 scoring rubric, a customer having an RFM score of 3-3-3 results in an aggregate sum of 3+3+3 = 9 and an average of 3, while an RFM score of 1-1-1 results in an aggregate sum of 3 and average of 1. Segments are then combined into groups that are defined with labels like "Champions," "Loyal Customers," "Potential loyalist," and so on (Jain, R. (2023, January 6)). A customer's score determines the segment, which then determines the group.

Appendix A, Table 1 reflects an edited reproduction of the table in the above-referenced article that maps customer RFM segments to specific groups. All possible 27 combinations of scoring are shown, including raw scores and aggregates, and the assignment of scores to the defined groups. The groups have names, like "Promising," with a score of 3-1-3. The group definitions can be added like "shows interest being recent and profitable, needs to repeat a purchase." In other words, a recent high-profit customer that needs to be prodded to buy more frequently. There are 9 groups comprised of the 27 segments in Table 1. Different actionable marketing campaigns would be created for each group under consideration.

There are no hard and fast rules about segmentation based on scores, so it depends on experience and trial and error. Since RFM scoring is 3-dimensional, it is difficult to illustrate with tables and charts. Appendix B, Image 1, reflects the sums of each of the 27 segments on the y-axis based on the sums of the individual RFM scores. Since the sums range from 3 to 9, it is easier to identity the groups visually. Based on the chart, one might create customer groups based on a perfect score of 9 and some segments with scores of 8, a group with scores 6 to 7, then 4 to 5, and so on. The tallest columns represent the segments that are likely the best customers, as well as those that need prodding for more frequent and higher dollar purchases. Note also that there are probably customers that score an RFM of 3-1-1, meaning that a new customer made only a recent small purchase. One's marketing strategy might determine if those customers are an actionable group.

BUILDING THE RFM MODEL

This section is a summary of how the RFM model is developed, and not a tutorial or a how-to description. See the article by Jain, R. (2023, January 6) for instructions using a 5-step method, as well as Muntasir, M. (2022, March 16), and Nishadha, (2023, January 5). A tutorial is also available for building the model in Microsoft Excel (Delval, F. (2022, October 31)). A summary of the five steps is below.

1. Collect customer data
2. Scale Recency, Frequency, Monetary
3. Create RFM Segments
4. Assign Segments into Groups
5. Perform RFM Actionable Analysis

Building the model is quite simple. It requires having the raw data of previous transactions from the customer database. The required data for each customer includes the customer id, the date of their most recent purchase, the number of purchases made over some

predefined period of time, and the customer's amounts spent (or profit from) over a particular time frame. A cutoff date is required to determine recency. Monetary value should be relative to the average selling price (ASP) of all items, where a score of 1 indicates customers below the ASP, a score of 2 at or just above the ASP, and 3 as significantly greater than the ASP. Familiarity with spreadsheet software and writing formulas is required.

RFM CONSIDERATIONS

RFM is not without some considerations. One such consideration is how many actionable groups there should be. That is, how many different campaigns will likely produce the desired outcomes? Other considerations include how far in the past to go when scoring recency, what is the time span over frequency, and what is the best way to create and score a monetary value metric. Additionally, one may ask what is the most important component of RFM? Some might say recency, but it depends on the type of merchandise sold by the business. An online business that sells a large selection of general merchandise in high quantities at low-profit margins might consider recency and frequency the most important, but one that sell infrequently purchased high- priced items like appliances or golf club sets might consider monetary value the most important.

Also, how would marketing campaigns differ based on groups? SpringML, (2021, January 28) provides an overview of actionable campaigns based on scores, as well as another technique of RFM based on nested groups. The reference also provides a figure as reproduced in Appendix C, Figure 1, reflecting RFM advantages over truly predictive models. *DevTeam, E.* (n.d.) discusses the benefits and inefficacies of RFM.

For an excellent overview of RFM, the interested reader can view the following websites reflected also in the references section.

- ActionIQ: Delval, F. (2022, October 31). What is RFM analysis?
- Better Marketing: Muntasir, M. (2022, March 16). Everything you need to know about RFM analysis
- CleverTrap: CleverTap (n.d.). RFM analysis for Customer Segmentation.
- Creately: Nishadha. (2023, January 5). Using Excel to identify your most profitable customers.
- Eight Leaves: Data Analytics & Software Development (n.d.). Using RFM to identify your best customers.
- Express Analytics: Express Analytics. (2022, June 10). Is RFM model relevant even today?
- Hubspot: Wollen, Roy (n.d.). A Modern Approach to RFM Segmentation
- Investopedia: Murphy, C. (2023, January 19). What is Recency, Frequency, Monetary value (RFM) in marketing?
- Retain Up: Jain, R. (2023, January 6). RFM analysis in Excel, Segmentation Models & 10 strategies.
- SpringML: SpringML (2021, January 28). Customer segmentation – RFM technique.

OTHER SIMPLE BUSINESS ANALYTICS MODELS

While this paper exemplifies a simple marketing analytics model in an effort to promote data literacy and simple analytics modeling, almost every functional area of a business can benefit from at least one method of analytics, usually a relatively simple method. The models do not have to be complicated or statistically rigorous. Another model in marketing is called A/B Testing, which uses simple averages and percentages to determine the best of two or more possible website landing pages. "Best" in terms of increasing overall return based on the website format. The concept and the tools are simple. It only requires data literacy as to what the metrics are, how are they measured, and how is the determination made (Unbounce (2021, July). A webinar for A/B testing is available at DataCamp (DataCamp, (n.d.).

In finance, there is an article about the ten most common types of financial models used by financial modeling professionals (Corporate Finance Institute (2022, November 27)). Of the ten, only a few are even discussed in the undergraduate finance curriculum. Two simple models called the "Three-Statement Model" and "Discounted Cashflow Model" can be analyzed using simple equations in Excel and is not statistically rigorous. In the economics curriculum, several relatively simple models include supply and demand curves, as well as simple one-variable regression equations to calculate marginal propensities (Finance & Development | F&D. (n.d.)). Models can be designed effectively using both graphs and simple analytics tools in Excel. But the audience must be data literate, having some knowledge of economic metrics and interpreting outputs. There are also simple analytics tools in accounting (Talha, Chhabra, M. and Mark, O. (2022, December 29)), and supply chain analytics (Barari, A. and Ramakrishnan, M. (2023, January 24)) as well as 9 data analytics examples across many industries (Brooks, A. (2020, June 15)). One does not need to be in a classroom to appreciate RFM and the aforementioned models, as it is presented and applicable to a wide audience across academics and industry.

TEACHING CASE APPLICATION

The material in this paper was presented to one freshman introduction to business class and two undergraduate junior level database classes. While no project was required, students were required to read the RFM links in section 7 and to complete a worksheet and submit answers in an online quiz. Freshman students were surveyed only regarding the value of the reading, their understanding, and increased interest in business analytics. Prior to the presentation, students were asked in an open class discussion if they had an interest in business analytics. Anecdotally, the majority seemed to have no interest, most indicating when asked that they didn't know anything about business analytics. After reading the required material, students were placed in groups and tasked to come up with possible ideas for campaigns for a least a few of the actionable groups. Suggestions were discussed with the class during one class period. Students were able to relate to campaigns as some stated they had received discount coupons after purchasing merchandise online, while others say they were encouraged to join a membership club with reduced member prices and/or free shipping.

The university wherein this case was introduced has an Information Systems (IS) degree with concentrations in enterprise systems and business analytics. All IS majors are required to complete the database course. The two classes for which the case was introduced were almost split evenly between both concentrations. Many of the enterprise systems students initially indicated disinterest in business analytics, but post-case discussion reflected most students felt they had a better appreciation and interest in analytics. Many of the students that were initially

disinterested suggested they thought analytics took mastery of statistics and considered it likely to be difficult. Throughout the database course, students were continuously reminded that analytics is not statistics, and that while many models are based on statistics there are also many tools and methods available for simple analytics beyond purely statistical models.

CONCLUSION

The primary objective of this paper is to reflect that while business analytics models cover a large range of simple and sophisticated models and methods, one can still become data literate, and understand and appreciate business analytics methods without the burden of statistical complexity. Data literacy was introduced as a prerequisite to understanding or application of business analytics tools or models. This case exemplified a decades-old marketing analytics model, RFM, introducing an effective marketing predictive model that does not require rigorous or complicated statistical models. RFM was discussed toward grouping similarly segmented customers into actionable groups. An overview of building the model was also provided. The case also discussed considerations when using the RFM method, as well as the advantages of using RFM versus rigorous statistical prediction models. Other models of simple business analytics were introduced in hopes that readers would increase their interest in data literacy and business analytics, regardless of their background. These included an additional area of marketing analytics (A/B Testing), as well as applications in models for finance, economics, accounting, and supply chain analytics. Finally, the case discussed the presentation to undergraduate business students in an introductory business class and an IS required database course. The case presentation increased student interest in business analytics.

REFERENCES

Barari, A., Ramakrishnan, M. (2023, January 24). What is supply chain analytics and why it matters for strategy. Emeritus Online Courses. Retrieved February 1, 2023, from https://emeritus.org/blog/strategy-and-innovation-what-is-supply-chain-analytics/

Blazewicz, G. (2016, November 3). The abcs of RFM - and how it can help you retain your customers. CMSWire.com. Retrieved February 1, 2023, from https://www.cmswire.com/digital-marketing/the-abcs-of-rfm-and-how-it-can-help-you-retain-your-customers/

Brooks, A. (2020, June 15). Data Analytics examples: 9 ways businesses are channeling the power. Data Analytics Examples: 9 Ways Businesses Are Channeling the Power | Rasmussen University. Retrieved February 1, 2023, from https://www.rasmussen.edu/degrees/technology/blog/data-analytics-examples/

Bult, Jan Roelf and Wansbeek, Tom (1995), Optimal Selection for Direct Mail, Marketing Science Vol. 14, No. 4 (1995), pp. 378-394 (17 pages), Published By: INFORMS

Business Insights Blog. (2021, November 2). What is prescriptive analytics? 6 examples: HBS Online. Retrieved February 1, 2023, from https://online.hbs.edu/blog/post/prescriptive-analytics

CleverTap. (n.d.). RFM analysis for Customer Segmentation. Retrieved February 1, 2023, from https://clevertap.com/blog/rfm-analysis/

Data Analytics & Software Development (n.d.). Using RFM to identify your best customers: Eight leaves. Retrieved February 1, 2023, from https://www.eightleaves.com/2011/01/using-rfm-to-identify-your-best-customers

DataCamp (n.d.). A/B testing in R. Retrieved February 1, 2023, from https://www.datacamp.com/webinars/ab-testing-in-r?utm_source=customerio&utm_medium=email&utm_campaign=230131_1-newsletter-a_2-b2c_3-all_4-na_5-na_6-dc-insights_7-na_8-emal-ci_9-na_10-bau_11-email&utm_content=blast&utm_term=livetraining

DataCamp (n.d.). How to build the business case for Data Literacy. Retrieved February 1, 2023, from https://www.datacamp.com/webinars/business-case-for-data-literacy?utm_source=customerio&utm_medium=email&utm_campaign=230131_1-newsletter-reg_2-b2c_3-all_4-na_5-na_6-dc-insights_7-na_8-emal-ci_9-na_10-bau_11-email&utm_content=blast&utm_term=webinar

Data Mining Using RFM Analysis (n.d.). Retrieved February 1, 2023, from https://cdn.intechopen.com/pdfs-wm/13162.pdf

Delval, F. (2022, October 31). What is RFM analysis? ActionIQ. Retrieved February 1, 2023, from https://www.actioniq.com/blog/what-is-rfm-analysis/#:~:text=Benefits%20of%20RFM%20Analysis,a%20particular%20set%20of%20behaviors

DevTeam, E. (n.d.). Advantages and inefficacies of RFM segmentation? Enhancer. Retrieved February 1, 2023, from https://enhencer.com/articles/advantages-and-inefficacies-of-rfm-segmentation

Express Analytics. (2022, June 10). Is RFM model relevant even today? Retrieved February 1, 2023, from https://www.expressanalytics.com/blog/what-is-rfm-model-is-the-rfm-model-relevant-even-today-2/

Finance & Development | F&D. (n.d.). *Finance & Development*. Retrieved February 6, 2023, from https://www.imf.org/external/pubs/ft/fandd/basics/models.htm

Gartner Inc. (n.d.). A data literacy guide for Data and Analytics A leaders. Retrieved February 1, 2023, from https://www.gartner.com/smarterwithgartner/a-data-and-analytics-leaders-guide-to-data-literacy

Jain, R. (2023, January 6). RFM analysis in Excel, Segmentation Models & 10 strategies. RetainUp. Retrieved February 1, 2023, from https://retainup.co/rfm-analysis/

Murphy, C. (2023, January 19). *What is recency, Frequency, monetary value (RFM) in marketing?* Investopedia. Retrieved February 1, 2023, from https://www.investopedia.com/terms/r/rfm-recency-frequency-monetary-value.asp

Muntasir, M. (2022, March 16). Everything you need to know about RFM analysis. Medium. Retrieved February 1, 2023, from https://bettermarketing.pub/everything-you-need-to-know-about-rfm-analysis-d332fc69cdb0

Nishadha. (2023, January 5). Using Excel to identify your most profitable customers. Creately Blog. Retrieved February 1, 2023, from https://creately.com/blog/product-management/using-excel-to-identify-profitable-customers/#:~:text=An%20easy%20way%20to%20do,will%20be%20at%20the%20top

Segmenting the banking market strategy by clustering - ijcaonline.org. (n.d.). Retrieved February 1, 2023, from https://research.ijcaonline.org/volume45/number17/pxc3879473.pdf

SpringML. (2021, January 28). Customer segmentation – RFM technique. SpringML, Inc. Retrieved February 1, 2023, from https://www.springml.com/blog/customer-segmentation-rfm-technique/

Talha, Chhabra, M., & Mark, O. (2022, December 29). Data Analytics in Accounting: 5 comprehensive aspects - learn. Hevo. Retrieved February 1, 2023, from https://hevodata.com/learn/data-analytics-in-accounting/?set=2

The Marketing Melange (n.d.). Is the RFM customer analysis model relevant for B2B
       marketing? (n.d.). Retrieved February 1, 2023, from
       http://marketing.infocat.com/2009/09/is-rfm-customer-analysis-model-relevant.html

Types of financial models. Corporate Finance Institute. (2022, November 27). Retrieved
       February 1, 2023, from https://corporatefinanceinstitute.com/resources/financial-
       modeling/types-of-financial-models/

What is A/B testing? (the 2021 essential guide with examples). Unbounce. (2021, July 9).
       Retrieved February 1, 2023, from https://unbounce.com/landing-page-articles/what-is-ab-
       testing/

Wikimedia Foundation. (2022, December 30). Subject-matter expert. Wikipedia. Retrieved
       February 1, 2023, from https://en.wikipedia.org/wiki/Subject-matter_expert
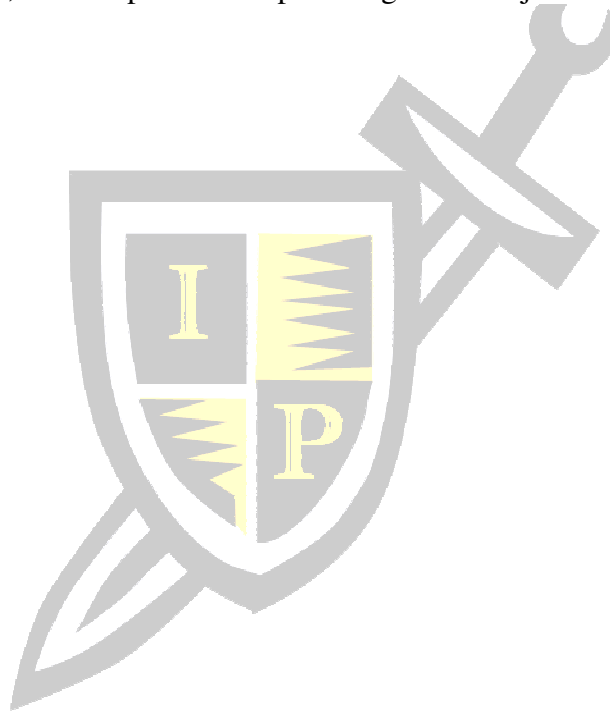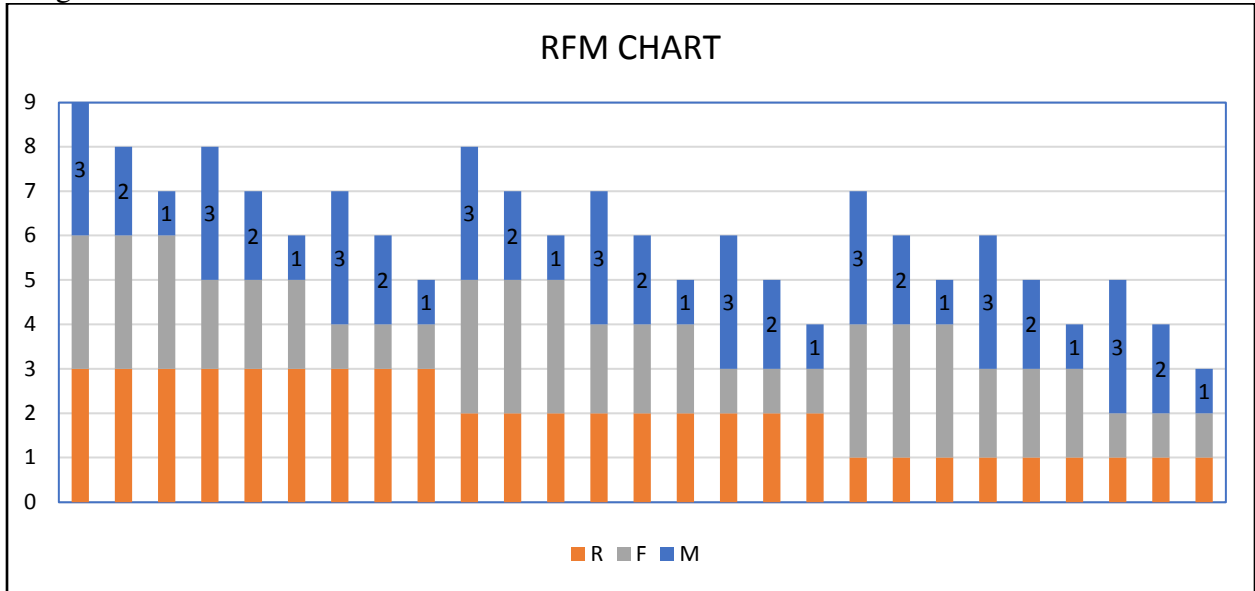
APPENDIX A

Table 1 – Customer Groups by RFM by Segment

Group	Segment			Aggregates	
	R	**F**	**M**	**Sum**	**Average**
Champions	3	3	3	9	3
	2	3	3	8	2.7
Loyal	3	3	2	8	2.7
	3	3	1	7	2.3
	3	2	3	8	2.7
	2	2	3	7	2.3
Potential Loyalists	3	2	2	7	2.3
	2	3	2	7	2.3
	2	3	1	6	2.0
Promising	3	2	1	6	2.0
	3	1	3	7	2.3
	3	1	2	6	2.0
	2	2	2	6	2.0
	2	2	1	5	1.7
	2	1	3	6	2.0
	2	1	2	5	1.7
New Customer	3	1	1	5	1.7
	2	1	1	4	1.3
Big Spenders	1	3	3	7	2.3
	1	2	3	6	2.0
Regular Spender	1	3	2	6	2.0
At Risk	1	3	1	5	1.7
	1	2	2	5	1.7
	1	2	1	4	1.3
Potentially Lost	1	1	3	5	1.7
	1	1	2	4	1.3
	1	1	1	3	1.0

APPENDIX B

Image 1 – RFM Chart

APPENDIX C

Figure 1: RFM Advantages Over Predictive Models

RFM	Predictive Models
Easy for managers to understand	Black Box
Can build it yourself	Need to hire a statistician or trained data miner
Can build it yourself, now	Requires a build process, with analysis and validation datasets
Portable across industries	May be applicable to only one company
Somewhat effective at mitigating the confounding effect of seasonality	Would need a model for each season; ideally one model for each campaign to a competitor or marketplace shift
RFM definition is stable and does not need to be rebuilt or redefined	Typically, would need to be rebuilt every 2 years when predictive power decays, or in reaction
Applies to all customers and supports sortation of all customers in the database (by RFM quartiles, percentiles, deciles, centiles)	Doesn't always apply to all customers (why score customers you know you won't promote?)
Can use RFM across the organization for reactivation, cress-sell	Additional model may be required for reactivation and cross-sell programs