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IMPROVING ANALYST TARGET PRICE PERFORMANCE THROUGH ENHANCED VALUATION TECHNIQUES

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ABSTRACT

This study focuses on the target price issue, it aims to improve the reliability of target price through the enhanced valuation techniques. Firstly, this study improves the target price reliability by enhancing the discount rate estimation method. Secondly, the concept of industry-specific combined valuation approach has been introduced by this study, this new concept not only takes advantage of the benefit from the combination of absolute and relative model, but also consistent with the distinguishing features of different industries. Thirdly, this study presents an enhanced target price setting method to improve the target price reliability, this method provides effective solutions to the common but unsolved question about how to combine a range of value estimates. Finally, a reliability testing method has been introduced by this study to measure the performance of value estimate and target price.

JEL: G12, G14, C10

KEYWORDS: Target Price Performance, Enhanced Valuation Methods

INTRODUCTION

The target price, together with the recommendation and earnings forecast are three most important quantitative outputs of the analysts' equity reports. Brav and Lehavy (2003) point out the target prices are analysts' most informative statement on firms' value, and the market tend to react significantly and immediately to their initial and revision announcements. Dong (2008) states that target prices reflect analysts' expectation for the highest price level that a company's stock is likely to reach within a certain time horizon, usually one year from the target price announcement day. Ideally, the target prices are supposed to help investors judge the best point to exit their existing positions for realizing the maximum profit potential. However, the target prices do not always produce the right signals, and most of them tend to be over-bullish. Recently, the reliability of target prices estimated by analysts has raised great attention of investors. There are increasingly doubts on target prices, as their low reliability has been found frequently, especially assigned targets for technology stocks are often too high to achieve. This study concentrates on the recent popular topic of target price issue. It attempts to improve the reliability of target prices by enhancing the valuation methodology from three aspects: the discount rate estimation method, valuation model and target price setting technique. In addition, this study introduces a reliability testing method to measure the performance of both value estimate and target price. The rest of the study is organized as follows: the literature review section discusses the low reliability of target prices, and the factors which have indirect and direct influences on the target prices. The enhanced discount rate estimation method section presents the expand CAPM model and the target price-based GGM model. The enhanced valuation model section introduces a concept of industry-specific combined model. The enhanced target price setting technique section designs a three steps approach to set target price. The reliability testing methods for value estimate and target price section presents a reliability testing method to measure the performance of value estimate and target price, followed by the concluding comments in the last section.

LITERATURE REVIEW

The low reliability of listed companies' target prices is becoming a wide spread issue. There are increasing researches investigating the target prices, and show that the target prices often significantly deviate from the market prices. Brav and Lehavy (2003) and Asquith et al. (2005) showed that, for the period 1997 to 1999, the average return implied by target prices was 32.9%. Bradshaw et al. (2013) found the target prices between the years 2000 and 2009 implied a return of 24.0%. In fact, there was only an actual market return of 8.1% from the years 1997 to 2009 (Bradshaw et al., 2014). Bonini et al. (2010) discovered that the target price reliability is very limited, their prediction errors are consistent, auto-correlated, non-mean reverting and large. In fact, the low reliability of target prices is a wide spread issue worldwide. Asquith et al. (2005) found that about 54.3% of target prices in the US reach their targets within 12 months. Kerl (2011) revealed that approximately 56.5% of target prices are achieved in Germany, Bonini et al. (2010) found that only 33.1% of target prices are achieved in Italy. The target price issue also attracts attention of financial media, for example "Price Targets are Hazardous to Investors' Wealth" (Morgenson, 2001) and "Moving Targets: Forget Analysts' Price Targets. They're Really Just for Show" (Maiello, 2000) are two famous articles express stock investors' attitudes towards target prices.

In reality, many factors that can indirectly influence the performance of target price. Bradshaw et al. (2013) found evidence that the target price accuracy is largely related to the overall market condition, where the target price forecasts are more accurate in the up rather than the down market. This is usually true as the financial analysts tend to issue "bullish" target prices, which are easier to achieve in a bull market. Asquith et al. (2005) suggested that the high target prices actually are the products of the financial analyst's optimism. Bradshaw et al. (2013) discovered that the target prices issued by the financial analysts employed by pure brokers are more optimistic due to the incentives to generate trading. Bonini and Kerl (2012) found that financial analysts' access to privately available information affected their ability to produce reliable valuation implications. The authors also revealed that the increased accuracy can be attributed to the additional information that financial analysts use to adjust the target prices.

Kerl (2011) highlighted that the size, reputation and research intensity of the investment bank had a positive influence on the target price accuracy. Bradshaw et al. (2013) discovered that the target price performance is worse when the target company's stock price volatility is high, and the target price is more likely to be achieved during the company-specific positive price momentum. Bradshaw et al. (2013) and Bilinski et al. (2013) concluded that country-specialized financial analysts with better past target price forecast records, higher forecasting experience, and employed by a large broker often issued more accurate target prices. Bilinski et al. (2013) emphasized that country-specific institutional and regulatory factors such as accounting disclosure quality, cultural traits and financial reporting standards explained the difference in target price reliability across borders. Ali and Hwang (2000), Ball et al. (2000) and Imam et al. (2013) also discovered that the value-relevance of accounting numbers varied significantly between countries due to the different legal systems, and the level of alignment of financial and tax accounting.

In addition to the above factors which have indirect influences on the listed company's target price reliability, the target price is directly affected by the quality of the value estimate. Financial analysts determine the target price on the basis of estimated future intrinsic value, where the future intrinsic value is often predicted based on the value estimate. Recent studies have shown that the quality of historical accounting data, the accuracy of company performance forecast data, the discount rate estimation method and the valuation model has significant effects on the quality of value estimates. Gleason et al. (2013) found evidence that the accuracy of a value estimate is strongly associated with the accuracy of the earnings forecast. Cassia and Vismara (2009) suggested that the equity reports that adopt the steady state earnings growth rate to determine the terminal value always produce more reliable value estimates. Gleason et al. (2013) underscored the importance of both forecasting ability and the valuation model. The authors further revealed that the potential benefits of superior earnings forecasts can be lost if those forecasts are used as

input in a flawed valuation model. Demirakos et al. (2010) showed that the valuation model affects value estimate accuracy. In the valuation of small, unstable and high-risk companies with volatile earnings and a limited number of comparable companies, the discount cash flow models often outperform the price multiples. For companies with negative future cash flows, Pinto et al. (2009) emphasized that the residual income model is the most appropriate valuation model. Liu et al. (2002) found that the forward price to earnings multiples tends to produce the most accurate value estimates for high growth or profitable companies. The market condition also influences the valuation model choice. Demirakos et al. (2010) suggested that the value estimate quality is more likely to improve when the financial analyst applies the price to earnings model in a bull market and the discount cash flow model in a bear market.

Enhanced Discount Rate Estimation Method

The discount rate has been widely used in the company valuation to estimate the intrinsic value of an enterprise. In the valuation practice, the cost of capital of a company has often been used as a discount rate that equates expected economic income with present value (Pratt, 2002). Normally, the cost of capital may refer to the required return on a company's equity capital or debt capital, or both (WACC). The estimation of an accurate discount rate is the first step to produce reliable value estimate and target price. Since the cost of equity is the most important component of WACC, this study focuses on the improvement of the cost of equity estimation method.

Expanded Capital Asset Pricing Model

This study presents the expanded CAPM which is originally introduced by Pratt (2002) and Pinto et al. (2009) to better estimate the cost of equity. The general expression is given in equation (1) below.

$$\text{Cost of Equity} = \text{Risk free rate} + \text{Shrunk beta} * \text{Market premium} + \text{SP} + \text{EP} \quad (1)$$

Where:

Shrunk beta = $(1 - \text{weight}) * \text{peer group beta} + \text{weight} * \text{company beta}$, $\text{weight} = \frac{(\text{cross-sectional standard error})^2}{(\text{cross-sectional standard error})^2 + (\text{time series beta standard error})^2}$. SP = Beta-adjusted average size premium. FP = Firm-specific risk premium The expanded CAPM is based on the fact that unsystematic risk cannot be fully diversified away especially for median and small cap firms, where total realized returns on smaller companies have been substantially greater than the CAPM would have predicted (Pratt, 2002). The beta-adjusted size premium is added to CAPM to reflect the average level of incremental unsystematic risk that smaller firms over larger firms. The Morningstar Ibbotson calculates the beta-adjusted size premium by dividing NYSE listed firms into 11 size groups (from 1-largest to 10b-smallest) according to their market capitalization, and each group has its own average beta. The realized return in excess of what traditional CAPM estimates is the beta-adjusted average size premium. In addition, the firm-specific risk premium is also included to capture the unsystematic risk that is unable to be measured by both beta-adjusted average size premium and Shrunk beta. The estimation of firm-specific risk premium is depends on the subjective judgment of the firm, and it is usually ranges from -2% to +2%. In addition, the shrunk beta is recommended by Morningstar Ibbotson to replace the simple OLS raw beta. Rather than adjust the beta toward mean value of one over the long run by Marshall Blume method, the shrunk beta method adopts the Vasicek Shrinkage technique to estimate a reasonable beta toward industry or peer mean value. In particular, firms with high beta or high standard error in their beta are subject to more adjustment toward industry average (Pratt, 2002).

Target Price-Based Multistage Gordon Growth Model

The target price-based multistage Gordon growth model (TPGGM) is based on Pratt (2002) and Fitzgerald et al. (2011) to estimate the cost of equity. The general expression is given in equation (2) below:

$$TP = \sum_{n=1}^5 \frac{[CF_0(1+g_1)^n]}{(1+r)^n} + \sum_{n=6}^{10} \frac{[CF_5(1+g_2)^{n-5}]}{(1+r)^n} + \frac{CF_{10}(1+g_3)}{(1+r)^{10} (r-g_3)} \quad (2)$$

Where:

TP is analyst' consensus target price for the firm in the next 12 months. CF_0 is the cash flow in the preceding year (growth stage) = Net income + Noncash charge - Capital expenditure - Addition to net working capital + Changes in long term debt. CF_5 is the expected cash flow in the fifth year (transition stage) = Net income + Noncash charge - Capital expenditure - Addition to net working capital + Changes in long-term debt. CF_{10} is the expected cash flow in the tenth year (mature stage) and it is equal to the dividend or Earnings * (1- Long term Real GDP grow rate / Long term ROE). g_1 , g_2 and g_3 are the expected cash flow growth rates in three stages (g_1 equals to the firm-specific growth rate, g_2 equals to the peer group or industry average growth rate and g_3 equals to the expected long-term GDP growth rate). r is the constant discount rate (cost of equity) for all three stages The TPGGM is a multi-stage model that incorporates different growth rates for different life stages of a firm, and this is more reasonable for rapid growing firm. The multi-stage model divides the lifetime of a firm into three stages: growth, transition and mature, and then estimates a cost of equity that equates the sum of the present values of the expected cash flows of the three stages to the target price. The TPGGM chooses the consensus target price as a proxy of the intrinsic value per share to consistent with the assumption of basic GGM. Fitzgerald et al. (2011) show that target price based estimate of cost of equity normally outperforms the market price based, the correlation between estimated and realized cost of equity is consistently positive and statistically significant when derived from target price. Following the studies of Pratt (2002) and Koller et al. (2010), the TPGGM defines the dividend or cash flow broadly and differently across the three stages. The declining growth rates recommended by Morningstar Ibbotson are also consistent with the change of a firm over its lifetime.

Enhanced Valuation Model

The valuation model selected has to be consistent with the characteristics of the companies being valued in order to produce reliable target prices. For a group of companies classified as either an industry or a sector, they share many similar features and these companies can be valued by certain type of models. Demirakos et al. (2004) carried out a content analysis reports across different industries. The authors find that the single period comparatives are frequently used in valuations of stable and traditional industries such as beverages, where accrual accounting can better reflect the value of the companies. The authors also indicate that the discounted cash flow models are more suitable for companies in fast growing pharmaceutical and technology industry with higher risk. Iman et al. (2008) conducted a semi-structured interview with investment analysts and a content analysis on equity research reports. The authors ranked the free cash flow model as the first choice to value high growing technology and media industry companies. They also ranked relative models of price to book as the primary model for financial/insurance firms, since these firms mainly consist of highly liquid or marketable assets. For cyclical retail or fashion industry which is heavily subject to business cycle effect, the authors considered the multiples of enterprise value to earnings before interest, tax, depreciation and amortization (EBITDA) as the most appropriate model to deal with the volatile earnings and produce reliable valuation results.

Although the industry-specific absolute or relative models are consistent with the industry or firm features, their intrinsic problems still limit their ability to produce reliable value estimates and target prices. In recent

valuation practice, the multi-period absolute models such as discounted cash flows become the analysts' dominant models. However, the absolute models still face great uncertainty of specific forecast such as future cash flows, and difficulties in the estimation of required return on capital. Pinto et al. (2009) suggest that absolute models are also over-sensitive to the changes in estimated inputs, since the absolute models is over reliance on estimated terminal values. Gode and Ohlson (2005) state that the terminal value can account for as much as 80-90% of the estimated value for high growth companies. On the other hand, the relative model such as the single period price or enterprise value multiples are easy to use and offer convenience to communicate, but their biggest problem is whether the chosen benchmark itself is fairly priced (Pinto et al., 2009). In reality, the average value of a series of comparable firms with similar features to the subject firm is a more common choice of benchmark. Alford (1992) suggests the combination of risk (beta) and earnings growth rate as effective criterion for selecting comparable firms. Bhojraj and Lee (2002) found that relative valuation based on peer group median value can produce more reliable target price than industry and market benchmarks. Although the 'best' benchmark is closely similar, it is not exactly the same as the company being valued. The value estimate or target price would be misleading when the comparable peers are difficult to identify, as its reliability depends on the definition of the peers.

Neither the absolute nor relative model deems 'perfect', and this study proposes the concept of industry-specific combined model. This concept considers several different industry-specific techniques together to arrive at "fair valuation" for the corresponding industry. The recent trend in company valuation practice emphasizes the importance of combined model, the analyst choose on average nine valuation models in the valuation of firms according to the Institutional Factor Survey conducted by Merrill Lynch in 2006. In addition, Jenkins (2006) suggests that the combined models are superior in valuation accuracy to single models, since the combination of absolute and relative models is able to focus both on multi-period and short-term forecasts. Vardavaki and Mylonakis (2007) conclude that the combined model is more informative by providing better and more accurate estimation of equity market values. They also suggest the effectiveness of combining models is derived from their ability to simultaneously capture multiple dimensions of valuation information contained. Imam et al. (2013) indicate the use of accrual based relative multiple model alongside a cash flow based absolute model reduces valuation error, as accruals add value relevant information to cash flows. In addition, it is also important to consider the industry unique feature in the valuation of firms from different industries. The industry-specific combined model proposed by this study not only takes advantage of the benefit from the combination of absolute and relative model, but also consistent with the unique features of different industries.

Enhanced Target Price Setting Technique

As one of the most important steps in valuation, analysts need to set a reasonable target price on the basis of valuation result. However, there is no standard or surefire way to determine the target price for listed firms. Imam et al. (2008) conducted a semi-structured interview with 42 UK sell-side investment analysts, the authors conclude three major processes of target price formation. The most commonly used approach is to set a target price on the basis of a combination of valuation models after adjusting for the analysts' subjective judgments. The second method is a relative based approach used to arrive at a price, and then a reversal of absolute model is applied to determine what implied growth rate that the target price would be delivered. The third method is the use of a subjectively determined percentage of premium or discount on the current price, and then the application of a valuation model(s) to produce a number close to target price. Based on the previous studies, this study introduces an enhanced target price setting approach. This approach starts with the valuation of company on the basis of combined model. The second step is to apply the regression-based method or Bayesian method to combine a range of value estimates from the combined model. The last step involves the reasonable adjustments of the combined value estimate produced by step two according to a series of non-financial factors. The approach introduced in this study does not attempt to combine various value estimates into one by using case-by-case adjustments immediately, it applies the objective regression technique or Bayesian techniques to combine value estimate before the manual

adjustments. Therefore, this approach is expected to outperform the traditional target price setting methods, the following sections investigate how to combine various value estimates (step two).

Partial Least Square Regression Approach

This study introduces the Partial Least Square regression (PLSRA) to combine various value estimates. The PLSRA is based on the methods suggested by Hoogerheide et al. (2010), Thordarson (2007), Yee (2004) and Yoo (2006). The general expression of the PLSRA is given in equation (3) below. The PLSRA is more logical and easy to use, automatically generates time-varying weights and allows the users to customize it by adding or removing any model to satisfy specific valuation needs.

$$MP_{t,s} = V_{t,s} + U_t = A_t + \sum_{i=1}^n W_{t,i} * VE_{t,i} + U_t \quad t = 1, 2, \dots, T. \quad (3)$$

Where:

t = Valuation date. $MP_{t,s}$ = The market price for company s at valuation date t, assume $MP_{t,s} = V_{t,s}$ ($V_{t,s}$ is the intrinsic value). $V_{t,s}$ = The combined value estimate of company s produced by a combination of valuation models. A_t = Constant term at valuation date t. $W_{t,i}$ = The weight of individual model i at valuation date t. $VE_{t,i}$ = The value estimate of company at valuation date t implied by individual model i. U_t = The estimation error is the remaining part of the intrinsic value that is not captured by the combined model or PLSRA, which is the difference between the intrinsic value at valuation date t and estimated intrinsic value (combined value estimate) at date t.

The rationale for the PLSRA is straightforward: every individual value estimate from different model is an incremental piece of information, relying on only one estimate may ignore some information, so the intrinsic value of company is the aggregate estimate that equal to the sum of individual estimates (Yee, 2004). The key assumptions of this approach is that the market prices reflect all available information and prices are efficient at all valuation dates, so $MP_{t,s}$ is used as proxy of the intrinsic values $V_{t,s}$. In addition, unlike the prior weighted average methods with restrictions that no constant term is added, and all weights must be non-negative and sum to one (Hoogerheide et al. 2010). The PLSRA includes the constant to avoid biases, where the methods with constant term are often more accurate than using the restricted least squares weighting scheme. Besides, the PLSRA further removes the restriction that the weight of different models have to sum up to unity. Similar to Yee (2004), the PLSRA generates different weights at different valuation dates by using historical time series data of value estimates (back testing). However, the Durbin-Watson test is required to eliminate the effect of autocorrelation between time series variables in case they are correlated in some way. The sample period is also limited to recent 12 months to avoid the possible non-stationarity of time series.

Bayesian Triangulation Approach

Similar to the PLSRA, the Bayesian approaches can be used to combine various value estimates. According to Yee (2008), this study presents an improved Bayesian triangulation approach (BTA) to produce the time-varying weights. The general expression of BTA is given in equation (4) below:

$$MP_{t,s} = V_{t,s} + U_t = (1 - W_{t,2} - W_{t,3}) * VE_{t,1} + W_{t,2} * VE_{t,2} + W_{t,3} * VE_{t,3} + U_t \quad (4)$$

$$Wt, 2 = \frac{\sigma_1^2 \sigma_3^2}{\sigma_1^2 \sigma_2^2 + \sigma_1^2 \sigma_3^2 + \sigma_2^2 \sigma_3^2} \quad (5)$$

$$Wt, 3 = \frac{\sigma_1^2 \sigma_2^2}{\sigma_1^2 \sigma_2^2 + \sigma_1^2 \sigma_3^2 + \sigma_2^2 \sigma_3^2} \quad (6)$$

$$Wt, 1 = (1 - Wt, 2 - Wt, 3) = \frac{\sigma_2^2 \sigma_3^2}{\sigma_1^2 \sigma_2^2 + \sigma_1^2 \sigma_3^2 + \sigma_2^2 \sigma_3^2} \quad (7)$$

Where:

t = Valuation date (t = 1, 2, ..., T). MPt,s = The market price for company s at valuation date t, assume MPt,s = Vt,s. Vt,s = The combined value estimate of company s produced by a combined model. VEt,(1,2 or 3) = The value estimate of company s implied by individual model 1, 2 or 3 at valuation date t. Ut = The estimation error is the remaining part of the intrinsic value that is not captured by the combined model. Wt,(1,2 or 3) = The weight of individual model 1, 2 or 3 at valuation date t. σ_1 = The standard error of value estimate VEt,1, which is a noisy measure of fundamental value Vt,s. Specifically, VEt,1 = Vt,s + e1 where e1 ~ N(0, σ_1). σ_2 = The standard error of value estimate VEt,2, also a noisy measure of Vt,s. Assume VEt,2 = Vt,s + e2 where e2 ~ N(0, σ_2) is uncorrelated with e1. σ_3 = The standard error of value estimate VEt,3, also a noisy measure of Vt,s. In particular, VEt,3 = Vt,s + e3 where e3 ~ N(0, σ_3) is uncorrelated with e2 and e1 so that corr(e1,e2) = corr(e1,e3) = corr(e2,e3) = 0.

The BTA generates different weight at different valuation dates by using the company's time series data (back testing). In addition, the sample period is limited to the recent 12 months to avoid the possible non-stationarity or over-fluctuation of time series. The key assumption of this approach is that the market prices reflect all available information, and the prices are efficient at the valuation dates. Unlike the PLSRA, the BTA sum of weights is equal to unity. According to the weighting scheme of BTA, if a value estimate is exact, it deserves full weight and its counterparts deserve zero weight. On the other hand, if a value estimate is infinitely imprecise, it deserves no weight and the two remaining estimates have non-zero weight (Yee, 2008). However, similar to other Bayesian probability theory-based methods, the BTA is difficult to extend when more than three valuation models are used at the same time. Therefore, the PLSRA outperforms the BTA in general.

Reliability Testing Methods for Value Estimate and Target Price

This study presents a reliability testing method to measure the performance of both value estimate and target price. This reliability testing method can also be used to measure the analyst performance, and assists investors to better understand the information contained in equity reports. Since the target price is actually the combined value estimate after qualitative adjustments, this section presents methods to verify the combined value estimate at first, and then offers detailed techniques to test the reliability of target price.

Reliability Testing Method for (Combined) Value Estimates

Based on the approaches suggested by Kaplan and Ruback (1994), Francis et al. (2000), Cheng and McNamara (2000) and Liu et al. (2007), this study presents a reliability test for (combined) value estimate which consists of the measurement of accuracy and explanatory power. Kaplan and Ruback (1994) indicates that it is possible one value estimate could successfully estimate the intrinsic value on average (accuracy), yet perform poorly in explaining the variation in fundamentals (explanatory power) and the converse is also possible. The first step of the reliability test is to contrast combined value estimates with market prices at

valuation dates, and then classify them into different groups (above, below or equal to market prices). The second step is to test their accuracy by applying the following metrics: Signed (Absolute) Valuation Error^a is the (absolute) deviation between combined value estimate and market price per share of company at valuation date^b. Signed (Absolute) Valuation Error Scaled by (1) market price per share of company at valuation date, (2) combined value estimate of company at valuation date, (3) the sum of market price and signed (absolute) valuation error^c or (4) the sum of combined value estimate and signed (absolute) valuation error^c. Statistics Distribution of Signed (Absolute) Valuation Error or Signed (Absolute) Valuation Error Scaled by (1), (2), (3) or (4), include mean, median, central tendency^d, square root^e, standard deviation or inter-quartile range.

Where:

a.) Alternatively, the valuation error also can be calculated as the natural logarithm of the ratio of the combined value estimate to the market price. Note $\log(\text{combined value estimate}/\text{market price}) = \log(\text{combined value estimate}) - \log(\text{market price})$. b.) Compare combined value estimate with market price at valuation date (or around valuation date) under the assumption that market price reflect all available information and is efficient. However, if the market is not at reasonable level of efficiency, then contrast the combined value estimate with market price three to five days after the target price issued. c.) The signed (absolute) valuation error scaled by the sum of market price and signed (absolute) valuation error or the sum of combined value estimate and signed (absolute) valuation error are used to reduce the adverse effect of extreme large outliers and regulate the error value to between 0 and 1, and create convenience for comparison. d.) The central tendency is the percentage of combined value estimates (scaled) with valuation error within certain percentage (e.g. $\pm 15\%$). Alternatively, the percentage of combined value estimates within certain percentage of the market price at valuation date. e.) Although the signed (absolute) valuation error scaled by (3) and (4) can reduce the outlier effect, it is right-skewed and their square roots are required to solve the skewness issue. The third step of the reliability test is to investigate how well the combined value estimates can explain the variations of companies' intrinsic values over time. This study uses an OLS univariate regression-based approach given in equation (8) below. The explanatory power can be judged by whether the intercepts and coefficients are significantly different from 0 and 1 respectively (based on t-statistic), the degree of Pearson and Spearman correlation between the market prices and combined value estimates, and the adjusted R^2 .

$$MP_{t,s} = A_t + B_{t,s} * VE_{t,s} + U_t \quad t = 1, 2, \dots, T. \quad (8)$$

Where:

$MP_{t,s}$ = The natural logarithm of market price of company s at valuation date t . A_t = The intercept term is expected to become zero if the combined value estimate is the unbiased estimator of the market price or intrinsic value. $B_{t,s}$ = The coefficient should equal to one if the combined value estimate is the unbiased estimator of market price. $VE_{t,s}$ = The natural logarithm of combined value estimate for company s . U_t = Valuation error. The ordinary least square method minimizes the sum of squared vertical distances between the market prices and estimated intrinsic values.

Reliability Testing Method for Target Price

The following performance testing method on target price does not consider the effect of target price revisions, and is under the assumption that the mispricing does exist and the market reacts to target price announcements immediately. In order to avoid the influence of announcements on the market prices, the first step of the reliability test is to contrast the target prices (TP) with the market prices three trading days prior to the announcement dates (MPTTD), and then classify them into five explicit recommendation groups as below. Although the target prices are often issued with recommendations, a unified classification

standard makes the test results comparable. Based on the study of Bonini et al. (2010), this study recommends the below classification method: Strong Sell: The TPs are set equal to -25% or less of the MPTTDs. Sell: The TPs are set within -10% to -25% of the MPTTDs. Hold: The TPs are set equal to $\pm 10\%$ or within $\pm 10\%$ of the MPTTDs. Buy: The TPs are set within +10% to +25% of the MPTTDs. Strong Buy: The TPs are set equal to +25% or more of the MPTTDs. The second step involves the judgment of whether different groups of target prices have been achieved according to the metrics recommended by Imam et al. (2013), and then label target prices as “Realized” or “Unrealized”. For target prices with buy or strong buy recommendations, the target prices are realized if the maximum prices of the companies’ shares during the 12-month forecast horizon are greater than or equal to the target prices. For companies with sell or strong sell recommendation, the target prices are met if the minimum prices during the 12-month forecast horizon are less than or equal to the target price. Similarly, for hold recommendations, the target prices are achieved if the maximum and minimum market prices during the forecast horizon are within approximately $\pm 15\%$ of the target prices.

The third step measures the degree of reliability for these target prices in different recommendation groups labeled as “Realized”. The first metric (%REALIZED) is the percentage of all realized target prices in each group. Most of the studies examine the percentage of targets met in and meet at the end of forecast horizon. This study introduces a more logical metric (%DISTRIBUTION) that analyzes the distribution of target price achievement within the different time frames (e.g. quarters) of a year. The third metric (%FREQUENCY) is the frequency or percentage of closing prices which are equal or above the target prices in the next 12 months for buy and strong buy groups. The frequency of closing prices which are equal or smaller than the target prices in the one year forecast horizon for sell and strong sell group. For target prices in the hold group, their degrees of reliability are measured by the standard deviation of closing prices within next 12 months. The last step examines these “Unrealized” target prices in the five recommendation groups. The first metric (%UNREALIZED) is the percentage of total unrealized target prices in each group. The second metric (%FORECAST_ERROR) can reflect the different level of target price forecast error. Specifically, for buy and strong buy groups, it is the absolute difference between the maximum price of the company’ share during the 12-month and target price. For sell and strong sell, the absolute difference between the minimum price and target price. For hold group, the absolute difference between maximum (minimum) closing price and +15% (-15%) of target price.

CONCLUDING COMMENTS

This study concentrates on the recent popular topic of the target price performance, it investigates the underlying reasons for the target price underperformance, and then proposes to improve the reliability via the enhanced valuation methods. Firstly, this study attempts to improve the performance of the target price through enhancing the discount rate estimation method. An expanded CAPM model which contains the shrunk beta, beta-adjusted size premium and firm-specific risk premium has been suggested to estimate the cost of equity. In addition, this study recommends a target price-based multistage Gordon growth model as another cost of equity estimation method. This method adapts the consensus target price as a proxy of the intrinsic value per share to better consistent with the assumption of basic Gordon growth model. Secondly, this study proposes the concept of industry-specific combined valuation model. This concept not only takes advantage of the benefit from the combination of absolute and relative model, but also consistent with the unique features of different industries. Thirdly, this study presents a new target price setting method and provides effective solutions to the common but unsolved question, which is how to combine a range of value estimates. Finally, a reliability testing technique has been introduced by this study. This technique measures the performance of the value estimates based on their accuracy and explanatory power, and tests the quality of the target prices by classifying them into five explicit recommendation groups and then measure their reliability respectively.

This study emphasizes the importance of valuation methodology in the determination of target price reliability. However, a range of other factors such as market condition, analyst's optimism, price momentum and country-specific factors also have strong indirect impact on the target price. Thus, further research on those indirect factors is highly recommended. In addition, this study mainly adopts the qualitative research method and focuses on the improvement of valuation methodology. It is recommended that future research tests the enhanced valuation techniques presented in this study by using real financial data, and fully applies these techniques into valuation and target price setting practice.

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MISSING SOCIAL OUTCOMES IN CSR REPORTS OF AWARD WINNERS

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ABSTRACT

Consumers increasingly expect transparency from companies practicing Corporate Social Responsibility (CSR) and base their buying practices on what they see and hear about a company's CSR initiatives. Unfortunately, many CSR reports resemble marketing materials, rather than data that shows what the actions have accomplished for those targeted stakeholder groups. CSR reports need to prove that companies have achieved outcomes, not just established goals. Companies need to demonstrate that their CSR initiatives are not just greenwashing to keep their consumers happy. The purpose of this study was to evaluate the CSR/Sustainability Reports of twenty-one corporations that appear both in the CR Magazine's 2018 100 Best Corporate Citizens and the World's Most Reputable Companies for Corporate Social Responsibility for 2018 to see if they report outcome measures as well as goals. The study found that, although many of the corporations address the Ten Principles of the UN Global Compact and the UN 2013 Sustainable Development Goals in their reports, the initiatives that focus on the social elements have no data or outcomes for them, especially when they involve philanthropy to nonprofits. Only environmental goals had year-to-year data on progress toward goals.

JEL: M14

KEYWORDS: Corporate Social Responsibility, Sustainable Development Goals, Global Reporting Initiative, Ten Principles of the UN Global Compact

INTRODUCTION

Corporate Social Responsibility (CSR) is a voluntary model to meet or exceed stakeholder expectations by not only being profitable but integrating social and environmental goals into an organization's operating strategy (Jonker & de Witte, 2006; Keys, Malnight, & van der Graaff, 2009; Lindgreen, Swaen, & Johnston, 2009; Chandler, 2017)). That strategy results in increased brand reputation, loyalty, and affinity, but it also means that consumers expect transparency from companies practicing CSR and base their buying practices on what they see and hear about a company's CSR. Unfortunately, the CSR reports that many companies are producing demonstrate the finding of the 2015 Cone Communications/Ebiquity Global CSR Study that indicates that although consumers require data, they prefer infographics and videos on media platforms to long reports (p. 4). The reports resemble marketing materials with lists of social and environmental goals for the stakeholders who buy the companies' goods, showing what they are doing for other stakeholder groups like the poor, hungry, disenfranchised, rather than what the actions have accomplished for those targeted stakeholder groups.

CSR reports need to prove that companies have achieved outcomes not just established goals. They need to prove that their CSR initiatives are not just greenwashing to keep their consumers happy (Bazillier & Vauday, 2009; Lii & Lee, 2012). Providing 1,000 packages of food to a food-deprived community does not solve the hunger problem in that community; helping farmers produce more food might solve it, especially when the CSR site said the company was committed to helping reach the United Nations

Sustainable Development Goals (SDGs) (See Table 1). Michael Porter (2013) said that government and nonprofits do not have the resources to solve global problems without business becoming a key player. In fact, Porter (2013) said that it is in business’ best interest to solve social problems because it can reduce costs. For example, reducing pollution can reducing the amount of waste in the firm’s manufacturing process, and insuring a safe work environment can reduce accidents, thus decreasing time away from work by employees, and the compensation paid to them by the company.

Most Americans consider themselves conscious consumers, and are more likely to buy from companies that treat the environment and its workers right. As advancements in technology give us the ability to become more aware of pressing social problems, consumers are beginning to feel more responsible about what they buy. However, CSR initiatives are not just to provide the conscious consumers something to feel good about; they are to solve problems in the society, whether at the local or global level. This requires that causes be identified and solutions must actually eliminate some of the causes.

Table 1: United Nations 2030 Sustainable Development Goals and Business Applications

Sdg 1 No Poverty	End Poverty in All Its Forms Everywhere
SDG 2 Zero Hunger	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
SDG 3 Good Health and Well-Being	Ensure healthy lives and promote well-being for all at all ages
SDG 4 Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
SDG 5 Gender Equality	Achieve gender equality and empower all women and girls
SDG 6 Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all
SDG 7 Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all
SDG 8 Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
SDG 9 Industry, Innovation and Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
SDG 10 Reduced Inequalities	Reduce inequality within and among countries
SDG-11 Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient and sustainable
SDG 12 Responsible Consumption and Production	Ensure sustainable consumption and production patterns
SDG 13 Climate Action	Take urgent action to combat climate change and its impacts*
SDG 14 Life Below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
SDG 15 Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
SDG 16 Peace, Justice and Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
SDG 17 Partnerships for the Goals	Strengthen the means of implementation and revitalize the global partnership for sustainable development

United Nations 2030 Sustainable Development Goals and Business Applications. (United Nations, 2015). The SDGs are being used by many global companies for their CSR goals because they address social and environment problems. SDG 17 Partnerships for the Goals provides a forum for companies to share best practices and develop partnerships. Retrieved from <https://sustainabledevelopment.un.org/sdgs>

As stakeholders require companies to be more transparent about their businesses, the problem of how to report environmental and social impact in a way that measures outcomes is becoming more apparent, especially since corporations who practice CSR adopt the United Nations 2030 Sustainable Development Goals (SDGs) (see Table 1), and many have joined the Partnership for the Goals. For example, using the icon for Zero Hunger to introduce reporting a donation to foodbanks or a food deprived community, or reporting volunteer hours by employees to programs that feed the poor, does not provide data on how these activities will help reach Zero Hunger. The people being fed today must be fed tomorrow. A business would never spend money on a new marketing campaign for a product without measuring if the marketing resulted in increased sales of the product. If 500 people in a food insecure area are provided enough food for one month, can they work for wages that allow them to feed themselves going forward? Does having food mean they have better health and can find better and continuous work? Does reducing inequality for

women by hiring more women lead to an increase in women in upper management positions? Inequality does not mean simply not representing 50% of the workforce, if that 50% is the bottom half.

Many global companies now use the UN Global Compact Toolbox (see Table 2) because it provides details on goals and reporting that allow the companies to work more easily with governments and non-government organizations (NGOs).

Table 2: The Ten Principles of the UN Global Compact: Key Mechanisms for a Company to Use

<p>Human Rights</p> <p>Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and Assessing human rights impacts and Integration of human rights policies throughout a company</p> <hr/> <p>Taking action: The appropriate action for a company to take will vary depending on whether (a) the company has caused or contributed to an impact, or (b) it is directly linked to that impact through its business relationships.</p> <p>Tracking performance: Monitoring and auditing processes permit a company to track ongoing developments.</p> <p>Communicating/reporting on performance: Reporting is a driver for change, externally as well as internally.</p> <p>Remediation: A company should have in place or participate in remediation processes.</p> <p>https://www.unglobalcompact.org/what-is-gc/mission/principles/principle-1</p>
<p>Human Rights</p> <p>Principle 2: Businesses should make sure that they are not complicit in human rights abuses;</p> <hr/> <p>Has the company made a human rights assessment of the situation in countries where it does, or intends to do, business so as to identify the risk of involvement in human rights abuses and the company's potential impact on the situation?</p> <p>Does the company have explicit policies that protect the human rights of workers in its direct employment and throughout its supply chain?</p> <p>Has the company established a monitoring/tracking system to ensure that its human rights policies are being implemented?</p> <p>Does the company actively engage in open dialogue with stakeholder groups, including civil society organizations?</p> <p>Does the company utilize its leverage over the actor committing the abuse? If the company does not have sufficient leverage, is there a way to increase this leverage (e.g. through capacity building or other incentives or by collaborating with other actors)?</p> <p>Does the company have an explicit policy to ensure that its security arrangements do not contribute to human rights violations? This applies whether it provides its own security, contracts it to others or in the case where security is supplied by the State</p> <p>Ramifications of ending a business relationship, given the potential adverse human rights impacts of doing so</p> <p>https://www.unglobalcompact.org/what-is-gc/mission/principles/principle-2</p>
<p>Labour</p> <p>Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;</p> <hr/> <p>Respect the right of all workers to form and join a trade union of their choice without fear of intimidation or reprisal, in accordance with national law;</p> <p>Put in place non-discriminatory policies and procedures with respect to trade union organization, union membership and activity in such areas as applications for employment and decisions on advancement, dismissal or transfer;</p> <p>Provide workers' representatives with appropriate facilities to assist in the development of effective collective agreement; and</p> <p>Do not interfere with the activities of worker representatives while they carry out their functions in ways that are not disruptive to regular company operations. Practices such as allowing the collection of union dues on company premises, posting of trade union notices, distribution of union documents, and provision of office space, have proven to help build good relations between management and workers, provided they are not used as a way for the company to exercise indirect control.</p> <p>https://www.unglobalcompact.org/what-is-gc/mission/principles/principle-3</p>

Labour

Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labour;

Types of forced and compulsory labour:

Slavery (i.e. by birth/ descent into “slave” or bonded status)

Bonded labour or debt bondage, an ancient practice still used in some countries where both adults and children are obliged to work in slave-like conditions to repay debts of their own or their parents or relatives

Child labour in particularly abusive conditions where the child has no choice about whether to work

Physical abduction or kidnapping

Sale of a person into the ownership of another

Physical confinement in the work location (in prison or in private detention)

The work or service of prisoners if they are hired to or placed at the disposal of private individuals, companies or associations involuntarily and without supervision of public authorities

Labour for development purposes required by the authorities, for instance to assist in construction, agriculture, and other public works

Work required to punish opinion or expression of views ideologically opposed to the established political, social or economic system

Exploitative practices such as forced overtime

The lodging of deposits (financial or personal documents) for employment

Physical or psychological (including sexual) violence as a means of keeping someone in forced labour (direct or as a threat against worker, family, or close associates)

Full or partial restrictions on freedom of movement

Withholding and non-payment of wages (linked to manipulated debt payments, exploitation, and other forms of extortion)

Deprivation of food, shelter or other necessities

Deception or false promises about terms and types of work

Induced indebtedness (by falsification of accounts, charging inflated prices, reduced value of goods or services produced, excessive interest charges, etc.)

Threats to denounce workers in an irregular situation to the authorities

<https://www.unglobalcompact.org/what-is-gc/mission/principles/principle-4>

Labour

Principle 5: Businesses should uphold the effective abolition of child labour;

Be aware of countries, regions, sectors, economic activities where there is a greater likelihood of child labour and respond accordingly with policies and procedures

Adhere to minimum age provisions of national labour laws and regulations and, where national law is insufficient, take account of international standards.

Use adequate and verifiable mechanisms for age verification in recruitment procedures

Avoid having a blanket policy against hiring children under 18, as it will exclude those above the legal age for employment from decent work opportunities

When children below the legal working age are found in the workplace, take measures to remove them from work

Help to seek viable alternatives and access to adequate services for the children and their families

Exercise influence on subcontractors, suppliers and other business affiliates to combat child labour

Develop and implement mechanisms to detect child labour

Where wages are not determined collectively or by minimum wage regulation, take measures to ensure that wages paid to adults take into account the needs of both them and their families

<https://www.unglobalcompact.org/what-is-gc/mission/principles/principle-5>

Type of Work	Developed Countries	Developing Countries
Light Work	13 Years	12 Years
Regular Work	15 Years	14 Years
Hazardous Work	18 Years	18 Years

Labour

Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation;

Institute company policies and procedures which make qualifications, skill and experience the basis for the recruitment, placement, training and advancement of staff at all levels

Assign responsibility for equal employment issues at a high level, issue clear company-wide policies and procedures to guide equal employment practices, and link advancement to desired performance in this area

Work on a case by case basis to evaluate whether a distinction is an inherent requirement of a job, and avoid application of job requirements that would systematically disadvantage certain groups

Keep up-to-date records on recruitment, training and promotion that provide a transparent view of opportunities for employees and their progression within the organization

Conduct unconscious bias training

Where discrimination is identified, develop grievance procedures to address complaints, handle appeals and provide recourse for employees

Be aware of formal structures and informal cultural issues that can prevent employees from raising concerns and grievances

Provide staff training on non-discrimination policies and practices, including disability awareness. Reasonably adjust the physical environment to ensure health and safety for employees, customers and other visitors with disabilities.

Establish programs to promote access to skills development training and to particular occupations

<https://www.unglobalcompact.org/what-is-gc/mission/principles/principle-6>

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges.

Develop a code of conduct or practice for its operations and products that confirms commitment to care for health and the environment

Develop a company guideline on the consistent application of the approach throughout the company

Create a managerial committee or steering group that oversees the company application of precaution, in particular risk management in sensitive issue areas

Establish two-way communication with stakeholders, in a pro-active, early stage and transparent manner, to ensure effective communication of information about uncertainties and potential risks and to deal with related enquiries and complaints.

Use mechanisms such as multi-stakeholder meetings, workshop discussions, focus groups, public polls combined with use of website and printed media

Support scientific research, including independent and public research, on related issues, and work with national and international institutions concerned

Join industry-wide collaborative efforts to share knowledge and deal with the issue of precaution, in particular in regards to production processes and products around which high level of uncertainty, potential harm and sensitivity exist

<https://www.unglobalcompact.org/what-is-gc/mission/principles/principle-7>

Environment

Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility; and

Assessment or audit tools (such as environmental impact assessment, environmental risk assessment, technology assessment, life cycle assessment);

Management tools (such as environmental management systems and eco-design); and

Communication and reporting tools (such as corporate environmental foot printing and sustainability reporting).

<https://www.unglobalcompact.org/what-is-gc/mission/principles/principle-8>

Environment

Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies.

At the basic factory site or unit level, improving technology may be achieved by:

changing the process or manufacturing technique;

changing input materials;

making changes to the product design or components; and

Reusing materials on site.

<https://www.unglobalcompact.org/what-is-gc/mission/principles/principle-9>

Anti-Corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Internal: As a first and basic step, introduce anti-corruption policies and programmes within their organizations and their business operations;

External: Report on the work against corruption in the annual Communication on Progress; and share experiences and best practices through the submission of examples and case stories;

Collective Action: Join forces with industry peers and with other stakeholders to scale up anti-corruption efforts, level the playing field and create fair competition for all. Companies can use the Anti-Corruption Collective Action Hub to create a company profile, propose projects, find partners and on-going projects as well as resources on anti-corruption collective action;

Sign the “Anti-corruption Call to Action,” which is a call from Business to Governments to address corruption and foster effective governance for a sustainable and inclusive global economy. Your company’s participation in this Call to Action underscores your continued efforts to integrate anti-corruption into your strategies and operations

<https://www.unglobalcompact.org/what-is-gc/mission/principles/principle-10>

The Ten Principles of the UN Global Compact: Key mechanisms for a company to use. (United Nations, 1999) By incorporating the Principles into company goals, strategies, and policies, companies can know they are meeting their basic responsibilities to people and planet. Highlights from <https://www.unglobalcompact.org/what-is-gc/mission/principles>

Environmental goals are easier to measure because one can report a goal of decreasing energy use by 2020, and then report progress year by year. Water and energy consumption are measurable, and they have monetary value. Using less water saves a company money; installing solar panels has an upfront cost, but saves money over the long term. However, in terms of responsible Consumption and Production, and Climate Action, what is the result on the environment? How much has air quality increased for specific stakeholders? The paper will review literature on stakeholders and the growing importance of organizational reputation, and their influence on the current state of CSR reporting. It will explain the methodology used to identify the global companies used in the study, and then evaluate the quality of outcomes for environmental and social goals found in the CSR reports by those companies. It will conclude with recommendations for quality of outcomes that will address the stakeholder requirements for transparency.

LITERATURE REVIEW

Stakeholders and Reputation

The focus of many CSR reports on the consumer stakeholder group is a response to only one stakeholder group, the one that buys the products and says it will buy from companies with good CSR reputations. Freeman’s (1994) stakeholder theory as developed by Donaldson and Preston (1995) holds that all stakeholders have worth, regardless of whether or not the stakeholder provides financial value to an organization. Carroll’s (1991) pyramid explains how CSR creates a culture in which profit and social responsibility are connected to all stakeholders, not just stockholders. Thus, the stakeholder groups that represent the groups that are the subject of an organization’s CSR initiatives must be center to its report (Peloza & Papania, 2008). Porter and Kramer (2006) state that “The notion of license to operate derives from the fact that every company needs tacit or explicit permission from governments, communities and numerous other stakeholders to do business” (p. 78). Reputation has been shown (Elkington, 1998; Fombrun, 1996; Fombrun & Van Riel, 1997; Gjørberg, 2009; Petryni, 2010; Porritt, 2005) to affect both short and long-term profitability. Stakeholder criticism, amplified by social media that damages reputation, can lead to loss of initial sales as well as repeat sales. This, if unchecked, can lead to long-term loss of market share, thus eroding growth and stability.

A corporate reputation is a collective representation of a firm’s past actions and results that describes the firm’s ability to deliver valued outcomes to multiple stakeholders. It gauges a firm’s relative standing both internally with employees and externally with its stakeholders, in both its competitive and institutional environments. (Fombrun & Van Riel, 1997, p. 10)

Consumers are paying attention to CSR (Foote, Gaffney, & Evans, 2010). Cone Communications (2017a) found American consumers have a more positive image (92% vs. 85% in 1993), are more likely to trust (87% vs. 66% in 1998), are more loyal (88%) to companies that support social and environmental issues, and would switch brands to one that is associated with a good cause, given similar price and quality (89% vs. 66 percent in 1993) (para. 14). Almost 90% said they “expect companies to do more than make a profit, but also address social and environmental issues,” 87% would purchase a product if the company advocated for an issue they supported, and they would tell “friends and family about a company’s CSR efforts” Cone Communications, 2017b, p. 23). Eighty-eight percent of respondents said they would stop buying products from a company if it had deceptive business practices, and would refuse to purchase a product if they found out a company supported an issue contrary to their beliefs. In 2016, the survey showed 50% of respondents had “boycotted a company’s product/services upon learning it had behaved irresponsibly” and 55% said they had “bought a product with a social and/or environmental benefit” (Cone Communications, 2017b, p. 24). Ninety-one percent said they do not expect a company to be perfect, as long as it is honest about efforts. Seventy-nine percent of consumers say they are more likely to believe a company’s CSR commitments if they share their efforts along multiple channels (Cone Communications, 2017b). The 2015 Cone Communications/Ebiquity Global CSR Study found that

global consumers have officially embraced corporate social responsibility—not only as a universal expectation for companies but as a personal responsibility in their own lives. Consumers see their own power to make an impact in so many ways: the products they buy, the places they work and the sacrifices they are willing to make to address social and environmental issues. (Cone Communications, 2015, p. 4)

The same study found that half of the global consumers need proof before they believe a company is socially responsible, and, although only 25% of global consumers say they do not read CSR reports, they still pay attention to the data from the reports on Websites and through social media. They pay attention to companies identified for poor CSR performance. Eighty-four percent consider CSR when deciding what to buy or where to shop, 82% consider it when recommending products and services to others, 84% consider it when determining which companies they want to see doing business in their communities, and 79% consider it when deciding where to work. (Cone Communications, 2015). It is also important to note that those surveyed for the 2017 Cone Communications Study also focused on other issues for business such as “Being a good employer (94%); Operating in a way that protects and benefits society and the environment (90%); Creating products and services that ensure individual wellbeing (89%); Investing in causes in local communities and around the globe (87%)” and “Standing up for important social justice issues (78%)” (Cone Communications, 2017b, p. 15). In another study, the 2016 Edelman TrustBarometer Global Report found that 80 percent of the 32,200 global respondents from the general public expect that businesses can both increase profits and improve economic and social conditions in the communities in which they operate. It found that 45% of respondents said that their trust in business has increased because it “Contributes to the greater good,” 40% agreed that it “Allows me to be a productive member of society,” and 50% agreed with the statement that trust in business has decreased because business “Fails to contribute to the greater good” (Edelman, 2016b, p. 35). Over 50% expect that a business leader “Exhibits highly ethical behaviors,” “Takes responsible actions to address an issue or crisis,” and “Behaves in a way that is transparent and open” (Edelman, 2016a, p. 37). Eighty percent of respondents said that CEOs should be transparent about their work on societal issues (Edelman, 2016a, p. 12).

Thus, companies today not only must have CSR goals in their reports, the reports must show that they are accomplishing their goals, and they must be transparent in their work through many media channels. Elkington’s (1998) Triple Bottom Line accounting proposed a measurable way to include the social and environmental impact of an organization’s activities in describing its economic performance.

The public is also responding positively to CEOs who believe they can fulfill the dual mandate of earning profits and providing benefits. In fact, trust in CEOs has risen substantially in the past five years to a global average of 49 percent. This is a vote in favor of the CEOs who have stepped forward on important issues, including Paul Polman of Unilever on the environment, Howard Schultz on youth employment, Cyrus Mistry of Tata on education and Jack Ma of Alibaba on inclusion. (Edelman, 2016a, p. 3)

CSR Reporting

The Global Reporting Initiative (GRI) Reporting Framework has been proposed as the major reporting organization for CSR (Wilburn & Wilburn, 2013; Macower, 2015). Its Sustainability Reporting Framework provides metrics and methods for measuring and “reporting sustainability-related impacts and performance” (Global Reporting Initiative, 2018a, para. 4) that enables all organizations to measure and report their sustainability performance. It is intended to serve as a generally accepted framework for reporting on an organization’s economic, environmental, and social performance. Companies of any size as well as nonprofit and government organizations can assess their sustainability performance and disclose the results in a format that mirrors financial reporting and move toward more transparency. The guidelines are free and can be used by organizations to report and assess their own progress toward achieving their CSR and sustainability goals each year, including differentiating between what is required by external laws and codes, and what is voluntary. The guidelines can also be used to benchmark an organization’s CSR and sustainability programs against other organizations’ programs (Global Reporting Initiative, 2018c).

The guidelines establish the principles and performance indicators that organizations can use to measure and report their performance in six categories: Economic, Environment, Social, Human Rights, Society, and Product Responsibility. The Economic Category requires Economic Performance Market Presence and Indirect Economic Impacts. The Environment Category includes Materials; Energy; Water; Biodiversity; Emissions, Effluents, and Waste; Products and Services; Compliance; Transport; and Overall. The Social Category includes sustainability and the impacts an organization has on the social systems within which it operates, as well as labor practices and human rights based on internationally recognized universal standards such as the United Nations Universal Declaration of Human Rights and its Protocols (Global Reporting Initiative, 2018b). The Human Rights Category includes Investment and Procurement Practices, Nondiscrimination, Freedom of Association and Collective Bargaining, Abolition of Child Labor, Prevention of Forced and Compulsory Labor, Complaints and Grievance Practices, Security Practices, and Indigenous Rights. The Society Category addresses Community, Corruption, Public Policy, Anti-Competitive Behavior, and Compliance. The Product Responsibility Category includes Customer Health and Safety, Product and Service Labeling, Marketing Communications, Customer Privacy, and Compliance (Global Reporting Initiative, 2018b).

There are other proposed structures for measuring CSR (Skaerseth & Wettestad, 2009; Widiarto-Sutantoputra, 2009; Viehöver, Türk, & Vaseghi, 2010; Wilburn & Wilburn, 2014). There are also other global organizations that have developed guidelines for measuring CSR and Sustainability such as International Integrated Reporting Council (IIRC), United Nations Global Compact (UNGC), OECD Guidelines for Multinational Enterprises. In addition there are other guidelines specific to industries or topic like ISO 26000, Carbon Disclosure Project (CDP), Greenhouse Gas Protocol (GHG), Protocol Corporate Standard, Principles for Responsible Investment (PRI) Framework, Extractive Industries Transparency Initiative (EITI), International Labour Organization (ILO), Tripartite declaration of principles concentrating multinational enterprises and social policy, Core Labour Standards (CLS), and UN Guiding Principles on Business and Human Rights. There are also organizations that rank CRS/Sustainability/ESG such as Newsweek’s Greenest Companies, CRO’s 100 Best Corporate Citizens, Ethisphere’s World’s Most Ethical Companies, Dow Jones Sustainability World and North America Indexes®, and NASDAQ OMX CRD Global Sustainability Index, CRD Analytics’ SPV Ratings®, and Carbon Disclosure Project score.

Reports studying CSR and Sustainability are published by Governance & Accountability Institute, Inc., the United Nations Global Compact/Accenture, and Cone Communications.

The Nasdaq CRD Global Sustainability Index tracks the performance of companies that are taking a leadership role in sustainability performance reporting. These companies have voluntarily disclosed their carbon footprint, energy usage, water consumption, hazardous and non-hazardous waste, employee safety, workforce diversity, management composition, and community investing (Nasdaq, 2019). Wang, Hsieh, and Sarkis (2018) found that, using Fog, Kincaid, and Flesch indices to measure the readability of CSR reports and ESG and KLD, both indexes for Socially Responsible Investing (SRI) index to measure social and environmental perspectives, on 331 CSR reports by U.S. companies there was a significant positive relationship between CSR performance and the readability of CSR reports. The analysis of the methodologies adopted by CSR rating agencies by Saadaoui and Soobaroyen (2018) found that they cover the same elements, with some differences such as transparent vs. confidential approach, industry-specific ratings, and different weights for each dimension. Others have evaluated the structure of CSR reports (Hopkins, 2005; Hess, 2014; Izza, 2015).

A growing number of companies are working with NGOs, especially those with operations on the ground and a commitment to getting things done. Both sides now see CSR as offering what Porter calls “shared value”: benefits for both business and society (Porter & Kramer, 2011). George Kell, the director of the UN Global Compact, says that the case for engagement has changed from a moral to a business one. . . . In that report, more than 50% of the respondents agreed that corporate responsibility “is a necessary cost of doing business” and “gives us a distinctive position in the marketplace” (The next question: Does CSR work?, 2008, para. 1). Mendonca and Miller (2007) studied the social contract that is now required of business, while Perrini and Tencati (2006) showed how stakeholders are important to that social contract. Gitman, Chorn, and Fargo (2009) found increased interest in Environmental, Social and Governance (ESG) elements as drivers of financial returns from the pension fund and long-term investment managers, another important stakeholder group. The positive and negative impacts of CSR on financial health have also been addressed. (Sprinkle & Maines, 2010; Saeidi, Sofian, Saeidi, Saeidi, & Saeidi, 2015)

DATA AND METHODOLOGY

The purpose of this paper is to evaluate the CSR/Sustainability Reports of firms that have been lauded for their excellent CSR to identify whether they report outcome measures as well as goals. Although reporting outcome measures requires additional time and resources (Ebrahim, 2013), they are essential to measuring progress on solving the global social problems to achieve the U.N. SDGs is necessary to see what works and what does not and to provide roadmaps others can follow. The twenty-one corporations that were chosen for evaluation appear on two lists of companies with exemplary CSR: CR Magazine’s 2018 100 Best Corporate Citizens and the World’s Most Reputable Companies for Corporate Social Responsibility for 2018, reported by Forbes and Bloomberg. These two were chosen because they represent different methodologies for collecting data and somewhat different measurements of CSR.

The Best Corporate Citizens list ranks companies on the Russell 1000 Index and does not use self-reporting. The annual evaluations are conducted by ISS Corporate Solutions and based on “260 ESG points of disclosure and performance measures—harvested from publically available information in seven categories: environment, climate change, employee relations, human rights, governance, finance, and Philanthropy & community support” (CSRwire, 2018, para. 4). The World’s Most Reputable Companies for Corporate Social Responsibility list is created by RepTrak®, which tracks twenty-three observed variables that measure corporate reputation in seven dimensions:

Products & Services (high quality, value for money, stands behind products, meets customer needs), Innovation (innovative, first to market, adapts quickly), Workplace (offers equal

opportunities, rewards employees fairly, employee well-being), Governance (fair in business, behaves ethically, open and transparent), Citizenship (environmentally responsible, positive influence on society, supports good causes), Leadership (well organized, appealing leader, excellent managers, clear vision for its future) and Performance (profitable, strong growth prospects, better results than expected) ranks. (Reputation Institute, 2016, p. 3)

Table 3: Overview of CSR Elements in CSR Reports of Global Companies Appearing in Both the 100 Best Corporate Citizens List and the World's Most Reputable Companies for Corporate Social Responsibility List

Name of Company	Name of Report	Covers Environment	Covers Social	Covers Governance	Includes Goals	Uses UN SDGs	Uses GRI	Uses Nasdaq CRD Global Sustainability Index
3M	Sustainability Report	YES	YES	YES	YES	YES	YES	YES
Accenture	Corp. Citizenship report	YES	YES	YES	YES	YES	YES	YES
Apple	Environment Responsibility Report	YES	NO	NO	YES	NO	NO	YES
Boeing	Environment Report	YES	YES	YES	YES	NO	NO	YES
Campbell Soup	Corporate Responsibility Report	YES	YES	YES	YES	YES	YES	YES
Cisco	CSR	YES	YES	YES	YES	YES	YES	YES
Colgate	CSR and Sustainability Report	YES	YES	YES	YES	YES	YES	YES
Palmolive	CSR and Sustainability Report	YES	YES	YES	YES	YES	YES	YES
Eli Lilly & Co	Integrated Summary Report	YES	YES	YES	YES	YES	NO	YES
FedEx	Global Citizenship Report	YES	YES	YES	YES	NO	YES	YES
HP	Living Progress Report	YES	YES	YES	YES	YES	NO	YES
IBM*	CSR	YES	YES	YES	YES	YES	YES	YES
Intel	CSR	YES	YES	YES	YES	YES	YES	YES
Johnson & Johnson	Health for Humanity	YES	YES	YES	YES	YES	YES	YES
Kellogg's	Corporate Responsibility Report	YES	YES	NO	YES	YES	YES	NO
Kimberly Clark	Sustainability Report	YES	YES	YES	YES	YES	YES	YES
Microsoft*	CSR	YES	YES	NO	YES	YES	YES	YES
PepsiCo*	Sustainability Report	YES	YES	YES	YES	YES	YES	YES
Proctor & Gamble	Citizenship Report	YES	YES	YES	YES	YES	YES	YES
Walt Disney	CSR	YES	YES	YES	YES	YES	YES	YES
Visa	Corporate Responsibility and Sustainability Report	YES	YES	YES	YES	YES	YES	NO
Xerox	CSR	YES	YES	YES	YES	NO	NO	NO

Overview of CSR Elements in Individual CSR Reports for Identified Global Companies appearing in both The 100 Best Corporate Citizens list (http://www.csrwire.com/press_releases/41014-Corporate-Responsibility-Magazine-Announces-2018-100-Best-Corporate-Citizens) and The World's Most Reputable Companies for Corporate Social Responsibility list. These two lists were derived using different methodologies for gathering data and somewhat different measurements. (<https://www.reputationinstitute.com/sites/default/files/pdfs/2016-SouthAfrica-RepTrak.pdf>)
*Companies also appear in Ethisphere's World's Most Ethical Companies List for 2018

These were developed based on stakeholder interviews and focus groups between 1999 and 2006 (Ponzi, Fombrun, & Gardberg, 2011). According to Fombrun, Ponzi, and Newberry (2015) who validated the variables: “Building on the international Qualitative work already completed by the Reputation Institute to develop the RQ instrument, Reputation Institute expended the research by conducting a wide range of interviews with reputation mangers, senior communication managers and functional heads of HR, marketing and finance of global companies” (p. 5). Thus the companies that made both lists would have been strong in both having Environmental, Social, and Governance (ESG) performance measures and having met reputation requirements based on stakeholder input. The companies that made both lists are 3M, Accenture, Apple, Boeing, Cisco, Campbell Soup, Colgate Palmolive, Eli Lilly & Co, Fed Ex, HP, IBM, Intel, Johnson & Johnson, Kellogg’s, Kimberly Clark, Microsoft, PepsiCo, Proctor & Gamble, Visa, Walt Disney, and Xerox. The latest available CSR reports (2017-2019) at the time of the study for each company were evaluated for CSR goals and for specific data on performance measures in environment, social, and governance areas. Because some global companies are now using the UN Sustainability Development Goals (SDG) and connecting them to the Ten Principles of the UN Global Compact, the goals were evaluated in the light of UN measurements. It was also noted if the company used the Global Reporting Initiative (GRI), which could indicate a more comprehensive evaluation of goals. However, this was not evaluated as part of this study unless the data was included in the company’s CSR Report. Also noted was whether the company used the Nasdaq CRD Global Sustainability Index, which would indicate that it takes sustainability seriously.

It should be noted that Microsoft, IBM, PepsiCo, and Visa were also on Ethisphere’s list for World’s Most Ethical Companies, for which companies are evaluated on Ethics and Compliance Program, Culture of Ethics, Corporate Citizenship and Responsibility, Governance, and Leadership and Reputation identified by answers to an Ethics Quotient® questionnaire. (Ethisphere, 2019).

RESULTS

The twenty-one companies have much in common. Seventeen of the companies use specific UN Sustainability Development Goals in their reports. A few, like Apply and Boeing, focus almost exclusively on environmental goals. Some have data, but many rely on pictures and statements of what they have done with no connection to goals or year-to-year progress. 3M has a 2018 Sustainability Report that includes the UN Compact Report and GRI Index with data accessible for each of the elements in each report, such as Regional and Global Lost Time Incident rate for various regions from 2013-2017. The chart for Females in Management has no goals for 2025 but show the number to have risen from 25% in 2013 to 29% in 2017. The Environment is a significant section of the report. 3M also has goals for 2025 such as to provide training to 5 million people on worker and patient safety; however, the measurement will be the number of trainings completed, not the results of that training on a decrease in worker or patient injuries (3M, 2018).

Accenture is a consulting firm and has a Corporate Citizen Report 2017. It uses SDGs 4, 5, 10, 13, 16. It has 2025 goals for a gender-balanced workplace with 41% in 2017 and 36% in 2016. The 2020 goal is to provide more than 2.2 million people with workplace skills; in 2017, Accenture had placed more than 1,000 participants into employment opportunities. It will expand this training to over 20,000 people at eight U.S. military installations. There is not follow-up data for those who had been employed, nor is there data on whether those who were not employed found employment. Use of virtual training has decreased the use of CO₂ and provided savings not only to Accenture but to the companies they supply. There is a Performance Data Table showing Community Impact, Environment, and Supply Chain goals and progress from 2013-2017 (Accenture, 2017). Although Apple does have a page on its Website listing the GRI Index topics that it addresses, it does not include this in its Environmental Responsibility Report 2018, nor does it address SDGs. Its focus is on its own use of energy, which as of 2018 comes from renewable sources for all of its facilities. The report also says it is helping suppliers switch to renewable energy. It does have key

performance indicators (KPIs) listed by goal and data each year from 2012-2017. One such KPI is its savings through energy efficiency of over \$40 million, and in plastics and fiber packaging (Apple, 2018).

Boeing does not use the GRI Index or address SDGs. It too focuses on the environment. Its 2018 Environment Report includes use of repurposed treated water for irrigation, and has goals for 2025 for greenhouse gas emissions, water, and solid and hazardous waste. However, it does not have year-to-year data on any environmental goal. Its report mentions employee volunteer hours, but they focus on Earth Day and World Environment Day (Boeing, 2018). Campbell's 2019 Corporate Responsibility Report has targets in Agriculture, such as reduce water use per pound of U.S. tomatoes by 20% by the end of 2020 as compared to 2012 and shows 16% reduction by 2019. Others are Sourced Packaging and Responsible Sources, Produced Climate, Water, and Waste, and Shared Safety. One target is to reduce water use by 20% by 2025 as compared to 2017, but 2019's progress is 0.2%. Campbell has commitments for all the SDGs it uses: For example, #2 Zero Hunger it is investing in food innovations that enable consumer health and well-being, and enabling access to affordable and healthy food, and #10 Reduce Inequalities by enforcing the Code of Business Conduct and Ethics and Responsible Supplier Code to identify and eliminate labor violations. The Appendix is the GRI Content Index which has data like Cage-Free Eggs: 16%, "No Antibiotics Ever" Chicken: 98% and Crate-Free Pork 57% for products meeting recognized responsible production standards (Campbell Soup Company, 2018).

Cisco has a 2017 Corporate Social Responsibility Report: Accelerating Global Problem Solving. It focuses on People, Society, and Planet. For example, Society is defined as scaling inclusive social and economic impact globally and has one goal to positively impact one billion people by 2025. The 2017 progress is on the impact the nonprofit partners report as a result of the cash grants Cisco gave them. Most of Cisco's programs involve education. The report addresses the GRI Index standards and all SDGs, but many do not have programs listed but only the partners and grantees to which Cisco donates. There goals are on blogs and difficult to find: Five-year goal to reduce total Cisco Scope 1 and 2 GHG emissions worldwide by 60% absolute by 2022, and use electricity generated from renewable sources for at least 85% of global electricity by 2022 from the 2007 baseline. However, progress on the goals is not identified, although the money to be spent on them. One interesting program Cisco is developing is one that will track human movement around nature preserves to identify poachers (Cisco, 2018).

The Colgate Corporate Social Responsibility and Sustainability Report 2016 is organized by Key Issues, Risks, and Opportunities. The key Sustainability Issues are Oral Health, Responsible Sourcing and Human Rights, Product Stewardship, Sustainable Packaging, Climate Change, Deforestation, and Water Stewardship. The 2015-2020 Strategy lists Goals and Highlights some with data but not by date on Helping Colgate People and Their Families Live Better, Contributing to the Communities Where We Live and Work, Brands that Delight Consumers and Sustain Our World, Making Every Drop of Water Count, and Reducing Our Impact on Climate and the Environment. The last section is on performance that reports Non-GAAP financial measures and activities such as responsible sourcing of palm oils, promoting water conservation awareness, with only one or two using data such as 100% of personal care manufacturing plants have achieved U.S. EPA Energy Star Challenge for Industry. It has a chart of 5% for the Planet donations for 2011-2016. The report is text that describes programs like Bright Smiles to support oral health education and treatment for children, a program in handwashing and its support for a mobile facility to provide medical and dental. It reports charitable donations for 2001, 2002 and 2003 (Colgate, 2018).

Eli Lilly has a 2018 Integrated Report and opens its report by discussing its medicines and people that they have helped. It organizes its Report by diseases with videos and photos of employees who help and people helped. The Environment 2020 goals include a 20% improvement in waste efficiency while increasing recycling about 70% and decreasing waste to landfill below 10% of total waste. There are goals and progress numbers through 2017 for Greenhouse Gas Emissions Intensity Reduction, Energy and Waste Efficiency improvement, as well as Phosphorus Emissions in Wastewater. Environmental performance has

data for the years 2012-2017. There are numbers for 2017 on U.S. workforce ethnic and gender diversity but no goals. The goal for Improving Global Health is to reach 30 million people in resource-limited settings by 2030 with 5 million reached in 2017, by discovering current and shelved medicines for people in those areas and building partnerships to increase access to medicines. However, there is no explanation about how these will achieve the goal or outcomes that this will accomplish. It has numbers for contributions of cash and products for 2018 but no goals or outcomes; the same is true of the one day of volunteer service that all employees give. The Results section has financials and a list of global brands for various medical areas. Lilly does produce a 2017 UNGC Communication on Progress that has results of UNGC principles. The report is organized in sections for Human Rights; Labor; Health, Safety, and Environment; and Anti-Corruption, and identifies SDGs for each including 2, 5, 7, 12, 13, 14, and 16, and has some year-to-year data (Lilly, 2017).

FedEx has a 2018 Global Citizenship Report that uses the GRI Index and covers the company, including financials, and goals and progress for Environment and People. The focus was on the environment, with 2020 goals on aircraft emissions, vehicle fuel efficiency, CO₂ reductions, and reduction of energy use in facilities, as well as obtaining jet fuel from alternative fuels by 2030. The report does report annual progress starting with 2005. FedEx also will invest \$200 million in 200 communities worldwide through cash donations as well as in-kind shipping and giving. It has an education program that has reached more than 1 million children, but there is no purpose described or outcomes provided (FedEx, 2018). HP uses SDGs 4, 5, 8, 10, 11, 12 and 13 in its 2017 Sustainable Impact Report on Planet, People, and Community. The report includes a mixture of 2022 goals and 2017 accomplishments including a few with 2016 numbers, for example, an increase in women in leadership from 21.7% in 2015 to 28.2% in 2017, although there is no goal listed for women in leadership for Goal 5, Gender equality. It uses the GRI for its materiality assessment. HP has goals to decrease the carbon footprint and water use of its supplier as well as its own company, and has data showing the environmental impact of its supply chain from 2013-2017. It also measures its circular economy by gathering data on materials recovery and reuse. One 2025 goal is to enable better learning outcomes for 100 million people in digital literacy and quality; there are progress numbers since 2015, but no outcome measures in terms of what those who have been educated have done as a result (Hewlett Packard Enterprises, 2018).

IBM's 2017 Corporate Responsibility Report covers Trust and transparency, Education and skills and Inclusion, and The IBMer, Supply chain, Governance; each is a downloadable section. It has a performance summary that has data for key performance indicators from 2013-2017. That includes energy conservation, where the goal is to achieve annual savings equal to 3.5 of total use, which it achieved in 2017. It has goals for renewable energy procurement and for CO₂ emissions. It reported 1,496 employee volunteer hours in 2013, which dropped to 1,205 in 2017, but there was no information on the purpose of the goal of employee volunteering. It also reported corporate contributions of over \$300 million, but no purpose or results were included. It reported that over 100,000 individuals received job preparation education, and 35,000 were moved directly into jobs, although there is no follow-up data on how long or how successful those individuals were. IBM uses both the GRI and the SDGs but not in its report (IBM, 2017).

Intel has a Corporate Social Responsibility Report for 2017 that focuses on Environmental Sustainability, Supply Chain Responsibility, Diversity and Inclusion, and Social Impact. Since 2008, it has linked a portion of executive and employee annual performance bonus to achieving financial as well as corporate responsibility goals. In the environment area, it has achieved 75% hybrid vehicle use and has a goal of 85% of its ground fleet being 'green' by 2020. Using an Intel grant for construction materials and tools, Intel volunteers are building transitional homes for more than 25 people in Jalisco, Mexico. It has an Intel She Will Connect Program that has a goal to reach 5 million women in Sub-Saharan Africa by 2020 through expanding connection to Facebook; by 2017, it had reached 3.3 million women. There is no explanation of the purpose or goals of this program in terms of how it will affect the women's lives; thus, there is nothing to evaluate once the 5 million number is reached (Intel, 2018).

Johnson & Johnson's 2017 Health for Humanity Report has goals for 2020 and 2050 on design of products, reducing impact on climate and water resources, including with suppliers with a note on progress made. It also includes a SDG Progress Scorecard 2017 that started with data from 2016, and covers Health Workforce, Women's and Children's Health, Essential Surgery, Global Disease Challenges, and Environmental Health. These areas are linked to the GRI sections. There is a chart on the Global Workplace by gender showing women at 45.4% in 2015 and 46.5% in 2017. It has goals for 2020 for donating medications such as Deliver HIV/AIDS therapy and for donating doses of medications to a cumulative 130,000 adults and 5,000 children. It also has goals for providing support and tools to enable a healthy future to 60 million women. However, there are no indications of collecting data that show the results of such donations. There are environmental goals like reduce absolute carbon emissions by 20% (Johnson & Johnson, 2018).

Kellogg's 2018/2019 Corporate Responsibility Report has four sections. The first is Nourishing With Our Foods, which includes food quality and safety with SDGs 2, 3, 13, and 17; responsible marketing with SDGs 3, 5, 12, 14 and 17; and wellbeing (physical, emotional, and social) with SDGs 2, 3, 5, 13, 14, 15, and 17. The second is Feeding People in Need, which includes food security with SDGs 2, 3, 5, 13, 14, 15, and 17. The third is Nurturing Our Planet, which includes climate change with SDGs 1, 2, 9, 13, 15, and 17; Food loss and waste with SDGs 2, 12, 13, 14, 15, and 17; Natural resource conservation with SDGs 2, 6, 7, 9, 13, 14 and 17; and Sustainable agriculture with SDGs 1, 2, 4, 5, 6, 15, and 17. The fourth is Living Our Founder' Values, which includes Business ethics and compliance with SDGs 2, 3, 4, 5, 8, 12, 13, 17 and 17; Diversity and inclusion with SDGs 5, 8, 10, and 17; and Human rights with SDGs 2, 3, 4, 5, 8 and 17. Kellogg's has goals for packaging and responsible sourcing and charts from 2015 to 2020 goal for total food waste, water use per metric ton of food produced, energy use, and CHG emissions. On the social side is a 2017 diversity chart by category of employees but with no goals, and there are goals for the amount of money spent on initiatives to donate food to people in need and provide education to children and farmers, but there are no data or outcomes (Kellogg's, 2019).

Kimberly-Clark's 2017 Sustainability Report Our Sustainability to Deliver Essentials for a Better Life focuses on five areas: Social Impact (Improve the well-being of 25 Million People in need), Forests & Fiber (Innovate tissue products to reduce their natural forest footprint by 50% by 2025), Waste & Recycling (Extend zero waste mindset), Energy & Climate (20% reduction in greenhouse gases), and Supply Chain (Uphold commitment to human rights, worker safety, anti-corruption and Environmental Protection). In 2017, the progress for Social Impact exceeded 4.3 million lives through social programs with total global donations and community investments of \$26 million. For Forests & Fiber it was using 89% environmentally preferred fiber in tissue products, and an increased amount of FSC® certified virgin fiber in tissue products from 7% in 2006 to 84%. For Waste & Recycling it diverted 95% of manufacturing waste from landfills. For Energy & Climate it received the fifth consecutive EPA Smartway Transportation Award and reduced absolute GHG emissions by 18% from 2005 baseline. For Supply Chain, it had a global total reportable incident rate of 0.19, and it initiated a watershed analysis at five of 12 water-stressed operations. The Report has financial business data, charts for each Environment category that show progress from 2010 to 2017, and one chart for Social Compliance Audit results for 2014 to 2017. It has a GRI Index with answers and cross-references for the items. The 2020 Social Goal is to improve the well-being of 25 million people in need through social and community investments that increase access to sanitation, help children thrive and empower women and girls. However, the impact is measured by aligning programs to its brands and there is no measurement of what the philanthropy or products do to change the lives of individuals. (Kimberly-Clark, 2018)

Microsoft's 2018 Corporate Social Responsibility Report has goals that focus on the environment, some of which, such as having 100% carbon neutral operations and sourcing 50% of the electricity used by datacenters from renewable energy sources have been achieved. Other goals involve reduction in CO₂ emissions and product packaging weight. Working with non-profits, Microsoft has committed \$50 million

to provide cloud and AI tools to those solving global environmental challenges, but there are no goals or processes for how this money will be spent, which means there are no outcomes for measuring success. Microsoft also has multiple education programs for schools, but no results based on how many students who attend the programs use it to further their careers (Microsoft, 2018).

PepsiCo's Sustainability Report 2017 reports on SDGs 2, 3, 5, 6, 8, 12, and 13. For number 3, it reports that almost half of its beverage portfolio contains no more than 100 calories from added sugars per 12-ounce serving. The CSR report has data charts for 2016 and 2017 on Products, Planet, and People with goals and progress such as a goal of providing 16 million people with access to safe water: it provided safe water access to 9 million in 2015, 11 million in 2016, and 16 million in 2017. In 2017, PepsiCo covered additional plant sites in India to increase water recharge. It also one page on GRI Materiality Topics Assessments with a link to the GRI Index and to a site A-Z Topics that PepsiCo has created to list their websites for programs on Climate Change, Deforestation, Diversity and Engagement, Saturated Fat, Sugar, that identify the goals for each and then allow a download for more information. For example, on Saturated Fat the goal is that by 2025, at least three fourths of global foods portfolio volume will not exceed 1.1 grams of saturated fat per 100 Calories. In 2017, 66% of foods in 78% of the global market volume met that goal. It also provides a free recycling program for K-12 schools in the United States that provides incentives for students to recycle; nearly 6,000 schools have participated from 2010-2017 to collect 130 million plastic bottles and aluminum cans (PepsiCo, 2018).

Proctor and Gamble's 2018 Citizenship Report website comes up as a series of websites that have photos and comments stating accomplishments like providing more than 14 billion liters of clean drinking water since 2004, or donating \$50 million worth of products in partnership with In Kind Direct since 2002. There is a button to click for the 160-page document, which has financials and products first and then sections on Ethics & Corporate Responsibility, Community Impact, Diversify & Inclusion, Gender Equality, and Environmental Sustainability, which have information with stories a click away. Tide Loads of Hope are mobile laundry units that go into disaster zones to wash clothing. In 2017, \$100 million was committed to women-owned businesses outside the United States, and although there are stories about presentations, there is no data about how the money was spent or on the success of the women-owned businesses. As is the norm, there is only data and year-to-year charts about the environmental initiatives such as decreasing manufacturing waste going to landfills and recycling waste (P&G, 2018).

Walt Disney focuses on 2020 targets for improving the environment and reports 2017 numbers for environment (emissions, waste, and water), Volunteer Hours (VoluntEAR hours), and Healthy Living (Licensed wholesale good sales, and Global advertising), all of which show they are on track, with 2020 goals identified in 2017 accomplishments, such as reducing net emissions by 50% from 2012 levels, with 41% reduction by 2017. There is a Data Table for Environmental Stewardship, Strategic Philanthropy, Workplaces, Supply Chain, and Healthy Living with data from 2015, 2016, and 2017, as well as a GRI Index with Disney policies. Two goals for Healthy Living are that 85% of globally licensed food sales and 100% of food and beverages advertised on Disney-controlled platforms for children will meet global nutrition guidelines. Philanthropy and volunteer hours are highlighted; there are 2020 goals for volunteer hours but not for philanthropy; neither have outcomes. Pixar in a Box is a partnership between Pixar Animation Studios and Khan Academy, sponsored by Disney that shows how Pixar artists bring stories to life. 1.8 million learners were reached and 20 million minutes of learning time with videos and hands-on activities produced, but there were no outcomes for any of these, nor were their purposes discussed (The Walt Disney Company, 2017).

Visa published 2017 Corporate Responsibility & Sustainability Report that addresses SDG 1, 5, 8, 10, 13, 16, and 17. For SDG 5, one goal is expand first-time access to digital payment accounts to 500 million underserved people by 2020, which is the only goal with a date for accomplishment. For SDG13, there are three goals: 100% renewable electricity, LEED or other green-building certification, and Disclose energy

use and GHG emissions. The report says Visa is on track to meet its commitment to provide first-time payments to 500 million unbanked and underserved consumers in support of the World Bank’s broader goal by 2020. In the Environmental area, there are graphs that cover 2014-2017. Donations and volunteerism have numbers but no purpose or results. The report ends with the GRI Index with references back to the 2016 CSR Report (Visa, 2018).

Xerox’s 2018 Corporate Social Responsibility Report is organized using the SDGs 3, 5, 6, 7, 9, 10, 11, 12, 13, but it focuses on sustainability and labor. For example, it has a goal of 100% landfill avoidance by 2020 and says it was at 93% in 2017. It also has goals for a balanced workforce diversity such as having 36% women managers by 2020 and reports 32% in 2017. The report uses GRI descriptions that have pictures and numbers, but the reader can click on those to reach descriptive text. The only data is in the CSR Progress Summary. Xerox provided more than \$4 million to non-profits for education of youth and workforce preparedness as well as for disaster relief, but there is no data showing how the money was used or the benefits experienced by those who received education and workforce training (Xerox, 2018).

Table 4: Sample of Environmental Goals, Social Goals, and Examples for Researched Companies’ CSR Reports

Name of Company	Year of Report	Environmental Goals	Social Goals	Examples
3M	2018	Excellent data on Environment results	Goals for training and worker and patient safety, but no results	Females in Management increased from 25% in 2013 to 29% in 2017 but there are no goals
Accenture	2017	No goals or data	2025 goals for gender-balanced workplace with 26% in 2016 and 31% in 2017	Performance Data Table for Community Impact, Environment, and Supply Chain goals and progress
Apple	2018	Data showing all facilities powered by renewable sources	Not addressed	Helping suppliers switch to renewable energy. Has key performance indicators and data for energy and packaging from 2012-2017
Boeing	2018	Focus is on goals for greenhouse gas emissions and hazardous waste but no data	Employee volunteer hours are noted for working on Earth Day and World Environment Day	Repurposed treated water for irrigation is a new goal for 2025
Campbell Soup	2019	Water use per pound of tomatoes decreased by 16% in 2019 from 2017 with goal of 20% by 2025	Goals on Zero Hunger and Reduce Inequalities	Goals and data from GRI such as Cage-Free Eggs at 16% and chicken with no antibiotics at 98%
Cisco	2017	Has goals but no data	One goal to positively impact one billion people by 2025 but no data	Most CSR is done by giving money to non-profit partners
Colgate Palmolive	2016	Has goals for deforestation and water stewardship and some data	Goals for helping people live better and brands that delight customers, but no data	Reports 5% to the planet donations for last 5 years
Eli Lilly & Co	2018	Goals and progress numbers for Greenhouse Gas Emissions and other environmental areas from 2012-2017	Reaching 30 million resource-limited people by 2030 with 5 million reached in 2017 through providing medicines	Numbers for U.S. workforce ethnic and gender diversity but no goals
FedEx	2018	Aircraft emissions, vehicle fuel efficiency goals and annual progress from 2005	Cash donations of \$200 million to 200 communities but no results	Education program that has reached 1 million children but no purpose or outcomes are stated
HP	2017	Goals to decrease carbon footprint and recovery and reuse of materials	Increase in women in leadership from 21% in 2015 to 28% in 2017 but no goals	Has data measuring environmental impact of supply chain from 2013-2017
IBM	2017	Summary of key performance indicators like energy consumption from 2013-2017 with new goals	Employee volunteer hours are counted but no goals or purpose for volunteering	Contributions of over \$300 million but no purpose or results
Intel	2017	75% hybrid vehicle use achieved and 80% goal for 2020	Linked employee performance bonus to CSR goal achievement as well as financial	Has program to expand Facebook connection to 5 million women in Sub-Saharan Africa by 2020; it reached 3.3 million by 2017. No explanation of purpose

Name of Company	Year of Report	Environmental Goals	Social Goals	Examples
Johnson & Johnson	2017	Health for Humanity goals for 2020 and 2050 in reducing climate and water resources with note on progress	SDG Progress Scorecard 2017 focuses on women's and children's health, global disease, essential surgery with goals but no results	Has goals for 2020 for donating medications such as Deliver HIV/AIDS therapy and for donating doses of medications to a cumulative 130,000 adults and 5,000 children, but there are no outcomes
Kellogg	2018	Has data for packaging and responsible sourcing and goals and progress on goals for total food waste, water use per metric ton of food produced, energy use, CHG emissions	Goals for the amount of money spent on initiatives to donate food to people in need and provide education to children and farmers, but no data or outcomes	Has examples of initiatives but they lack goals and outcomes.
Kimberly Clark	2017	Has results for use of environmentally preferred fibers, divert waste from landfills, reduce GHG emissions with data	Social Impact has progress of impacting 4.3 million lives through social programs and community investments but no measurement	Chart shows progress in environmental areas from 2010 to 2017 and progress in Social Compliance Audit from 2014-2017
Microsoft	2018	Focus is on the environment like goal of having 100% carbon neutral operations and reduction in CO2 emissions	Only social area is education programs for schools but no purpose or results	Committed \$50 million for cloud and AI tools to solve environmental challenges but no goals or processes
PepsiCo	2017	Provides access to safe water to 16 million people which has increased from 9 million in 2015	Uses SDGs and has goals to decrease amount of sugar and for saturated fat in products by 2025; in 2017 66% of foods in 78% of global market volume met the saturated fat goal, which helps increase health	Provides free recycling for schools
Proctor & Gamble	2018	Donations of clean drinking water Year to year data on decreasing manufacturing waste going to landfills and recycling waste	Tide Loads of Hope are mobile laundry units that go to disaster zones to wash clothing, but no data	Many stories about the \$100 donated to women-owned businesses but no data
Walt Disney	2017	Reducing net emissions by 41% from 2012 with goal of 50% by 2020	2020 goals for Volunteer hours and Healthy Living wholesale goods sales are on track with progress since 2017	Have Pixar in a Box to demonstrate how to bring stores to life, but no outcomes, only data that shows 1.8 million learners and 20 million minutes of learning time
Visa	2017	100% renewable electricity, green-building certification, disclosure of energy use, but no dates	Digital payment to underserved people by 2020 but this is the only goal with a date to accomplish	References back to 2016 report to find numbers to compare 2017
Xerox	2018	Uses SDGs but focuses on sustainability like 100% landfill avoidance by 2020 with 2017 being at 93%	Balanced workforce diversity by 2020 with 36% women managers; has 32% in 2017	Provided \$4 million to non-profits for education of youth but no data on how the money was spent

Sample of Environmental Goals, Social Goals, and Examples for Researched Companies' CSR Reports. This is selected information from global companies in the research group on environmental goals and social goals, and the presence or lack of data on outcomes. Examples from the reports of specific goals are included.

DISCUSSION

Accomplishment of CSR goals is not only to satisfy the conscious consumers' requirement for goals in social and environmental areas, but they should lead to solving problems in the society, whether at the local or global level. This is especially for global companies that use the UN Sustainable Development Goals (See Table 1) and the Ten Principles of the UN Global Compact (see Table 2) in their reports as guidance for their CSR initiatives. In these cases, causes for those problems must be identified and CSR goals must be at least partial solutions that actually eliminate at least a percentage of the problem. For example, it is not enough to provide information to millions of youth; you must measure the success of that education by having an outcome that says that a certain percentage of those youth are using that information a year later. Providing a million women with one of your products for no cost is not an outcome. What are those women

doing with the product, and what is the outcome for them that make them healthier or able to secure a job? As Unilever discovered, giving a million children soap does not result in fewer infections if the children do not know how to wash their hands. Once Unilever partnered with UNICEF to create a song that told children how to wash their hands and a video that showed them how, UNICEF was able to document fewer infections in children. As stakeholders require companies to be more transparent about their businesses, the problem of how to report environmental and social impact in a way that measures outcomes is becoming more apparent, especially since corporations who practice CSR adopt the United Nations 2030 Sustainable Development Goals (SDGs) (see Table 1). The outcomes must show how the SDGs of Zero Hunger or of Good Health and Well-Being were partially met. Feeding people for a day does not move the needle toward Zero Hunger, but feeding them for 90 days so that they can use their money for healthcare and they can find jobs that will allow them to feed themselves can move the needle. This requires a focus on a local population, not a philanthropic gesture across a continent.

The reason business can accomplish more to achieve the 2030 SDGs is that history has shown that philanthropy, whether directly from a corporation or through a nonprofit, simply addresses symptoms, not problems. Philanthropy does not require accountability or transparency, just statements that say \$x million was given to poor people. Business must adapt its financial acumen to measuring the goals of CSR, especially social ones, so that it is obvious that a CSR program made a measureable difference that was long lasting and thus had a return on the investment of time and money. Volunteer hours make a difference if they result in a house through Habitat for Humanity, or a water well that brings water to a community that did not have clean water, or training that results in 95% of those who completed it finding a job that they still have a year later. Business does not spend money making a new product without expecting results of profit for sales. Business should use the same thinking when it creates CSR goals and initiatives. Only then can long term progress happen on the global problems that business says they want their CSR programs to address.

CONCLUSION

Although the 2015 Cone Communications/Ebiquity Global CSR Study showed that only 25% of global citizens, especially in developing countries, are reading traditional corporate CSR reports, and prefer summaries, infographics, and videos via social media and emerging technologies to communicate CSR, they still require data (p. 4). CSR reports need to prove that companies have achieved outcomes not just set goals. Measures of outcomes would show that their CSR initiatives were not just greenwashing. The purpose of this paper was to identify outcomes in CSR reports for a representative sample of global companies that are recognized for their accomplishments. The representative sample was taken from the 2018 lists of CR Magazine's 2018 100 Best Corporate Citizens and of the Forbes and Bloomberg's World's Most Reputable Companies for Corporate Social Responsibility for 2018. The CR Magazine used data on over two hundred performance elements of ESG in "environment, climate change, employee relations, human rights, governance, finance, and Philanthropy & community support" (CSRwire, 2018, para. 4). Forbes and Bloomberg tracked "twenty-three observed variables in Products & Services, Innovation, Workplace, Governance, Citizenship, Leadership, and Performance" (Reputation Institute, 2016, p. 3) that were developed from stakeholder interviews (Ponzi, Fombrun, & Gardberg, 2011). Thus, the two reports measured different variables. The twenty-one companies that were listed by both organizations were chosen for the study. A review of the latest CSR reports of the twenty-one companies was conducted. The review found year-by-year data on goals, progress, and outcomes prevalent in the Environmental sections of the CSR reports. However, the Social sections, in most cases, simply had statements of activities or sometimes goals, but little data and few outcomes.

It is easier to track environmental activities such as energy and water use, and since companies can see financial savings from decreases in energy and water use, for example, there is greater reason to set goals, track progress, and measure achievement. Environmental goals are easily written as a percentage, such as

percentage of increase in electricity from renewable sources. The cost benefit can be included in financial reports. However, this data could be used for measuring social goals, if, for example, as PepsiCo does, some of the goals focus on recycling water in a factory in an area that lacks water. Then the goal could be to increase the water for use by citizens in the area, which is easily measured, as would a goal of providing farmers more water for crops that could help achieve a percentage of decrease in food scarcity.

The lack of data and specific outcomes in the Social sections of the CSR report is influenced by the difficulty in establishing goals that can be measured and capturing the data that shows progress towards accomplishing those goals. Social goals that are internal to the company can certainly be measured. Xerox has data on its goal of workforce diversity Accenture has data on its goal to have a gender-balanced workplace. HP has data on the increase in women in leadership, although it has no goal for that. Many companies have social goals such as Intel's goal to expand Facebook connections in Africa, but there is no explanation of why it has the goal, so measuring an outcome for it is impossible. The other problem identified in the CSR reports is that many companies use philanthropy and donations for social initiatives. The goal of giving \$300 million dollars to non-profits can be measured, but what is achieved with the money is not addressed. Further research must be done to find companies that are establishing social goals and then tracking progress towards achieving the goals. These could be used as examples for other companies. Using another list like the CRO's 100 Best Corporate Citizens or Ethisphere's World's Most Ethical Companies might identify companies that have CSR reports that have measurable outcomes for social goals and report on progress toward achieving them.

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SOCIAL MEDIA NETWORKING AND THE IMPACT IT HAS ON ENTERPRISE APPLICATION SOFTWARE

Mitch Kramer

ABSTRACT

Social Media networking has become an integral part of daily life for both individuals and organizations. This paper will look at how Social Media plays a vital role in organizations. It will show how corporations use these Social Media networking websites, and how it correlates to their Enterprise Application Software including Customer Relationship Management and Enterprise Resource Planning systems. In addition, it will explain how corporations are growing their Social Media presence by acquiring other corporations and companies. A summary of results from a study conducted on the views of business professionals with regard to Social Media will also be presented.

JEL: D83, L86, M10, M20, M30, M40, M50

KEYWORDS: Social Media Networking, Enterprise Application Software, Customer Relationship Management (CRM), Enterprise Resource Planning (ERP)

INTRODUCTION

This paper will look at how Social Media plays a vital role within organizations. Organizations use Enterprise Application Software to run their companies. Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) are two integral components of Enterprise Application Software. Currently, Social Media has at least 3.03 billion active networking users. (Smith, 2017) The correlation between Social Media and Enterprise Application Software is an important topic due to the number of active users. Social Media advertising spending reached \$24 billion in 2015 according to research firm eMarketer. (Perlberg, 2015).

The current state of literature addresses Social Media networking in terms of how it is affecting activism, bullying, and political topics. This paper contributes to the current literature by addressing how Social Media networking impacts organizations. Organizations are acquiring other companies to expand and enhance their Social Media presence. In addition, this paper looks into the connection between Social Media networking sites and Enterprise Application Software addressing some of the advantages that can be gained by organizations. The impact of Social Media on some of the modules within Enterprise Application Software systems will be detailed. This paper will include results from a study conducted on business professionals with regard to their awareness of Social Media and the impact it has on business.

LITERATURE REVIEW

The focus of discussion in this paper will be Social Media networking. "Social networking sites are applications that enable users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending e-mails and instant messages between each other. These personal profiles can include any type of information, including photos, video, audio files, and blogs." (Kaplan and Haenlein, 2010) Social Media was first introduced as Web 2.0. Some examples of Web 2.0 were web tools such as blogs, wikis and other virtual worlds. (Parise and Guinan, 2008) Kaplan

and Haenlein's (2010) quote references personal information profiles, though the same is also valid for business information profiles. "Social media platforms enhance the power of online communities in four ways: They promote deep relationships, allow fast organization, improve the creation and synthesis of knowledge, and permit better filtering of information." (Kane et al., 2009).

Social Media plays an intriguing role in combination with Enterprise Application Software. To run efficiently and effectively a company's Enterprise Application Software must run a couple of core processes. The following systems are frequently used: Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP). These systems must be connected to each other to be effective. The definitions of CRM and ERP follow. A Customer Relationship Management system identifies business opportunities and new sales leads as well as streamlines the sales process and reduces repetitive work. It allows for the automation of marketing processes, for example, email or online advertising campaigns. It is also capable of managing social media accounts. (Burnson, 2016) Sales, marketing, and business development professionals keep track of customers and their purchasing patterns by using a Customer Relationship Management system. "Enterprise Resource Planning is defined as an integrated computer-based system that manages internal and external organization resources. These resources include tangible assets, financial resources, materials, and human resources. At the same time, ERP is an application and software architecture that facilitates information flows between various business functions inside and outside an organization and, as such, is an enterprise-wide information system. Using a centralized database and operating on a common computing platform, ERP consolidates all business operations into a uniform system environment." (Radovitsky, 2004).

The primary function of the Customer Relationship Management system is to run the Sales and Marketing modules. The Enterprise Resource Planning system is responsible for running the following modules: Finance & Accounting, Human Resources Management, and Supply Chain Management including Inventory and Purchasing. Additionally, some of these modules have sub-modules. For example, Finance & Accounting contains General Ledger, Accounts Payable and Accounts Receivable. The information is continuously flowing across each department, and the business can make decisions based on the flow of transactions in one system and their databases. By using the Enterprise Application Software, the business users can fast-track month end processing and reporting.

The different modules within the CRM and the ERP systems correlate with Social Media networking sites. The information herein will focus on how the following modules connect Social Media to organizations. The emphasis will be on the Sales and Marketing, Finance & Accounting, Human Resources Management, and Supply Chain Management modules. Social Media is big business. It is having a substantial impact on Enterprise Application Software.

The Customer Relationship Management system of the Enterprise Application Software assists the company within the Sales and Marketing departments. Social Media is often used to gather data about customer segments. Companies use this data to target different demographics for their products and services. Organizations use Social Media sites to discover which goods and services reflect the preferences within each demographic. They can look closely at specific criteria, for example, a particular age group or a distinct location. Social Media helps provide organizations with valuable metrics. It enables organizations to save money on market research. The use of Social Media allows organizations to connect more frequently with their customers for feedback. Customers can send messages quickly and post their feedback on Social Media sites such as Twitter and Facebook. With Social Media, marketers have the chance to network with thousands of customers or potential customers and get to know and trust each other. (Woodcock and al, 2011) A marketing manager's activities should include looking at Social Media to: "1) Facilitate users in generating content, 2) focus on building a community, 3) ensure authenticity of the message, and 4) look for marketing opportunities through experimentation." (Parise and Guinan, 2008).

Organizations are buying ad space on Social Media with the hope that the users will click on these ads promoting a sale and therefore, generate higher revenue for the organization. At the click of a button, the following departments: Sales, Marketing, Finance & Accounting, Human Resources, and Supply Chain all reap the benefits of the integration with CRM. (Sumner, 2005) By paying to advertise on Social Media sites, organizations hope this will bring in new customers who will positively impact the Sales and Marketing modules. The CRM system will store the new information in the database for future opportunities to do business. Research shows that Social Media has an impact on the sales domain in two ways, first by allowing a method of communicating with customers, thus allowing for a prompt response from a salesperson and second, it implies that there will be greater customer satisfaction. (Agnihotri, et al., 2016) The Sales and Marketing departments have a direct impact on the Enterprise Resource Planning system, which in turn affects the Finance & Accounting, Human Resources, and Supply Chain departments. Cash, Accounts Payable, Accounts Receivable, and General Ledger including Consolidation are just a few of the sub-modules within Finance & Accounting. Social Media impacts these modules in different ways. The Enterprise Resource Planning system is the back-office system that helps an organization function. Social Media networking sites, such as Facebook, mention that they do not sell an individual's data to advertisers. The question to ask is, if Facebook does not sell users' data then where does the revenue come from for Facebook and other Social Media sites? Facebook makes money because it allows a platform for advertisers to target people based on personal data (including pictures) that users post to Facebook's website. (Weissman, 2018) The Social Media sites control the information provided by users; however, they sell access to the users' newsfeeds to the advertisers. "Advertisers pay to reach an audience based on several factors, such as geographic location, particular interests or characteristics, and behaviors—including the use of other online services." (Castro, 2018).

The advertising revenue for Facebook and Google will reach \$65 billion in 2018 with a 58 percent market share. (Spangler, 2018) The advertising revenue has a direct impact on the Finance & Accounting modules such as Cash and Accounts Receivable for these companies. The advertiser will consider this a cost of doing business. This expense will impact the advertiser's Cash and Accounts Payable modules.

Within the General Ledger module, there is a sub-module called the Consolidation module. This module is where intercompany transactions are performed. The Consolidation module helps facilitate the financial statements when a corporation acquires another corporation or company. Intercompany transactions are necessary due to the increased frequency of corporations purchasing other corporations or companies. "An intercompany transaction occurs when one unit of an entity is involved in a transaction with another unit of the same entity. While these transactions can occur for a variety of reasons, they often occur as a result of the normal business relationships that exist between the units of the entity. These units may be the parent and a subsidiary, two subsidiaries, two divisions, or two departments of one entity." (Bline, et al., 2004).

Recently, four significant acquisitions have taken place. Google, Facebook, and Microsoft have acquired other corporations to improve their Social Media presence. In 2006, Google, the Internet's leading search engine, purchased YouTube, an online video site, for \$1.65 billion. (La Monica, 2006) In 2012, Facebook acquired Instagram for a total of one billion dollars in a combination of cash and stocks in Facebook. Instagram allows users to share photos from an Apple device or an Android device. Instagram had 30 million users at that time. (Upbin, 2012) By April 2017, that number expanded to approximately 700 million active users on Instagram. (Zhan, 2018) In June 2013, Google acquired Waze Limited, a provider of a mobile map application, which offers turn-by-turn navigation, and real-time traffic updates powered by incidents and route information submitted by the users of the system. (Bae, 2014) This Social Media navigation application cost Google \$966 million. (Kerr, 2013) In 2016, Microsoft saw that it was advantageous to purchase LinkedIn. The vision of LinkedIn is to "create economic opportunity for every member of the global workforce." (LinkedIn.com) Microsoft saw an opportunity to integrate their Enterprise Resource Planning system with LinkedIn. Microsoft announced the purchase of LinkedIn in June 2016 and closed the deal in December 2016, for \$26.2 billion. (Greene, 2016).

The Human Resources module is utilized when an organization is advertising career opportunities. Many companies have links on Social Media sites that link directly to the career opportunities section on their own website. Individuals look at organizations' Social Media sites to learn about career opportunities and to learn more information about the organization. LinkedIn is unique in that career opportunities are posted directly on the site. The LinkedIn mission is to "connect the world's professionals to make them more productive and successful." (LinkedIn.com) Users of LinkedIn look up individuals (i.e., friends and former coworkers) that they are connected to, in order to see if there is an opportunity for a referral or a new career opportunity. (Kietzmann et al., 2011).

New hiring approaches are desirable due to increased staffing costs, time constraints and higher turnover. Organizations are competing for high-quality talent. Millennials and the developing workforce interconnect differently with technology and have different expectations from employers than in the past. Social Media offers another method to acquire personnel. (Phillips-Wren et al., 2016).

Indirectly, human resource personnel use LinkedIn, Facebook and/or Twitter profiles to check on current and prospective employees. As well, job seekers use these Social Media networking sites when they are looking for a new opportunity. They rely on these sites to assist with checking on potential employers and obtaining information. One of the features available is a salary comparison tool. The Social Media site Glassdoor provides an opportunity for users to share experiences (positive or negative), benefits, salaries, thoughts on day-to-day functions and other information that may be useful to individuals who are looking to join a particular company. This leads to extensive advances in the workforce, such as more equitable pay and more efficient hiring, which, in turn, leads to improvements for employees. (LayHaye, 2018).

Social Media has also created many new career opportunities for individuals. These opportunities are not exclusive to working for companies such as Facebook and LinkedIn. Other organizations have created new Social Media related roles. These opportunities were not available 15 years ago. An example of this is a "Social Media Manager." (LayHaye, 2018).

Social Media assists the Supply Chain department in various ways. Companies can improve communication with customers, generate interest, reduce operating costs, mitigate risk, increase productivity, and enhance marketplace intelligence. (Rusch, 2014). Through Social Media, customers can connect with organizations to ask questions about different products and services. Customers can ask if an item is available and how much quantity is readily available. They can also inquire when the organization will be receiving more stock. Another significant benefit is that organizations can use YouTube or other Social Media sites to post "How To" videos to help explain their products.

Professional Purchasers use Social Media as a tool to improve collaboration with suppliers, and as a way to increase purchasing performance. (Rozemeijer, 2011). Professional Purchasers will then be able to improve the quality of their decision-making. A Purchaser considering using social media technology should focus on how these technologies incorporate with existing systems to support their organization's capabilities. Building on Social CRM cannot only drive customer engagement, but also improve the organization's overall worth over time. (Wang and Kim, 2017).

The CRM and ERP systems are the backbone of an organization. The impact of Social Media on Enterprise Application Software is evident in the above examples. The ability to utilize the information gained from Social Media is more important than just the number of "likes" they receive or the number of "followers" the organization has on one or across numerous Social Media sites.

DATA AND METHODOLOGY

A study, conducted in February 2018, was used to determine the awareness of business professionals with regard to Social Media. The study was also used to gauge their knowledge of the impact it has on Enterprise Application Software. When the study was distributed to each of the 50 participants, they were asked not to research information on any of the questions by internet searches before answering. As well, they were asked not to disclose their responses to one another. The response rate was 100 percent. The study included the following questions: Circle any of the Social Media sites you have heard about; Circle any Social Media sites that you use; Have you ever clicked on an advertisement on a Social Media site?; Have you ever used Social Media to inquire about a product?; Do organizations post job opportunities on Social Media? A copy of the study can be viewed in the Appendix.

RESULTS

Table 1 shows the results of the first question, asking which Social Media networking sites the participants had heard about. All participants had heard about Facebook, YouTube, LinkedIn, and Twitter. It is interesting to note that Waze had the lowest percentage of familiarity with only 67 percent of respondents having heard of it.

Table 1: Responses from the Study on Social Media, Inquiring Which Sites Participants Have Heard About

Facebook	Waze	YouTube	Google+	LinkedIn	Twitter	Snapchat	Yelp
50	33	50	41	50	50	48	44

All participants had heard about Facebook, YouTube, LinkedIn and Twitter.

The next question addressed which Social Media networking sites the participants use. The results were different than expected. The top Social Media site was YouTube, chosen by 80 percent of those studied. Twenty-four percent of participants use Twitter, and surprisingly, four percent use none of the sites. Detailed results can be viewed in Table 2 below.

Table 2: Responses from the Study on Social Media, Inquiring Which Sites Participants Use

Facebook	Waze	YouTube	Google+	LinkedIn	Twitter	Snapchat	Yelp	None of These Sites
38	16	40	17	32	12	16	20	2

Eighty percent of participants use YouTube while only 24 percent use Twitter. Four percent use none of these sites.

The survey questions also show the impact Social Media sites have on Enterprise Application Software. In one question, the participants were asked if they have clicked on an advertisement on a Social Media site. This question and the responses show the connection between the Customer Relationship Management system and Finance modules within the Enterprise Resource Planning system. The results posted in Table 3 Panel A, show two-thirds of the participants have clicked on an advertisement.

The next question asked if the participants have used Social Media to inquire about a product. Results are presented in Table 3, Panel B. This question shows the correlation between the Customer Relationship Management system and Supply Chain module in the Enterprise Resource Planning system. Table 3 Panel B shows more than half (60 percent) of participants have inquired about a product or service.

The final question was regarding organizations posting job opportunities on Social Media. It shows the impact on the Human Resource module within the Enterprise Resource Planning system. The majority of

participants (86 percent) answered the question regarding if career opportunities are posted on Social Media, with "Yes." Results are displayed in Table 3 Panel C.

The findings show that 100 percent of business professionals studied have heard of the eight different Social Media networking sites listed in the study, while 96 percent use Social Media. Sixty-six percent have clicked on an advertisement, and 60 percent have inquired about a product or service on a company’s Social Media profile. The study also revealed that 86 percent think that organizations post career opportunities on Social Media. The large percentage of participants responding that they are active on Social Media and that they are using the tools available on those sites, demonstrates just how powerful Social Media is and the positive impact that Social Media is having on organizations and the impact it has on Enterprise Application Software.

Table 3: Responses from the Study on Social Media.

Panel A: Have Participants Checked an Advertisement on a Social Media Site?	
Yes	33
No	17
Panel B: Have Participants Used Social Media to Inquire about a Product?	
Yes	30
No	20
Panel C: Do Participants Think Employers Post Job Opportunities on Social Media?	
Yes	43
No	7

Sixty-six percent of users have clicked on an advertisement on Social Media. Sixty percent of users inquired about a product on Social Media. Eighty-six percent participants answered that there are career opportunities posted on Social Media.

CONCLUDING COMMENTS

Social Media is having a positive impact on individuals and organizations on a daily basis. This paper discussed how organizations are using Social Media networking sites. It also discussed the impact Social Media has on Enterprise Application Software such as Customer Relationship Management and Enterprise Resource Planning systems. It shows how corporations are growing their Social Media presence by acquiring other corporations and companies. This paper was written to provide additional literature to help increase the awareness of the impact Social Media is having on Enterprise Application Software. A need for information is evident from the results of a study distributed to 50 business professionals in February 2018. The study included in this paper shows a substantial increase in users compared to the Pew Research study. The study from February 2018 shows that 96 percent of business professionals studied use Social Media. The Pew Research study, in 2015, on American adults, showed only 65 percent of those studied used Social Media networking sites. (Perrin, 2015). Future research can be done to look into the privacy of Social Media and what users, organizations, and government need to be aware of and how concerns can be addressed. Social Media networking sites have become an integral part of organizations. It is essential to recognize the impact of Social Media on Enterprise Application Software.

APPENDIX

Table 3 Questions

No.	Question	Options
1	Circle any of the Social Media sites you have heard about.	Facebook Waze YouTube Google+ LinkedIn Twitter Snapchat Yelp Never heard of Social Media
2	Circle any Social Media sites that you use.	Facebook Waze YouTube Google+ LinkedIn Twitter Snapchat Yelp None of these sites
3	Have you ever clicked on an advertisement on a Social Media site?	YES NO Never heard of Social Media
4	Have you ever used Social Media to inquire about a product?	YES NO Never heard of Social Media
5	Do organizations post job opportunities on Social Media?	YES NO Never heard of Social Media

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BIOGRAPHY

Mitch Kramer's focus for the past 20 years has been Enterprise Application Software. He is a member of the International Institute of Business Analysis. He has a Bachelor of Commerce in Accountancy and a Certificate in Management. To view other papers by Mitch Kramer visit his author page on SSRN <https://ssrn.com/author=2644561>. He lives with his wife Michelle, in Florida.

FINANCIAL TOOLS AND BUSINESS GROWTH: EVIDENCE FROM VALLE DE MÉXICO

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ABSTRACT

In México, micro, small and medium-sized enterprises (MSMEs) represent 99.80% of economic units and employ 74% of the population. However, the percentage of gross production is just 35.90%. This implies that, despite their strong presence in the indicators of economic units and jobs generated, their assets are limited and there are insufficient financial resources or inadequate financial management. This study was performed in the Valle de México metropolitan area, which covers the two federative entities with the highest number of economic units, population and gross domestic product. We examine a sample firms of MSMEs in the metropolitan area to apply financial tools and identify the effect on growth and its economic-financial situation. The research was qualitative and includes six sample firms of different MSMEs which were analyzed through three stages: diagnosis, proposal and implementation of financial tools and evaluation. Data was obtained through in-depth interviews, six-month observations and analysis of financial information. Each case study showed a different situation. In most situations favorable results were obtained in administrative control yet, the growth was still not observed in most MSMEs.

JEL: G30, M10, O12

KEYWORDS: Financial Tools, Business Growth, Msmes, Finance Management

INTRODUCTION

According to the World Bank (2018), among all economic units in the world, 73.6% are micro, 16.5% are small and 3.0% are medium for a total of 93.1% Micro, Small and Medium Enterprises (MSMEs). In addition, the World Trade Organization (WTO) (2016), affirms that among developed, developing and least developed countries, there exist 82.9% micro, 13.8% small and 3.3% medium-sized enterprises. Hence, these economic units represent the largest units across the world. “in emerging economies, SMEs contribute up to 45% of total employment and 33% of GDP [Gross Domestic Product]”, (Organization for Economic Co-operation and Development [OECD], 2017). In México, MSMEs represent 99.80% of business units and generate 74% of jobs. This implies that they are the Mexican economic base.

It is essential to analyze the characteristics they have and problems they face, to gain a better understanding and further economic growth and social stability. According to Sumanjeet and Minakshi (2017), “MSMEs are important for development because they can make a definite contribution to the realization of a country’s central economic purposes and to bring about an efficient utilization of natural, human and capital resources for the achievement of predetermined ends”. The aim of this research was to examine sample firms from MSMEs in Valle de México metropolitan area. We wish to apply financial tools to the firms and identify their effect on business growth and the MSMEs economical-financial

situation. We begin by conveying a literature review dealing with characteristics and issues MSMEs present, financial techniques that the Financial Management offers and an analysis of business growth indicators. In the Methodology, we described the kind of investigation executed, plus the compiling technique and analysis of results. In the information results and discussion section, we thoroughly describe the compiled data acquisition in the researching process. Findings from the study are conveyed in the results acquisition section. Lastly, the paper closes with some concluding comments.

LITERATURE REVIEW

Characteristics and Issues of MSMEs in México

México’s economy is classified as a developing country (United Nations, 2018) with efficiency driven in their stage of development. México enjoys the 51st place in global competitiveness, with an index of 4.44 in 2017–2018 (World Economic Forum (WEF), 2017). Twelve pillars integrate the Global Competitiveness Index: Basic requirements (1-4), efficiency enhancers (5-10), innovation and sophistication (11 & 12) factors subindexes. “According to WEF’s classification, the factor-driven phase is dominated by subsistence agriculture and extraction businesses, with a heavy reliance on (unskilled) labour and natural resources. In the efficiency driven phase, an economy has become more competitive with more-efficient production processes and increased product quality” (Global Entrepreneurship Research Association (GERA), 2018).

A variety of enterprising activities, that cover all fields and sizes of economic entities, take place in México. Among these enterprises, 48.3% are devoted to trading, 38.1% to private non-financial services, 11.6% to manufacturing industry, and 2.0% to the remaining sectors, according to the National Institute of Statistics and Geography (INEGI, 2017). According to the Ministry of Economy (SE) (2009), Mexican companies are classified based on three main characteristics: field, numbers of employees, and annual sales in millions of pesos (MDP). Table 1 shows data from the International Finance Corporation (IFC) (2009). It also includes assets and financing amounts that these enterprises have in monetary values in US dollars (USD).

Table 1: Stratification of Micro, Small and Medium Enterprises in México

Characteristics	Micro	Small	Medium
No. of employees	From 1 to 10	From 11 to 50	From 51 to 250
Revenues (mdp) (USD)	Up to \$4 ≤ \$100,000	From \$4.01 to \$100 >\$100,000≤ \$3,000,000	From \$100.01 to \$250 >\$3,000,000≤ \$15,000,000
Assets (mdp) (USD)	\$182.1 ≤ \$100,000	\$4,155.4 >\$100,000≤ \$3,000,000	\$32,880.9 >\$3,000,000≤ \$15,000,000
Financing	< 10,000 USD	< 100,000 USD	< 1,000,000 USD

Note: Table 1 shows the four characteristics or elements (number of employees, revenues, assets and financing) that classify the MSMEs in México in their different size. Source: Prepared by the authors, based on the Ministry of Economy (2009) and IFC (2009).

Each of México’s Federative entities (32 in total, according to its political constitution), presents unique characteristics. What is more, 74 metropolitan areas are identified in México including 75.1 million inhabitants, which represents 62.8% of the nation’s population. This investigation focuses on the Valle de México metropolitan area, because it is the biggest and the most important Mexican metropolitan area. It consists of three federative entities: México City, the State of México and Hidalgo. México City is in Valle de México metropolitan area and it is the biggest metropolitan zone of the country. It includes the most boundaries and districts totaling 76: 16 in México City, 59 in the State of México, and 1 in Hidalgo. Some 68% of the territory consists of 52 districts which are in its centre and hold a minimum of 100,000

inhabitants. This area spreads over 7,866 km² and includes 20,892,724 residents. It has the biggest average urban density per kilometer. Most of its population are urban; inhabitants employing themselves in non-primary activities and present a high degree of functional inclusion. There is a high rate of movement among boundaries and districts with thousands of people transmuting everyday according to the Secretaría de Gobernación (SEGOB), Secretaría de Desarrollo Agrario, Territorial y Urbano (SEDATU), Consejo Nacional de Población [CONAPO] and the INEGI (2018). Two federative entities of this metropolitan area (México City and the State of México) have most of the population, employment, economic units, and the highest gross production percentage of the country as shown in Table 2.

Table 2: Integration of Valle de México Metropolitan Area

Geographical Area	Population	Employment	Economic Units	Gross Domestic Product
National	119 938 473	29 642 421	5 654 014	100%
MéxicoCity	8 918 653	4 255 757	452 939	17%
State of México	16 187 608	2 754 212	664 785	9%

Table 2 shows the population, employment, economic units and gross domestic product of the country and data corresponding to the two entities under study: México City and the State of Mexico. Source: INEGI, (2015).

Based on Table 2, México City is ranked in 2nd place in the country due to its population. It generates more employment, holds 2nd place for creating economic units, and provides 17% of the country’s Gross Domestic Product (GDP). The State of México has more population, is second in providing employment, first in possessing economic units, and supplies 9% of the national GDP (INEGI, 2015). In accordance with the National Survey on Productivity and Competitiveness of Micro, Small, and Medium-sized Enterprises (ENAPROCE), the lack of training of the MSMEs personnel is outstanding. Only about 50% of personnel have studied elementary school and junior high school. With this academic level and a lack of training, workers do not have technical knowledge about their job, and their performance in their field is deficient (INEGI, 2015).

Another issue is the low percentage (25%) of control over the administrative-accounting activities, which previously was accomplished with notebooks. In many instances, MSMEs endure inexistence of administrative-accounting records and, as a result, difficulty to manage at a large-scale. This leads to a variety of financial problems. Aruna (2018) explains “the financial problem of MSMEs is the root cause of all the other problems faced by the MSME sector”. In México, financial problems have their origin in their own characteristics. Firms have minimum initial investment, and, as a result, there is little or insufficient capital for developing economic activities. The financial resource MSMEs work with consists of owners personal or family wealth, which is invested in the company and, in this way, the necessary resources are obtained. Not having enough initial capital is manifested by the lack of trained personnel in the finance area, which needs to guide management of financial resources. Therefore, entrepreneurs have neither enough initial capital, nor financial education to support their decisions. Without counseling they lack a long-term vision and worry about day-to-day issues.

Financial Management and Business Growth

Jindrichovska (2013) states that “most small business people only know one-half of what it takes to succeed. The part they are missing is how to manage and grow their business.” For this reason, it is important to study and apply Financial Management to help entrepreneurs make decisions about money. It is also important to offer financial tools to all kind of enterprises to manage and control financial resources. Some authors divide these tools in three stages: analysis, planning and control (Perdomo 2002

and Besley & Brigham, 2001). Other experts into two stages: analysis and planning (Martínez, 2005; Gitman, 2007; Ochoa, 2009 and Brigham & Besley, 2016).

Financial tools classified in the analysis stage are the financial reasons that allow acknowledging the enterprises' financial situation. We specifically identify liquidity, credit, operative efficiency, and profit displays. During the planning stage, tools are regularly classified so that enterprises can be supported to forecast their figures through financial plans including, budgets, forecast financial statements, analysis of balance points, work capital management. Tools classified during the control stage allow reconciling forecast figures with observed figures. All these tools belong to Financial Management and can be applied to any kind of enterprise. These tools support the enterprise during the use, recording, and control of financial resources. Nonetheless, within MSMEs, it is not easy to apply all financial tools, because they do not have enough records, controls and facilities. In these cases, it is important to adopt these tools to their specific needs and characteristics.

Under these circumstances, it becomes harder to identify business growth in MSMEs, which is normally associated with increased sales and profitability. Several studies suggest that business growth can be seen through different elements in MSMEs. Blázquez, 2005 mentions to Penrose (1962) who says that the organization must be studied as a whole to discover the reasons for its growth. Correa, González and Acosta (2001), argued that "business growth implies not only an increase in economic magnitudes, also the complexity of the business organization". Besides, Correa, González and Acosta (2001) affirm that business growth does not have a specific or unique theory, nor does it have a generally accepted conceptual definition. This concept adheres to different approaches and opinions, measurement parameters and determining factors (Blázquez, Dorta and Verona, 2006a). Blázquez, Dorta and Verona (2006a) presented a summary of concrete and timely contributions of experts in the study of growth in companies. The measures or indicators used are precisely observed to determine the existence of growth in economic entities. Most are quantitative indicators, however, there are also contributions that value multicriteria or qualitative indicators.

In Blázquez, Dorta and Verona's opinion, (2006b), there are two main kinds of business growth: internal and external. Internal growth implies a slower process. It tends to be an initial form of growth. It goes along with companies during the first steps since their emergence. It requires considerable effort and a careful planning to accomplish the expected results by means of the shareholders' increases in funding, and the business profits reinvestment. During this stage, enterprises keep a healthy economic situation and do not accumulate external debt. This internal growth can be seen in increases in work force, production, training programs, investments on facilities, and the entity's administrative-financial strength. External growth implies obtaining financing through external people or by means of mergers and acquisitions. External growth allows expansion in exchange for leaving enterprise control in shareholders' hands that are unrelated to the organization. External growth commonly involves becoming international, stopping being an MSME, and becoming a big enterprise, which encompasses an enlargement in all its transactions.

Amat, Renart and García (2013) assume that business growth implies key factors in business productivity: human resources and training; innovation and quality; internationalization; marketing; financing; activity subsector; and family ownership. A study by Neil (2014), "suggest high-growth firms perceive problems in six areas: recruitment, skill shortages, obtaining finance, cash flow, management skills and finding suitable premises". According to Aguilera and Virgen (2016), "the models for strategy formulation proposed in business administration literature do not integrate business growth aspects in an explicit way." This implies, that business growth covers more aspects than just increases in financial aspects. In addition, Eschker, Gold and Lane (2017) consider important success factors in newly started small businesses and identify specific areas as follows: sources of advice, means of financial support, and background experience of the firm's founder.

On the other hand, there are different approaches about business growth with quantitative indicators. For example, the Statistical Office of the European Union (EUROSTAT) (2014), establish that a high-growth enterprise increases by 20% or more per year over a three-year period. Growth can be measured by the number of employees or total sales to third parties. A considerable amount of literature exists on variables to measure firm growth. These studies affirm Hossain, Ibrahim and Uddin (2016) that “the multiple variables which may represent the growth of a business include sales, employment, net profit, number of customers or market share, asset size, business expansions, market and product diversification, physical output, among others”. Also, Ríos-Manríquez (2018), proposes to establish a costs system that provides information to evaluate performance and impact business growth, by determining profitability indicators including sales growth, gross margin and margin of net income. A recent study by Urbano, Aparicio and Audrestch (2019), mention that Scott (2008) has suggested that organizations at all stages are affected by different institutional pillars: regulative, normative, and cultural-cognitive.

This implies that issues related to business growth affect in these different pillars including quantitative and qualitative factors. The MSMEs importance in the world economy is an undeniable fact. Nevertheless, MSME characteristics and needs limit their growth. Their development relies exclusively on satisfying entrepreneurs’ survival needs. MSMEs entrepreneurs ignore or do not put into practice Financial Management and taking this as landmark. A question may be asked: How does financial tool implementation affect MSMEs growth in Valle de México metropolitan area? We intend to verify the following hypothesis: since the MSMEs lack information to make decisions about management and control of financial resources, if financial tools are implemented in accordance to their particular needs and characteristics, and a strict tracking of their evolution is followed, then we can identify the effect they have over enterprise growth. As a result, using financial tools will be reflected in its tenure and growth.

METHODOLOGY

The research here was qualitative; descriptive and correlational. It was qualitative, because it provides a specific, deep and holistic study about six economic units with different characteristics. It was descriptive because it specifies in detail the circumstances faced as well as the MSMEs characteristics and needs. Similarly, the study was correlational since we can identify the current relations between MSMEs issues, proposals and results. This research comprehends six sample firms of different MSMEs that were analyzed through three stages: diagnosis, proposal and implementation of financial tools and evaluation. During the diagnosis stage, data was achieved through in-depth interviews compiled in October, 2017. The guide to in-depth interviews was integrated with these sections: (1) company profile, (2) issues and solution measurements in the administrative-financial area, (3) operative area, (4) accounting-fiscal area, and (5) knowledge about tools offered by the financial management. In November and December, 2017, a diagnosis of the sample firms was achieved through a deep content analysis of the interviews. At the same time, observation techniques and documentary information analyses were completed over the daily actions concerning the MSMEs, our subject matter.

Taking as reference the diagnostic study, during the second stage, called proposal and implementation, some suggestions for solving well-identified issues were made. By means of an implementation plan in administrative-financial, operative, and accounting-fiscal areas, financial tools were applied during a six-month period, from January to December of 2018, with different periods for each MSME. During the evaluation, the third stage, a meticulous record of the results obtained after implementing such proposals was maintained. Thus, whether there is business growth or not in the MSMEs can be assessed. In this final stage, it was possible to determine, the results through financial and qualitative information of the sample firms. This stage was completed from January through March, 2019.

RESULTS AND DISCUSSION

This section displays the situation of each MSME. To begin with, by looking at Table 3, an overall evaluation can be made of the enterprise’s profiles.

Tabla 3: Profile of the Economic Entities

Concept	A	B	C	D	E	F
Activity	Services	Manufacture	Trade	Services	Services	Trade
Size	Micro	Micro	Small	Small	Medium	Medium
Employees	2	4	8	12	55	150
Seniority	2	4	10	16	10	30
Annual sales (mdp)	From \$4.01 to \$100	Up to \$4.0	From \$4.01 to \$100	From \$4.01 to \$100	From \$4.01 to \$100	From \$100.01 to \$250

This Table shows the activity, size, number of employees, years of life in operation and anual sales of each company under study. Source: Prepared by the authors based on the results of the project.

Hereunder, the analysis of the data compiled in the study of each the six economic entities is displayed. These results were gathered in two tables, Table 4 presents the results of the micro and small enterprises (A, B, C and D); Table 5 shows the results of the medium enterprises (E and F). Tables 4 and 5, show the three stages of the study: diagnosis, proposals and implementation, and evaluation. The results achieved in the three areas are presented: administrative-financial, operative, and accounting-fiscal.

In Table 4, results achieved in the enterprise A, B, C, and D are shown. Although they started as micro enterprises, currently the enterprises C and D are classified as small enterprises due to their incomes. The enterprise A, which is micro and offers technical services has been working for two years and requires strengthening its market. This company received the suggestion of implementing a work capital management, which involves cash-based accounting, accounts receivable, inventories, and suppliers. Enterprise B, which is a manufacturing company, and is classified as micro enterprise is a smaller operation. The entrepreneur is not full-time in the business. Therefore, he received the counseling of implementing the administrative-financial monitoring tool. Enterprise C is classified as small due to its income. Taking into account the particular characteristics, enterprise C was advised to implement the financial planning tool. Enterprise D, which is small and offers food services, is very well placed. It has made alliances with companies that have become permanent clients. It has long-term growth expectations. It was advised to improve its management of working capital.

Table 4: Diagnosis, Proposals, And Results of the Economic Entities A, B, C and d (Micro and Small Enterprises)

Area	Problems	Proposals	Evaluation
Administrative Financial	Lack of control in charging clients, inventory monitoring, organization in administrative activities, credit, supervision on accounts receivable and money. A jack-of-all-trades entrepreneur. Disagreement between clients and suppliers about pre-established deals.	Record, trace, monitoring, and control of cash, clients and suppliers. Investment on inventory systems. Design and record of return forms. To establish client and supplier policies. Establishing priorities on schedule. To determine entrepreneur duties and distribute responsibilities. Hiring personnel to support the administrative area.	To charge clients on time and to identify precise data of workers in debt. To exam and compare inventories physical with records. Forms to plan incomes, expenses and purchases. Close cash control (receipts and disbursements). Hiring someone to be in charge of management and to assign responsibilities to workers.
Operative	Lack of communication between employer and employee. Lack of commitment from employees. Lack of supervision to the employee and training of personnel. Constant turnover of staff. Lacks of a spare parts inventory.	To strengthen organizational identity. To establish schedules in agreement with employees. Periodical training for personnel and to make profiles for post to select personnel. Hiring technicians to assure a better service. Acquiring spare parts and supervising inventory. A software implementation to do the activities and to print reports.	To promote and strengthen organizational communication. To provide training to personnel. More and better supply and control in warehouses. After hiring someone for management, work load became equal for each business member. Technician personnel will be hired. The entrepreneurs accepted make inventories. The acquisition of software is postponed.
Accounting Fiscal	Lack of knowledge of accounting and enterprise fiscal topics, which causes confusion while facing new arrangements. Lack of organization on safeguarding information of fiscal support.	To hire an accountant services. Safeguarding fiscal receipts data in electronic files in a regular and methodical manner. Frequent meetings with the accountant.	Hiring accountant to deal with accounting and fiscal obligations, now these activities are under control. Better supervision of accounting and fiscal data. Data was finally organized and accessible whenever necessary.

Table 4 shows the problems, proposals and evaluation presented by companies A, B, C and D, in each of the areas: administrative-financial, operational and accounting-fiscal. Source: Prepared by the authors based on the results of the project.

In Table 5, Enterprises E and F information are displayed. Enterprise E is a medium sized company and is identified as a legal entity. It offers environmental counseling. The problem is the debt it carries. This company should look for financial support alternatives. The medium-sized enterprise F consists of a legal entity devoted to trading. It is a company with troubles for overcoming accounts receivable. Consequently, it should improve its work capital management.

Based on the information provided in synthesis in Tables 4 and 5, Table 6 depicts the most significant issues of the six MSMEs, the solution alternatives implemented during a period of six months, as well as the results achieved. It can be clearly appraised that the financial tools implementation demands time, and that positive financial results cannot be assessed in such a short period.

Table 5: Diagnosis, Proposals, and Results of the Economic Entities E and F (Medium Enterprises)

Area	Problems	Proposals	Evaluation
Administrative Financial	Cash shortage. Interest payment. There is no financial planning. Lack of client tracing. Family enterprise; duplicity in commanding. Turnover of staff	To allow cash flow. Renegotiate its debt. To search support alternatives in the Environment Secretariat. Development of financial planning. Regular visits to clients, datelines revision, discounts in each route. Organization chart development. Revision of posts profiles.	To develop a cash flow giving priority to transactions. An agreement with the financial institution to extend the debt dateline and reduce the interest rate. Financial planning becomes affected by the enterprise owners' personal expenses. Acknowledgement of signature changes in contracts of clients. The chart organization was updated. Personnel was hired for Human Resources Department
Operative	It must update its equipment. There are no policies in sales department (discounts). Lack of rout supervision.	To plan updating the cash flow. Development of sales conditions policies. Daily reports from supervisors who monitor clients.	Renting equipment is seen as an option. Attachment to sales terms: discounts, amounts, endorsements with people in charge stated. A punctual tracing of clients by means of supervisors.
Accounting Fiscal	Entrepreneurs ignore accounting and fiscal matters.	Hiring an accountant or an expert on the area.	Updated accounting and fiscal duties.

Table 5 shows the problems, proposals and evaluation presented by companies E and F, in each of the areas: administrative-financial, operational and accounting-fiscal. Source: Prepared by the authors based on the results of the project.

Table 6 shows the most significant financial tools applied to each enterprise, financial data analyzed and the results obtained. This information is classified according to the enterprise's size. In Table 6, we observe that in micro-enterprises, only the financial tool of "administrative and financial monitoring" was recommended. These firms lacked organizational structure and personnel trained to carry out the activities. Moreover, they do not have information systematized in the review of the financial data. There was not enough information, so tools had to be provided to design and elaborate the processes of the activities.

We recommended elaborating the profiles of positions and formats to take control of the records and monitoring of its operations. This type of company only had isolated records of financial information. Once these financial tools were applied, it was observed the companies have liquidity, despite a lack of administrative and financial organization. On the other hand, due to the lack of information, they do not accurately identify the results of their operation. They do not know the amount of profit or loss obtained. Regarding the small companies, the financial tools applied were "financial analysis", to identify their initial situation. We mpte that they have no control over their expenses and costs. Ror this reason, we recommended applying "financial planning". Financial information, accounting and internal reports were taken as reference to carry out this planning. In this six-months planning, we observed this is a favorable tool. They generate quantitative documents where they project all the operations and it permits planning cash flow. These companies have liquidity, despite this, they do not have timely monitoring of their costs and expenses. They authorize any outflow of money and this eventually results in losses in their operation.

Table 6: Financial Tools, Financial Data and Results of the Economic Entities

Enterprise	Financial Tools	Financial Data	Results
Micro Enterprises (A and B)	Administrative and Financial Monitoring	Observation the activities, design the processes, stablishing the profiles and formats. Internal records Classification of the evidences from operations Fiscal evidences	Liquidity Lack of records, not identify with precision incomes, costs and expenses.
Small Enterprises (C and D)	Financial Analysis Financial Planning	Accounting Internal Reports Fiscal Documents	Liquidity No control about the costs and expenses. Without financial planning.
Medium Enterprises (E and F)	Analysis of Balance points. Work capital management	Financial Statements Internal reports	Liquidity and rentability. Operative inefficiency. Enterprises on debt. Profits and loss projection limited.

Table 6 shows a summary of the financial tools proposed to the sample firms, the financial data examined and the results obtained from this study. Prepared by the authors based on the results of the project.

Medium-sized companies, were recommended to apply more detailed financial tools, such as the "Analysis of Balance and Results Accounts", which allow us to recognize whether there is good working capital management. In the review of their financial information, we observed that both companies have loans with third parties. They are in debt, which generates the commitment of interest payments. For this reason, it is essential that these companies achieve an efficient use of their available assets (cash, banks, customers, inventories, suppliers), in this way, they could have cash flow and face their daily operations. These companies have liquidity and profitability, however, their financial situation could improve if they more efficiently used their current and passive assets in the short term. Through this research, we observed that MSMEs must use financial tools to achieve business growth. It is highly transcendental to affirm that these financial tools have to be adopted to meet to characteristics and needs of the economic entities. However, to make this possible, first, the economic entity must be strengthened in its internal structure by, for example, achieving an adequate management of financial and material goods, reinforcing its infrastructure, training staff, establishing a formal and professional organization and making use of technology. Once this stage is over, business growth begins, which is reflected in the size scale of the company, as shown in Table 7, which corresponds to MSMEs characteristics.

Characteristics shown on Table 7 confirm that MSMEs grow steadily, and that time is a deciding factor. We can observe Enterprise F, which has had the longest working period, has the highest growth. On the other hand, Enterprise A, which has just started operations, is on the lowest growth level. Figure 1 shows the size scale of the six enterprises studied grows progressively on account of the reinforcement of their internal structure. This internal strengthening is achieved with the support of Financial Management. All factors achieved during this research are displayed in Figure 1. From this figure, we can acknowledge the effect of Financial Management implementation on the MSMEs growth. These elements were classified according to each entity's size. Number 1 corresponds to Micro, 2 to Small, 3 to Medium-sized, and 4 to large enterprises. Determining factors are the following: constitution (legal entity or physical person), number of employees, revenues (mdp), assets (mdp), financing (USD), type of market, organizational structure (areas), and technology use. In accordance with the former information, we assert that MSMEs business growth comprises these elements, and that these later ones constitute quantitative and qualitative aspects in their internal structure.

Table 7: MSMEs Characteristics

Concept	MSMEs					
	A	B	C	D	E	F
Economic activity	Services	Manufacturing	Trade	Services	Services	Trade
Constitution	Physical Person	Physical Person	Physical Person	Physical Person	Legal Entity	Legal Entity
No. of employees	2	4	8	12	55	150
Revenues (mdp)	≥4	<4	≥4	≥4	≥4	≥150
Assets (mdp)	<4,155.4	<4,155.4	<4,155.4	<32,880.9	<4,155.4	>32,880.9
Financing (USD)	0	≤100,000	≤100,000	0	<1,000,000	>1,000,000
Type of market	Regional	Local	Regional	Local	Regional	Regional
Organizational Structure (areas)	2	2	6	5	5	7
Technology use	Only computer equipment	Software Machinery	Software Machinery	Only computer equipment	Software Machinery	Software Machinery

Table 7 presents the results identified for each company, which are: economic activity, type of constitution, number of employees, income, assets, financing, type of market, number of areas in their organizational structure and use of technology. These elements determine the internal characteristics of the companies under study that need to be strengthened in order to achieve business growth. Source: Prepared by the authors based on the results of the project.

Figure 1: Business Growth in the Msmes of Valle de México Metropolitan Area

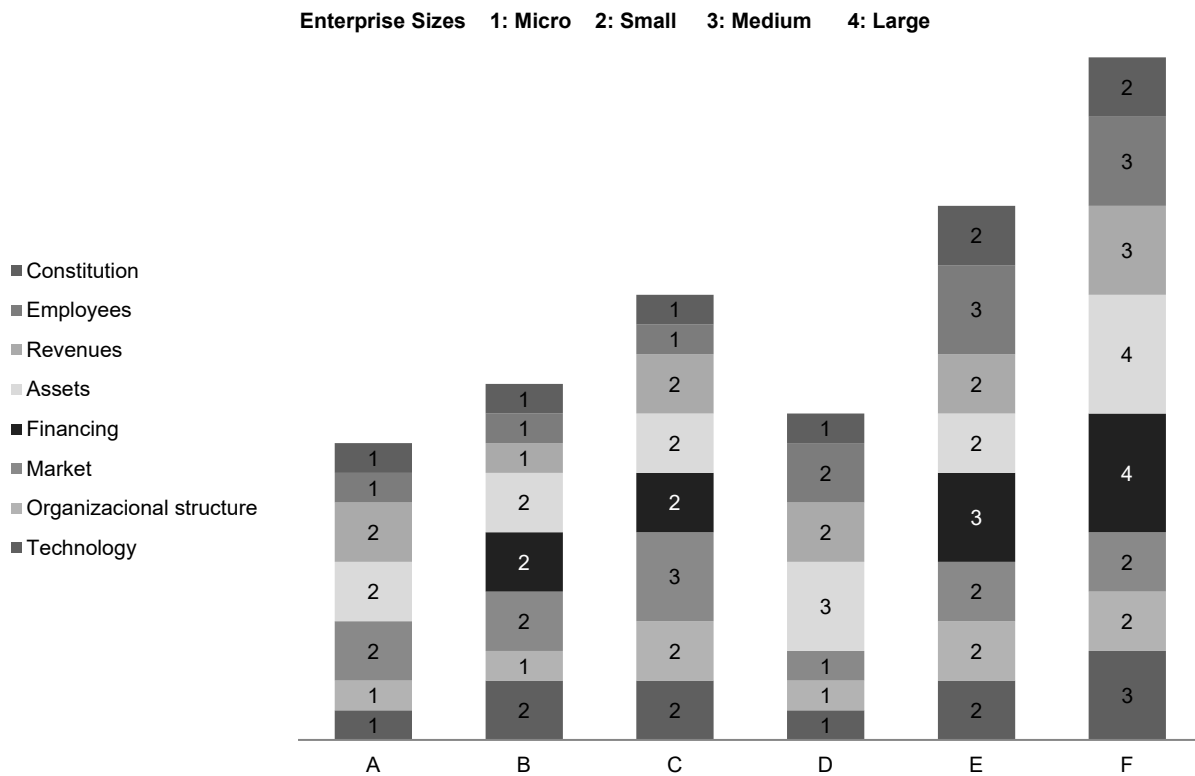


Figure 1 shows the elements determinant for the business growth. These are constitution (legal entity or physical person), number of employees, revenues (mdp), assets (mdp), financing (USD), type of market, organizational structure (areas), and technology use. These elements were classified according to each entity's size, number 1 corresponds to Micro, 2 to Small, 3 to Medium-sized, and 4 to Large enterprises. Each factor presents different situation or evolution in each enterprise. Source: Prepared by the authors based on the results of the project.

CONCLUDING COMMENTS

Financial Management is a discipline that offers diverse tools, which ought to be adapted to the MSMEs needs to apply them to specific circumstances. In this way, they will be useful for this sector. Until these financial tools are used and the result appraised, business growth will not be present in the MSMEs operations. Generally, business growth can be evaluated through figures (sales increase, profitability, etc); however, regarding MSMEs, it appears first in different elements or factors and, as a result of internal strengthening, later on will be conveyed in profitability. It is noteworthy that business growth is not achieved immediately. Rather it improved in each MSME in a different manner.

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EMPIRICAL EVIDENCE ON LABOR PROFILE COMPETENCIES OF MEXICAN IMMIGRANTS TO THE UNITED STATES OF AMERICA

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ABSTRACT

The immigration of Mexicans to the United States of America (USA) has led to migration policy problems in both countries, with ethical, social, human, health and labor implications. For this and other reasons, bilateral relations between these countries have long-standing legal needs. There is a need to find formulas and solutions to confront multiple challenges and opportunities. This research examines the professional profile of Mexican immigrants to the USA. We describe the qualitative, quantitative, exploratory and descriptive case method we employed in a pilot survey we applied in the Rio Grande Valley (RGV) of Texas and on a study of immigrants visiting their villages in Central Mexico. The result of our study is the Competency Based Human Resource Management (HRM) Model, which consists of 12 core competences that comprise the job profile of Mexican immigrants to the USA. This Human Resource Management (HRM) Competency Model is a theoretical contribution to the management field. Our goal is to make it available for use by public and private organizations to assess and implement public programs addressing emergencies in labor insertion and reinsertion of Mexican migrants on both sides of the USA-Mexico border.

JEL: M120, M510

KEYWORDS: Competencies, Job Profile, Immigrants, Human Resource Management

INTRODUCTION

Migration from Mexico to the United States of America (USA), both legal and not documented, surged after the Bracero Program, a temporary farm worker program that ended in 1964 (Massey et. al., 2002 in Hirschman, 2014). In the United States, the states bordering Mexico are the most immersed in migration issues. According to Beeson et. al. (2014) Texas has specifically been recognized by the Center for Public Policy Priorities (CPPP) as many immigrants, whether authorized or not documented, engage in postsecondary education and skills training. Bilateral relations between Mexico and the United States have a long-standing need to address legal matters that contemplate the regulation of immigration. These needs include the immigrants' ability to enter and benefit from the labor markets of the USA in a legal way that is also beneficial to both nations. Because of those settlements and other agreements related to immigration, we argue that source countries (of emigration) may experience labor and brain drain. This brain drain results in a negative consequence, even when they benefit from the monetary remittance flows their emigrants send to people in their country. Receiving countries typically get a boost of human capital not only in numbers, but also in the professional competencies that successful immigrants bring with them. However, people in the receiving country often perceive that immigration has adverse consequences in culture and the labor market. The goal of this research agenda is to address these problems to find formulas and solutions to confront multiple challenges and opportunities caused by the migration phenomenon across both nations. We focus on human resource management. Our literature

review starts by describing the lack of policies in both Mexico and USA in the face of high rates of migration coming from a developing country with lower resources and opportunities to one that possesses them in greater abundance. We continue by examining the concept of job profile by implementing job analysis theories. These theories let us introduce the competencies in the profile of human resources. This section ends with the analysis of specific Competency Based Human Resource Management (HRM) Models. After reviewing the literature, we found an absence of work related to constructing a Mexican immigrants' job profile.

Certain work can be applied here including Gan and Kleiner's (2005) theory, which states that Job descriptions help organize and classify the workforce. We did not find a human resource management competency model, which develops skills, knowledge, is designed in an appropriate competency model, includes immigration-job profile-competencies and anticipates future professional competency requirements. This research is a case study involving qualitative, quantitative, exploratory and descriptive methods. We carried these studies in 2017 until 2019 involving the application of a 20-item pilot survey to seven subjects in the Rio Grande Valley (RGV), Texas. We also used a 45-item survey to 18 subjects in Central Mexico, with the goal getting information about their professional competencies. We used questionnaires and observations following recommendations by the Canadian Human Resources Council (CHRC) as depicted in their US current job profiles. On results section shows 12 core competences in the job profile of Mexican immigrants to the USA. We describe the use of our questionnaire instrument, and the manner in which we linked factors/standards to each core competence. This characteristic of decomposition in factors allows a clear identification of the labor competencies profile of our subjects. This Human Resource Management (HRM) Competency Model is a scientific contribution to the management field. Its usefulness and implications are availability to public and private organizations and is suitable to be applied in public programs addressing emergencies in labor insertion and reinsertion of Mexican migrants on both sides of the US-Mexico border having a clear job profile that highlights the competences Mexican immigrants have. Through its application, managers and government officials of both countries could develop legal schemes intended to regulate labor migration for basic or specialized competence Mexican workers.

LITERATURE REVIEW

Migration Policy Between Mexico and the United States

Migration is a common phenomenon of the globalized world. As Sasnal (2018, p. 2, 3 and 5) affirms, "The challenge of governing migration lies in its inevitability, volume, and heterogeneity. As a portion of the global population, migrants represent around 3 percent, but this number is rising. Moreover, migration is a complex process. Depending on the cause, duration, and legality, migration can be voluntary or forced, permanent or circular, regular or irregular. Politically, migration poses a twofold challenge: balancing the security and freedom of a country and harmonizing international obligations with domestic laws. Some forms of migration, such as large and mixed movements of people, can be managed by governments only with a global governance framework". For the six actions that Sasnal (2018, p. 4) considers very important for implementation in order "to take full advantage of what migration has to offer to countries of origin, transit, and destination (and to minimize the risks posed by mismanaged or unmanaged migration)", we considered two actions that should ideally be taken into account by involved countries. First, the states involved should agree on a normative framework for the multilateral governance of migration. Secondly, national governments and international institutions should promote regular migration. According to Hirschman (2014) about 30 % of all immigrants in US are from Mexico, with an estimated number of 11 million. This figure is an approximation, due to the absence of precise records that implies non-documented migration. In his studies, he found that highly skilled immigrants are attracted to universities and technology sectors, while less skilled immigrants are drawn to agriculture, food processing, and manufacturing industries. The attractiveness to the US is that hiring and promotion has settled on the meritocratic base.

Even though immigration implies, for immigrants and their children, assimilation to a different culture (language, religion, cuisine as well as social and educational aspects). Contrary to common thought, immigrants are generally above average in terms of education and labor competencies in their home societies.

On the other hand, Peri (2010) documented that US born workers and immigrants tend to take different occupations. Among less-educated workers, the US born tend to work in manufacturing and mining, while immigrants work in agriculture and services. Among more-educated workers, those born in the United States tend to pursue jobs as managers, teachers or nurses, while immigrants tend to pursue jobs as engineers, scientists and doctors. Data shows the information derives from differences between nationals and foreign nationals due to English language competency. For example, U.S.-born workers tend to specialize in communication tasks, while immigrants tend to specialize in other tasks, such as manual labor. He said that immigrants expand the US economy's productive capacity, at the same time they stimulate investment, and promote job specialization, which in the long run boosts productivity. There exists an added benefit that this does not come at the expense of jobs for US born workers. To address immigration issues, the Mexican State migration policy has undergone substantial changes in the last decade (SICREMI, 2014). In that sense, dialogue with the United States is the most important bilateral activity. This dialog has the objective of defining a broad and consensus-based migration agenda between both countries with the goal of finding formulas to confront the multiple challenges and opportunities caused by the migration phenomenon between both nations.

Human Resource Management: Job Profile and Job Description.

To introduce human resource management theories, it is important to describe some concepts exposed by several experts related to job analysis including job descriptions/specifications, which are the foundation for most Human Resource Management (HRM) functions including: Recruitment, Selection, Orientation, Training, Supervision, Compensation and Performance Management. According to Gan and Kleiner (2005, p. 48), a job description “outlines the essential duties and responsibilities that are expected of the employee and the basic purpose of the work the employee is expected to perform”. It describes educational (HS diploma, or bachelor's degree, etc.), professional/licensed (CPA, MD), physical (in good health, exertion, lifting and sensory requirements) or specialized skills (welding, mechanic, etc.), and knowledge required by the position as well as character traits. Job descriptions should include conditions in which the work will be performed (noise levels and exposure to extreme environmental conditions).

Arias (2015) describes a job description as a written statement explaining the tasks, duties and responsibilities of the position. He differentiates it from a specification of posts, which is the inventory of human characteristics that must be possessed by the individual who will perform the task (factors of formal education, experience, training and the ability to face certain demands of a physical or mental nature, classified in intellectual requirements, physical requirements, implicit responsibilities and job conditions). In cases where a job position includes more than one country, familiarity with the linguistic, legal and cultural aspects of both countries is an obvious need. The Americans with Disabilities Act (ADA) of the United States requires all job descriptions to state the physical requirements and demands of the position, including work environment conditions that effectively address the needs of disabled workers. According to the database of the Canadian Human Resources Council, if an organization does not have job descriptions or if their job descriptions are out of date, the first task is to conduct a job analysis to detect the duties and responsibilities of a position as well as the knowledge, skills and abilities required to do the job. Typical kinds of information gathered are: Educational requirements, Special qualification, Experience, Equipment/tools used, Frequency of supervision, Authority for decision making, Responsibility for records/reports/files, Working conditions, Physical demand of the job and Mental demands of the job. As Gan and Kleiner (2005) affirm, “thought and planning must be doing before writing a job description, writing one is easy but writing an effective one is difficult. Defining the position's purpose will provide

clearer expectations and responsibilities. After defining the purpose of the position, it will be easier for the job description writer to communicate the employer's expectations of the employee and the employee's responsibilities."

Fondas (1992) addressed the concept of Behavioral Job Descriptions (BJD) in order to classify a particular position's dominant behavioral requirements. In that way, one could identify specific behavioral requirements and build a BJD built for each job. The behavioral job description would seem an especially suitable tool, given its emphasis on different types of interpersonal contacts. Knowing this, would be useful for managers thinking about "what job moves and career plans are feasible and what training and development might be beneficial". Once established, the concepts of job descriptions/specifications, it is necessary for organizations to address the concept of Job Profile as an outline, a high-level overview of a position. This provides only general information about a particular position. Heathfield (2016) stated that the major difference between a job description and a job profile is the degree of detail. A job profile allows more latitude for current goals and expectations. The job profile presents the significant elements to provide a picture of a job. It is another useful tool in the HR toolbox. With this background, we note that the job profile, occupational profile or professional profile is an extremely useful tool for a successful HR management. We use the concept of job profile, occupational profile or professional profile as equivalents to define competencies that Mexican immigrants possess.

Job Profile Competencies

Regarding job, occupational or professional competencies, we adopt the definition provided by the International Labor Organization (OIT, 1993) as the suitability to perform a task or perform a job effectively by possessing the qualifications it requires. This definition is similar to the professional competencies definition offered by the National Institute of Employment in Spain (INEM, 1995), Bunk (1994), and Tejada (2005). According to Boyatzis (1982, in Steward 1983, p. 1) "competency is an underlying characteristic of the person that leads to or causes effective or superior performance in a job"; and later, in his 2008 article (p. 6) he defined competency as "a set of related capability or ability, understand as a different sets of behavior organized around an underlying construct, which we call the intent. The behaviors are alternate manifestations of the intent, as appropriate in various situations or times". The right competencies to include are skills-abilities, knowledge-experience, social roles, self-construction, self-image, personal characters, and motivations. Prahalad and Hamel (1990, in Rutledge et. al., 2016) were the first to develop the concept of core competencies in organizations. They defined core competencies as "the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies. Berger and Berger (2011, p. 7) defined core competencies as "knowledge, skills, attitudes and personal attributes that enable people to succeed in a given environment. Competencies are the building blocks of a talent management system". Based on this research, it is clear that core competencies are a main component in designing human resources management systems with a competency approach.

The Construction of the Specific and Innovative Competency Based HRM Models

Competencies and Competency models can lead to significant human resource developments by providing a competitive edge to organizations. The case for competency management has grown strong since David McClelland (1973) argued that the best predictors of outstanding on-the-job performance were underlying, enduring personal characteristics he called competencies. He stated that competencies by themselves are insufficient for performance, unless defined in behavioral terms. Vazirani (2010, p. 122) coincides to those affirmations by stating "Although different sets of competencies predict success in different roles, there are certain consistent patterns as well". Vazirani (2010, p. 123), argued there is ample evidence that competencies form the base for effective and superior performance and the expansion of competency models. This has established in the private sector and now the public sector sector ultimately resulting in

a proliferation of definition, tools, models and application. Thus, he assures “despite the generally accepted distinction in meaning of competence and competency, the terms are still interchangeably used by causing them to mean different things to different people. The two terms arise from different streams of thought on the concept of fitness at work. They are: A) Competency which is a description of behavior and B) Competence, which is a description of work tasks or job outputs”

Vazirani (2010, p. 124) affirms that “competencies are underlying characteristics of people that indicate ways of behaving or thinking, which generalizes across a wide range of situations and endure for long periods of time. There are at least five terms in this definition that require understanding: knowledge, skill, self-concepts and values, traits-traits and motives. Competence thus requires developing skills and knowledge and designing appropriate Competency models that tie to current roles and anticipate future skill requirement”. In the same stream of research, Fogg (1999) indicated that a behavioral job description for each specific role or occupation in any organization or industry is the base for a competency model. He affirms that by using job description as a tool is possible to point out the competencies required for a particular job or occupation. Shippman (2000) coincides with Fogg’s theory, saying that a job description is generally composed of 7 to 9 competencies, depending of organization type; while Dubois (1993) believe that competency models are the best approach to help organizations design an effective Human Resource Management (HRM) System.

Boyatzis (1982 in Boyatzis 2008 p. 6), in same context, stated that a theory of performance is the basis for the concept of competency: “Maximum performance is believed to occur when the person’s capability or talent is consistent with the needs of the job demands and the organizational environment”. Later in 2008 (p. 6), he settled that “aspects of the organizational environment that are predicted to have important impact on the demonstration of competencies and/or the design of the jobs and roles include: culture and climate; structure and systems; maturity of the industry and strategic positioning within it; and aspects of the economic, political, social, environmental, and religious milieu surrounding the organization”. In his subsequent paper, Boyatzis (2008, p. 6) posits “the construction of the specific competency is a matter of relating different behaviors that are considered alternate manifestations of the same underlying construct. But they are organized primarily or, more accurately, initially by the similarity of the consequence of the use of these behaviors in social or work settings”. In the same article, he affirms “the separate competencies, like the clusters, are the most helpful focal point for description and study of performance” (p. 8). Those settlements are referring because we believe it is valid for management in designing profiles for different kind of professions.

On the other hand, a competency model is adaptable for different kinds of research. For adaptation, it is important that job description competencies and expectations include qualifications (no education, primary, secondary, secondary vocational school education, bachelor, master or PhD degree) and professional skills (experience, physical fitness and health, PC skills, driving license and certificate of good conduct, physical load (muscular, static, dynamic) and psychological effects (stress, isolation, attention concentration, monotony) (Beata, 2015). In this research we assign a high degree of importance to competencies in the job description because they make up the structure of the job description, as well as laying the groundwork for later defining the measurable factors that compose each competence. This is the theoretical link between management activities related to human resources management and the competencies approach. Based on the aforementioned research, we continue to establish the relation between background and the competencies’ approach for Mexican immigrants’ job profiles. By applying theories of human resource management, as well as other work (Mora and Davila. 2014, 2013, 2011; Davila and Mora, 2013, 2011; Davila, et al., 2011; Herrera, A. 2017, 2016, 2005; Cervantes, J. and Rodríguez, A., 2015), we designed a competency-based view model, and a survey instrument, with the goal of assessing migrants’ job profile competencies.

DATA AND METHODOLOGY

This research is a case study involving qualitative, quantitative, exploratory and descriptive methods. It was carried out as follows. In August-October 2017 we studied general migration data for Mexican immigrants to the USA; administration of human resources and competencies in a job description/profile theories; and, competency based HR management models. In November 2017 we designed a competency-based pilot survey. This survey includes 20 direct questions made using factors to outline competencies in the job profile for Mexican immigrants to the USA. The pilot survey had 25 items, focusing in general information including: demographic, educational features, current and previous jobs in the US, handling of tools, instruments and machinery, English proficiency, labor conditions, ideal places for work in the US and pension plans.

In December 2017, the pilot survey was applied. Survey respondents were to be 18 or older, born in Mexico, and work in the US regardless of immigration status. A request to participate in the pilot survey was made randomly among 30 blue collar workers (in restaurants, hotels, gardens, stores and a catholic church) in the Rio Grande Valley (RGV), Texas. Most refused to answer, but seven people, who were working in services (cleaning, gardening, kitchen, parishioner and as waitress/waiter), agreed to answer. In January 2018, we redesigned the survey according to findings of errors, structure, and ambiguities, taking into account attitudes that were revealed by the respondents and those who refused to answer. The restructured survey has 45 items and were phrased using a simple vocabulary. It did not contain charts, ranking answers or perceptual proficiency measures. Besides the previous factors in the pilot survey (demographic, educational features, current and previous jobs in the US, handling of tools, instruments and machinery, English proficiency, labor conditions, ideal places for work at the US and pension plans), we collected data on the number of entries to the US, number of years working in the US, work schedules, risk and effort that their job implies, entrepreneurship and information technology skills, training/educational needs and/or interest, and an optional question indicating their reasons for migration and migratory status at the US.

In May 2018, we modified our data collection strategy given a high level of fear and distrust among the RGV workers invited to answer the pilot survey. We targeted a reduced group of Mexican immigrants working in the United States while visiting their families in Mexico for the “*Santa Cruz*” festivities (April 30 to May 3, 2018) in the small village of Victoria de Cortazar, Municipality of Jaral del Progreso, in Guanajuato State. A total of 25 immigrants were invited to be surveyed and 19 accepted. This yielded 18 valid surveys (one survey was invalidated given that the participant was a US citizen by birth). We followed the same application criteria: participants should be 18 or older, born in Mexico, and work in the US regardless of immigration status. Victoria de Cortazar is a small village that belongs to Jaral del Progreso municipality, in the State of Guanajuato, Mexico. This is an ideal site for research in our topic as, due to low labor opportunities, there is a long history of male immigration to the USA. They migrate mainly to Illinois and Texas. Most of the population is Catholic, and those that migrate to the USA try to return to Mexico at least one week per year. They usually travel for Christmas or *for La Santa Cruz* holidays. We worked with Ms. Maria Serrano Rivera, a retired nurse, who knows personally every habitant in the village and, due to her 30 years of service, holds their respect and trust. She introduced us to some immigrants who were visiting their families for *La Santa Cruz* festivities. She also provided us bed and meals because hotel and restaurant are not available in the village. In June 2018 information was collected through surveys, which were later recorded in SPSS.

Second Stage

IN August 2018, we completed the analysis of collected information to outline the labor competencies the surveyed hold. During this process, aside from identifying participants’ individual competencies, it was possible to identify groups of competencies. In August -September 2018, the information obtained was compared and contrasted with the theoretical concepts, models, recommendations and precisions to redefine

the immigrants' job profile. We clearly identified 12 groups of competencies. This profile may be used as reference for designing a general model of competencies for Mexican immigrant job profiles. In October 2018, the Competency based view HR model and his associated factors were ready to assess the immigrants' job profile. We used a 73-item survey questionnaire to detect labor competencies, as well as 7 items to assess demographic data, for a total of 80 items. The findings of this second stage are shown in the discussion and results sections, where we describe the competency model intended to measure labor competencies and define the immigrants' profile.

RESULTS AND DISCUSSION

Designing a Competency Approach Job Profile Model

Our findings and resulting applicable Mexican immigrant profile shows consistency with past research. Rutledge et. al. (2016) asserts that using core competencies throughout the management process enables middle managers and human resources administrators to help employees maximize their potential. He described a competency-based talent management approach from the perspective of an HR manager in order to make organizational values and goals concrete. Further, Vazirani (2010) argued that Competency Models have the following advantages: enhancement of recruiting process, enhancement of employee development, performance management, identifying training needs and employee development, unification of corporate culture across business units, establishment of connectivity through Integration of HR processes and establishment of clear expectations for success. Our profile is based on these theoretical tenets and shows potential applications by managers and government officials. Despite past applications of competency human resource management models to several industries (health care, education, business, etc.) and different professions (e.g., managers, librarians, medical personnel, professors) by the scholars mentioned above, a competency model had not been applied to Mexican immigrants' job profiles. Therefore, the key contribution of our research is that managers and politicians can focus on Mexican immigrants as a source of human resources for a wide variety of firms, as well as macro human capital management in both the sender and receiver migration countries (i.e., Mexico and USA). Our application of the competency-based HR management model applied to immigrants is consistent with explained theories along this research.

Competencies in the job Profile of Mexican Immigrants to the USA

Migration can be affected by the application of a human resource Competency model in origin and destination countries to design migration policies according to characteristics of immigrant groups of individuals. Sasnal (2018) recommended involving country officials to see migration as an opportunity to minimize risk and problems through adequate management and void political agendas. He suggested following several multidisciplinary actions: agree on a normative framework for the multilateral governance of migration; promote regular migration; consolidate the global institutional architecture on migration; consider differences in national capacities while setting standards for sending and receiving countries; and increase cooperation to improve consular capacities of states. Sasnal (2018) indicated that migration evokes fear among people because it is an unintelligible phenomenon, so using precise language can help people correctly understand it. In order to familiarize the global population with migration issues, the United Nation Development Program (UNDP) provides high-quality data for research. As such, this institution provides opportunities for future research. In the future, scholars could propose, facilitate and coordinate a global census or survey with migration-relevant questions. Competency models, such as the one described, could be used to develop an evidenced-based program involving Mexico and the USA to facilitate and coordinate a migration agenda based on the management of labor competencies of Mexican immigrants. Besides Herrera's model (2017), we agree with Vazirani (2010, p. 126), who stated that "Competency behaviors can bring a common vocabulary and perspective to those operating within an organization or system. A consistency of expectations is understood by each player on an organizational

team or within a professional network. This systematic framework is use to convey the desirable behaviors and thinking as one develops individually and professionally, within an organization or across industries. In a sense, an individual’s technical, as well as their personal characteristics and attributes must be a fit with the corporate culture in order to be hired by a particular organization and be successful on the job”.

Vazirani’s model (2010, p. 128) affirms that “Despite the efforts to assess the competencies associated with personal characteristics, traits and motivation, such competencies are difficult to define and therefore difficult to assess.” Such competencies cannot be directly measured in behavioral terms, but more accurately we are likely to observe behaviors associated with such competencies. Through the questionnaire application we measured “standard behaviors” that, in concordance to Vazirani’s model (2010, p. 128), reveal potential assessments of such competencies. We identify 12 core competencies to be considered in the job profile of Mexican immigrants to the USA. This finding is result of grouping knowledge, skills and aptitudes that together allow an individual to develop a concrete activity in a successful manner. In that order, competencies that comprise the Mexican immigrants profile are Academic training/profession, Adaptation to labor environments, Acculturation, Specialized equipment handling, Capacity to perform in conditions of risk or extreme effort, Self-management of continuous education, Communication in English language, Management of information and communication technologies, Entrepreneurship, Decision making, Career planning and Capacity to identify conditions of improvement. Table 1 shows the 12 core competencies in the job profile of Mexican immigrants to the USA.

Table 1: Competencies in the Job Profile of Mexican Immigrants to the USA

Competencies in the job Profile of Mexican Immigrants to the USA	
I	Academic Training / Profession
II	Adaptation to Labor Environments
III	Acculturation
IV	Specialized Equipment Handling
V	Capacity to Perform in Conditions of Risk or Extreme Efforts
VI	Self-Management of Continuous Education
VII	Communication in English Language
VIII	Management of Information and Communication Technologies
IX	Entrepreneurship
X	Decision Making
XI	Career Planning
XII	Capacity to Identify Conditions of Improvement

Authors’ own elaboration. This table shows the 12 competencies in the Mexican immigrants’ profile. The 12 Competencies are result of grouping knowledge, skills and aptitudes that together allow an individual to develop a concrete activity o group of them in a successful way.

Secondly, after grouping and identifying the 12 Competencies, we found a high correspondence between such competencies and the 10 Competencies in the professors’ job profile (Herrera, 2017). The main reason for this coincidence is that, even when dealing with profiles of different actors, it is clear that these are Competency HRM Models for job profiles. Referred 12 and 10 competencies models have in common 5 competencies, as follows: Communication in the English Language – communication; Acculturation – diversity inclusion; Management of Information and Communication Technologies (ICT) –Information and Communication Technologies; Adaptation to Labor Environments –Teamwork; Capacity to Identify Conditions of Improvement – self-evaluation; and, Self-Management of Continuous Education – self-learning. Table 2 depicts the correspondence between the job profiles Competency HRM Model. The first column lists 6 Competencies of the Mexican Immigrant Competency HRM Model developed in this study; the second column list the coincidences with the Professors Competency HRM Herrera’s (2017) Model.

Table 2: Comparative Core Competencies Between two job Profile Competency HRM Model

Mexican Immigrant Competency HRM Model	Professors' Competency HRM Model (Herrera, 2017)
VII. Communication in English Language	Communication
III. Acculturation	Diversity (inclusion)
VIII. Management of Information and Communication Technologies	ICT
II. Adaptation to Labor Environments	Teamwork
XII. Capacity to Identify Conditions of Improvement	Self-evaluation
VI. Self-Management of Continuous Education	Self-learning

Authors' own elaboration. This table links the Competencies in the Mexican Immigrant Competency HRM Model developed in this study with the correspondences in the Professors Competency HRM Herrera's (2017) Model.

Demographic Information About Immigrants Surveyed

Identification of the 12 competencies exposed above is based on descriptive data. This statistical information will be shown to associate with each of the 12 competencies that make up the model. Demographic information obtained from the survey is as follows: 3 women (16.67%) and 15 men (83.33%); 13 individuals (72.22%) who affirm to have children (total amount of children is 27, from which 15 were born in Mexico and 12 in USA); the mode for age was between 41 and 45 years old, with 5 answers (27.77%); most respondents were between 31 and 50 years old (61.11%), while 4 individuals were over 51, and only 2 individuals between 15 and 30 years old. Like Beata (2015), who established that competencies can be classified in different ways to discover and present causal relationships and connections between the parts and the whole of job description elements, we settle the competencies and their related factors by finding the job profile mapping of the connections between these factors for Mexican immigrants. Findings about competencies in the immigrants' labor profile were clearly identified by their communalities in 12 groups as follows:

Competence 1-Academic Training / Profession: Among the interviewed, schooling levels are 6 years (38.90%), 9 years (33.30%), 12 (22.20%) and 17 (5.60%). Their main current jobs are as factory worker 33.30%, field and construction 22.20 %; while following occupations are reported with 11.1 % each: carpenter, plumber, maintenance, cleaning, gardening, childcare, sanitation, furniture upholsterer, trucker and slaughterhouse worker. From 18 interviewed, 8 (44.44%) had a previous occupation in the US, different from their current occupation. Those jobs were mainly as workers in factories and cattle rising with 11.10% each. The main way for labor training for 15 interviewed (83.30%) is by co-workers and relatives, while only 2 (11.10%) report him/her self-training.

Competence 2-Adaptation to Labor Environments: Their ideal states for work due to wages and labor conditions are Texas, California, Wisconsin and Illinois with very similar percentages of preference. Most mentioned cities are Austin, Houston, Los Angeles, Green Bay and Chicago.

Competence 3-Acculturation: Some 10 of the respondents were not documented (55.60%), 6 were residents (33.30%), and only 2 were American citizens (11.10%). Despite the majority's immigration status, they continue their yearly border crossings and US employers hold their positions for their return.

The highest frequency in the number of years working in the US is between 1 and 5 (33.30%), followed by 11-15 and 21-25 years (16.70%); 6-10 and 36-40 years (11.10%); and, 16-20 and less than a year (5.60%). Five interviewed affirm that they used to travel to Mexico with 10 to 25 return-entries to the US, 8 (44.50%) with 2 to 4 return-entries, while 4 (22.20%) entered the US only once and stayed.

Competence 4-Specialized Equipment Handling: Results show 16.70% know how to handle a cutter, saw, drill and sandpaper (mainly for construction); 11.10% are able to handle each of the following equipment /tool sets: industrial machinery, lift truck (factories), scissors-hoe-mower (gardening) and broom-mop (cleaning); while 5.60% for each set: trailer truck, hammer-pliers-screwdriver (maintenance) and cutter-jointer industrial machinery (manufacturing factories).

Competence 5- Capacity to Perform in Conditions of Risk or Extreme Effort: The interviewees usually work 8, 12 and 10 hours a day with the following percentages: 55.50%, 22.20% and 11.10% respectively. The workday begins for 50.00% of them between 6 and 8 am, while the rest can begin at noon, evening or night. The 72.20% had reported risks and extreme efforts in the performance of their work. Among main risks mentioned are cuts, burns, falls, run over and accidents in general. Among the extreme efforts they make are 27.80% and 11.10% load heavy and work at heights, respectively; while with 5.60% are each of the following: noise, weather, standing, sleep at modified times and patience.

Competence 6-Self-Management of Continuous Education: Only 33.30% said they had taken classes in the US. However, 77.8% expressed interest in studying, mainly English (66.70%) followed by mechanics and electricity, with an equal percentage (5.60%). Two-thirds of those that had taken classes (22.20% of all respondents) said they had taken English classes in the US, mainly in California and Wisconsin (in a community college).

Competence 7-Communication in English Language: Only 33.30% of respondents were able to speak English; 27.80% may read documents in English; and, 16.70% write in English language.

Competence 8-Management of Information and Communication Technologies: Of those interviewed, 72.20% do not know how to use any computer software. Of the 5 that use computer software (27.80%), one- fifth use Office and the rest did not specify. Two respondents use computer software daily at work.

Competence-Entrepreneurship: Regarding the inquiry about opening a business in the US, 44.40% answered affirmatively, having the options of preparation-sale of food and having a hardware store 22.20%, while gardening, grocery store and merchandise transport have 5.60% each. Preferred states to establish a business were, 11.10%, Texas (Austin and Houston), Illinois (Chicago); whilst Wisconsin (Green Bay) is 5.6% and 16.70% are not sure about it. In case of returning to Mexico, 72.20% plan to continue working. Of these 14 individuals, 85.75% would prefer to open a business instead of working for an employer. The rate for opening a business in Mexico was 66.70%, while the rate for those planning to open a business in the US was 44.40%. The preferred businesses for opening in Mexico were trade (42.85%), cattle raising (14.28%), carpentry (7.14%) and agriculture (7.14%).

Competence 10-Decision Making: Regarding the question related to their reason migrating from Mexico to the USA: 55.56% said poverty, while 44.44% affirmed the main reasons were lack of opportunities (11.11%), low quality of life (11.11%), unemployment (11.11%) and family reunification (11.11%). In response to the question about the reasons for returning to Mexico responses indicate: to join my family at 50%, to rest in old age at 11.12%, while 22.22% (5.5% each) answered: in case of getting an illness, in case a family member passes away, and affection to my country/culture and a good government; 16.66% did not answer.

Competence 11-Career Planning: The 77.80% of respondents said they planned to return to settle in Mexico, while 16.70% said they did not want to return, 5.60% did not respond. Of those who plan to return to Mexico, 38.90% think that they will do so as soon as they get their pension in the US, 11.10% believe that they will do it before obtaining a pension in the US, while 33.30% did not answer this question. For those answering the question: Where would you prefer to live in similar employment conditions, Mexico or US? 88.90% answered in favor of living and working in Mexico; while the rest said that they prefer to

live and work in the US. It is important to mention that Competence 6 and 9, Self-Management of Continuous Education and Entrepreneurship have a high correlation with Competence 11 Career Planning.

Competence 12 Capacity to Identify Conditions of Improvement: With regard to the support they would request or desire to obtain from the Mexican government, in case they decide to return to their country of origin, people responded as follows: Loans, counseling and economic support for starting a small business (38.80%), sources of employment (5.6%) and security (5.6%). The remaining 50.0% said they are not sure, that they do not need anything, or did not respond. When we asked about support requested from the Mexican government while working in the US, people responded as follows: Mortgage, financial support to start a small business in the US, legal advice for US pension procedures, issuance of official documents by Mexico and courier services between both countries, with 28.00% (5.60% each). The remaining, 50.00% did not respond, 16.70% said they do not need any support, and 5.60% said that they were not sure.

Observation of 12 Competencies Through Items' Assessment

Competencies and competency models are useful tools and assistive devices for managers of human resources through career exploration and development purposes of each job and group. Competency models focus on the current competencies required for each job. Competency models provide structure for designing the human resource management for any kind of organization. As Dubois (1993) noted, Competency models provide organizations the elements for job designs, hiring, performance, management, employee development, career planning or succession planning and compensation system. With settled results in this article, we can affirm that any investment that any organization makes in competency model development will have direct benefits for human resource management area and the whole organization.

Previous settlement is reinforced by the Vazirani's (2010, p. 129) theory which posits that "the knowledge and use of the information contained within a competency model and awareness of their individual competency strengths and weaknesses, individuals may manage the future job or career success, navigate their current chosen career pathway, or apply the information to examine new career opportunities". Since neither the Mexican government nor the American government, nor public or private institutions, have specific data on the competences of migrant Mexicans, the purpose of this research is to propose a 12 core competencies HRM Model, as well as to provide factors and standards that compose and define each competence, in the immigrants' job profile. Bearing this in mind, we designed an instrument, in questionnaire version, to examine factors and standards and their link to distinct core competencies. This characteristic of decomposition in factors that can be evaluated allows a clear identification of the profile of labor competencies possessed by subjects of a given sample. The Mexican immigrants' 12 Competency HRM Model was assessed through 80 items, from which 73 items are linked to its 12 core competencies and 7 items refers to demographic data. Being settled in Table 1, the 12 core Competencies result of present research are Academic training/profession, Adaptation to labor environments, Acculturation, Specialized equipment handling, Capacity to perform in conditions of risk or extreme effort, Self-management of continuous education, Communication in English language, Management of information and communication technologies, Entrepreneurship, Decision making, Career planning and Capacity to identify conditions of improvement.

With these considerations, 12 tables are shown in the Appendix. Each table shows the items that allow us to measure the factors that make up each of the 12 Competencies: Academic training/profession (Appendix A), Adaptation to labor environments (Appendix B), Acculturation (Appendix C), Specialized equipment handling (Appendix D), Capacity to perform in conditions of risk or extreme effort (Appendix E), Self-management of continuous education (Appendix F), Communication in English language (Appendix G), Management of information and communication technologies (Appendix H), Entrepreneurship (Appendix I), Decision making (Appendix J), Career planning (Appendix K) and Capacity to identify conditions of improvement (Appendix L). Subsequently, one more table with 7 demographic items is shown (Appendix

M). In the process of identification and assessment of the competences in the job profile of immigrants, it is recommended that future assessors order the items in the body of a survey as they are numbered in Appendix's section tables (A to L). This recommendation derives from the qualitative information observed in the behavior of the subjects in the pilot survey. We recommend that scholars or managers applying the survey include an initial section stating it is as an anonymous survey, describing its objective and purpose, stating the names of those responsible for the survey, and providing instructions on how to answer it. As can be seen, the importance of the results shown is that they are useful for the adequate management of Mexican migrant human resources available in the US through the identification of their job profile by professional competences.

CONCLUSIONS

Migration is a human resource matter. As such, migration may be addressed from the perspective of human resource management development. We followed this perspective in our present work and presented arguments following the assumption that capable human talent is valuable for all organizations. In that sense, and given one of the largest migrations floods between México and the United States of America (USA), there is a binational need to find and utilize human talent. We assume that migration is a natural and recurrent phenomenon that will not stop. As such, there is a need to define a broad and consensus-based migration agenda for both countries to find formulas and solutions to confront multiple challenges and opportunities caused by migration phenomenon, including those related to human resource management.

With this background and in the framework of human resource management theories, this research addresses the professional profile for the Mexican immigrants to the USA following a competency approach model. On that path, our primary finding is the identification of 12 core competencies to be considering in the job profile of Mexican immigrants to the USA. This finding is the result of sorting competencies (knowledge, skills and aptitudes) that allow an individual to develop a concrete activity or group of activities in a successful way. As a secondary result, we propose a survey instrument intended to assess factors related to each core competence. The job profile HRM competency-model we described in this research is a scientific results contribution to the field of management and its sub-discipline of human resource management. The findings of identifiable and measurable competencies constitute a reference for policymakers, civic leaders and the general public with the facts and figures needed to design policies and programs that increase the economic potential of immigrants in border labor markets (Beeson et. al., 2014).

Limitations

The main limitation of this research is the lack of precise and real data about indicators related to immigration from Mexicans to the US. A secondary limitation, and probably the most important impact on bias, is the perceived attitude of distrust, fear and segregation among Mexican immigrants, either documented or not documented, when we invited them to answer the pilot survey and survey. This occurred even when confidentiality and anonymity were assured. A small degree of response bias is to be expected. One could surmise that respondents who possess lower human capital capabilities are more likely to decline answering the survey. We cannot assume that this is the case. Future research with a larger sample would help alleviate any response bias concerns.

Future Research

The present contributions, as well as the information that can be provided through the future application of the Competency HRM Model survey, may be used as a parameter for researchers. The end goal of our research is that Mexican and USA governments, as well as other States, may utilize our model and allow the implementation of policies and programs for regulation of migration on both sides of the US-Mexico border according to a clear and measurable job profile.

APPENDIX

In this section 12 Appendices are shown. Each shows the items that allow us to measure factors that make up each of the 12 Competencies: Academic training/profession (Appendix A), Adaptation to labor environments (Appendix B), Acculturation (Appendix C), Specialized equipment handling (Appendix D), Capacity to perform in conditions of risk or extreme effort (Appendix E), Self-management of continuous education (Appendix F), Communication in English language (Appendix G), Management of information and communication technologies (Appendix H), Entrepreneurship (Appendix I), Decision making (Appendix J), Career planning (Appendix K) and Capacity to identify conditions of improvement (Appendix L). Subsequently, one more Appendix, with 7 demographic items, is shown (Appendix M).

Appendix A: Competence I: Academic Training/Profession

I. Academic Training / Profession

2. What is your job? _____

3. Where do you work? City: _____ State: _____

5. Had you work another profession/trade? Yes ___ No ___

6. If so, which? _____

7. Where? In Mexico ___ or USA ___

8. What completed studies do you have?
 Elementary School ___ Middle School ___ High school ___ Bachelor ___ Master ___
 PhD ___ Other ___ in which are your studies? _____

9. Where did you learn / studied your trade or profession? Mexico ___ USA ___

10. Who teach you that trade or profession? Teachers ___ Parents ___ Relatives ___ Friends ___
 Others ___ if so, who? _____

Authors 'own elaboration. This table shows 8 items that are used for assessment of Competence I, Academic Training/Profession.

Appendix B: Competence II: Adaptation to Labor Environments

II. Adaptation to Labor Environments

11. How long have you been working in the USA? _____

12. What are the ideal cities to work in the USA? (Named up to three)
 _____, _____, _____

13. Why? _____

14. How many times have you entered the USA? _____

15. In what year was your first entry? _____

43. Have you a driver's license?... American? ___ Mexican? ___ Both? ___

Authors 'own elaboration. This table shows 6 items that are used for assessment of Competence II, Adaptation to Labor Environments.

Appendix C: Competence III: Acculturation

III. Acculturation

(Short Acculturation Scale for Hispanic Youth (SASH-Y) took from Barona and Miller, 1994).

Answer next questions, circling the number that you most agree, according to the scale:

1 (very weakly identified) _____ 6 (highly identified)

- 44. How much do you identify with American culture? 1 2 3 4 5 6
- 45. How much do you identify with Mexican culture? 1 2 3 4 5 6

Answer next questions, circling the number that you most agree, according to the scale:

- 5. Only Spanish
- 4. Spanish better than English
- 3. Both equally
- 2. English better than Spanish
- 1. Only English

- 46. In general, what language (s) do you read and speak? 1 2 3 4 5
- 47. What was the language (s) you used as a child? 1 2 3 4 5
- 48. What language (s) do you usually speak at home? 1 2 3 4 5
- 49. In which language (s) do you usually think? 1 2 3 4 5
- 50. What language (s) do you usually speak with your friends? 1 2 3 4 5
- 51. In what language (s) are the TV programs you usually watch? 1 2 3 4 5
- 52. In what language (s) are the music you usually listen? 1 2 3 4 5

Answer next questions, circling the number that you most agree, according to the scale:

- 5. All Latinos/Hispanic
- 4. More Latinos than not Latinos
- 3. About half and half
- 2. More not Latinos than Latinos
- 1. All not Latinos

- 53. Your close friends are: 1 2 3 4 5
- 54. You prefer going to social gatherings/parties at which people are: 1 2 3 4 5
- 55. The person you visit or who you visit are: 1 2 3 4 5
- 56. If you could choose your children’s friends, you would want them to be: 1 2 3 4 5

Baronas’ and Miller (1994) Short Acculturation Scale for Hispanic Youth (SASH-Y). This table shows 13 items that are used for assessment of Competence III Acculturation.

Appendix D: Competence IV: Specialized Equipment Handling.

IV. Specialized Equipment Handling

- 16. What equipment do you use to do your work? _____
- 17. What machines do you use to do your work? _____
- 18. What tools do you use to do your work? _____
- 19. What instruments do you use to do your work? _____

Authors’ own elaboration. This table shows 4 items that are used for assessment of Competence IV, Specialized Equipment Handling.

Appendix E: Competence V: Capacity to Perform in Conditions of Risk or Extreme Effort.

V. Capacity to Perform in Conditions of Risk or Extreme Effort

20. What is your work schedule, normally?
 Monday-Friday ___ Monday-Saturday ___ Monday-Sunday ___ Other ___ if so, which? _____
 From _____ am/pm To _____ am/pm
21. In carry your work duties, do you have face risks or need to use extreme efforts? Yes ___ No ___
22. What type of risks? _____
23. What type of extreme efforts? _____
24. In carry your work duties, do you have face stress? Yes ___ No ___
25. if so, which level of labor stress? Minimum 1 ___ 2 ___ 3 ___ 4 ___ 5 ___ Maximum

Authors 'own elaboration. This table shows 6 items that are used for assessment of Competence V, Capacity to Perform in Conditions of Risk or Extreme Effort.

Appendix F: Competence VI: Self-Management of Continuous Education.

VI. Self-Management of Continuous Education

26. Have you had the opportunity to study in the USA? Yes ___ No ___
27. if so, what? _____
28. Would you like to study or take a class? Yes ___ No ___
29. If so, where would you like to take it? Mexico ___ USA ___
30. What studies or classes interest you? _____

Authors 'own elaboration. This table shows 5 items that are used for assessment of Competence VI Self-Management of Continuous Education.

Appendix G: Competence VII: Communication in English Language

VII. Communication in English Language

31. Do you speak English? Yes ___ No ___
32. Do you read English? Yes ___ No ___
33. Do you write English? Yes ___ No ___
34. Have you taken English classes? Yes ___ No ___
35. If so, where? México ___ USA ___
36. Named the school/institution _____, City _____ State _____

Authors 'own elaboration. This table shows 6 items that are used for assessment of Competence VII, Communication in English Language.

Appendix H: Competence VIII: Management of Information and Communication Technologies.

VIII. Management of Information and Communication Technologies

37. Do you know how to handle computer programs? Yes ___ No ___
38. Which ones (name the most important ones, up to three)? _____, _____, _____
39. Do you use those computer programs in your work? Yes ___ No ___
40. Do you have an email account? Yes ___ No ___
41. Do you have a Facebook account? Yes ___ No ___
42. Do you have a smart phone? Yes ___ No ___

Authors 'own elaboration. This table shows 3 items that are used for assessment of Competence VIII, Management of Information and Communication Technologies.

Appendix I: Competence IX: Entrepreneurship

IX. Entrepreneurship

4. Are you self-employed? Yes ___ Not ___ If so, do you work for a small ___, medium ___ or large business ___?
57. Have you attempted or would you like to open a business in the USA? Yes ___ No ___
58. If so, what kind? _____ and Where? City _____ State _____
63. If you return to Mexico, would you intend to continue working? Yes ___ No ___
64. If yes, what would you do for work? _____
65. Would you like to start a business in Mexico? Yes ___ No ___
66. What kind? _____
67. Where? City _____ State _____
-

Authors' own elaboration. This table shows 8 items that are used for assessment of Competence IX, Entrepreneurship.

Appendix J: Competence X: Decision Making

X. Decision Making

62. If you had similar job's conditions and salary, where would you choose to work?
México ___ USA ___
70. What were the main reasons that made you migrate to the USA? (List up to three).

71. What reasons would make you return to your place of origin or to another city in Mexico?
(Name up to three).

-

Authors' own elaboration. This table shows 3 items that are used for assessment of Competence X, Decision Making.

Appendix K: Competence XI: Career Planning

XI. Career Planning

59. Do you plan to retire in the USA? Yes ___ No ___
60. Do you plan to return to Mexico to stay? Yes ___ No ___
61. In case you plan to return to Mexico, would you do it
before ___ after ___ you retire and get benefits or pension from the USA.
-

Authors' own elaboration. This table shows 3 items that are used for assessment of Competence XI, Career Planning.

Appendix L: Competence XII: Capacity to Identify Conditions of Improvement

XII. Capacity to Identify Conditions of Improvement

72. What kind of SUPPORT from the Mexican government or other institutions would you like to be offered if you were to reside in Mexico in the future?

73. And what kind of SUPPORT from the Mexican government or other institutions would you like to be available to you if you were to continue to reside in the USA?

74. Have you used the services of a Mexican Consulate in the USA? Yes ___ No ___
75. Have you used the services of a Mexican Migrant support Institute? Yes ___ No ___
76. Have you used the services of an American Migrant support Institute? Yes ___ No ___
-

Authors' own elaboration. This table shows 5 items that are used for assessment of Competence XII, Capacity to Identify Conditions of Improvement.

Appendix M: Demographic Data

Demographic Data

1. Where are you from? City: _____ State: _____
 66. What is your year of birth? _____
 67. What is your gender: Female _____ Male _____
 77. Do you have children? Yes ___ No ___
 78. And if so, how many? _____
 79. How many of your children were born in Mexico? _____ or in the USA? _____
 80. What immigration status in the USA do you currently have?
 Resident / Green card _____ DACA _____ Citizen _____
 Tourist Visa _____ Not documented _____ Other _____ if so, which? _____
 Prefer not to say _____

Authors' own elaboration. This table shows 7 items that provide Demographic Data.

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EVIDENCE ON EXPECTATIONS OF LUXURY VS NON-LUXURY CONSUMERS ON FACEBOOK LUXURY BRAND PAGES

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ABSTRACT

Luxury has been reluctant to Internet strategies due to its willingness to stay rare and exclusive. When it comes to social media, these brands rely even more on a concept of accessibility. However, luxury brands have more recently incorporated social media into their marketing strategies. Today, the majority of brands are present in social media. This raises the question of luxury brands follower expectations. On the basis of a literature review, a two-fold methodology including in-depth interviews with luxury consumers and a focus group with non-consumers, this research aims to identify the main expectations of luxury consumers and non-consumers on Facebook pages. The results identify the existence of two categories of persons regarding their expectations towards luxury brands Facebook pages: The “Facebook Enthusiasts” and the “Facebook Opportunists.” The identification of these two categories should help brands adapt the content of their Facebook pages.

JEL: M31

KEYWORDS: Luxury Brands, Facebook, Websites, Expectations

INTRODUCTION

In recent years, authors have investigated the paradox between luxury and internet. Luxury is characterized by an image of rarity and selectivity while the internet relies on a concept of accessibility. Luxury brands have been reluctant in their website adoption. In recent years, managers of luxury brands have significantly changed their opinion on the use of internet by integrating it directly into communication strategies (Geerts A. and Veg-Sala N., 2014). Nowadays, the use of the internet goes further. Luxury fashion brands have increasingly invested in social media. Currently, a majority of brands, including luxury brands are present in social media.

The community tools of Facebook, Twitter, Instagram, chat forums, web blogs are part of brands' strategy marketing (Phan M., 2011). The development of social media promised a new method of working for companies and brands that forced firms to seek new interactive ways of reaching and engaging their customers (Godey B. et al, 2016). Social media and mainly Facebook have become extremely popular. Facebook has 1.3 billion members worldwide. Social media provide marketers some opportunities to reach consumers in their communities and build more personal relationships with them (Kelly, Kerr, & Drennan, 2010). Some authors show that social media are the right platforms to find information for developing preferences about products/brands (Naylor, Lamberton et West, 2012). Customer ratings seems to have a strong effect on customers' preferences (Godey B. et al., 2016). The purpose of this paper is to understand the expectations of luxury consumers and non-consumers on the Facebook pages of luxury brands. On the basis of a literature review of the founding papers on these concepts, a two-fold methodology including in-depth interviews and focus groups is conducted. This led to the identification of 2 kind of audience for

luxury brands Facebook pages. The paper is structured as follow: the conceptual framework with the luxury sector, the luxury sector and Internet and the luxury sector and Social Media is detailed. Thereafter, the methodology is explained and the results of the 2 studies are described. A discussion of the main findings and the limit of the research are then presented.

LITERATURE REVIEW

The Luxury Sector

The luxury sector is constantly evolving (Lemoine, 2012). Over the past thirty years, the luxury-brand industry has experienced unprecedented growth: The global market for personal luxury brands was estimated at 224€ billion in 2015, delivering a healthy growth of 5% year after year (Bain and Company 2015). Luxury brand marketing has generated much interest from both academics and practitioners. The economic vision of the luxury brand was developed by Mc Kinsey (1990) who defined luxury brand as the top of the price pyramid, by category of products. Prices are appreciably higher to products presenting comparable tangible features. Rather close to this very pragmatic vision, Nueno and Quelch (1998) as well as Dubois and Laurent (1993) consider luxury brands in a descriptive way with concepts such as the functional utility, price and the socio-demographic characteristics (Geerts A., 2013). According to several authors (Roux and Floch, 1996; Castarede, 2004; Nyeck, 2004; Farhat and Khan, 2012; Kastiya S., 2016), luxury can be perceived as a way of life for some, a way of being, consuming and using all brands (Nyeck, 2004). They must have the values of unity, rarity and selectivity (Keller, 2009).

Literature has emphasized the existence of 3 levels of luxury: inaccessible, intermediate and accessible luxury (De Barnier et al., 2012). The inaccessible luxury is mainly dedicated to a certain elite of consumers. This category includes Haute Couture, High jewelry, Art, vehicles, yachts ... Intermediary Luxury relates also to the traditional sectors of luxury but with a slightly lower level of quality requirements, for example, clothing, luggages, accessories, watches, pens. Finally the accessible luxury, mainly dedicated to the middle class is linked to category of products which turns to be more accessible to consumers such as perfumes, cosmetics, spirits, gastronomy, leisure...

Disregarding the level of luxury, the brand belongs to, luxury brands must constantly try to develop while controlling their growth. Luxury brands face many paradoxes, between selectivity and diffusion, rarity and expansion (Bechtold, 1991, Roux, 1995; Nueno and Quelch, 1998; Heilbrunn, 2002). Luxury brands must highlight an elitist image, including a choice of selective communication (Chevalier and Mazzolovo, 2008), protecting their selectivity and allowing them to remain discreet. But the communication of luxury brands is also essential in order to increase their notoriety, to show that they exist, that they are present and strong. It is the same regarding the distribution of luxury goods (Kapferer and Bastien, 2008). The management of these paradoxes has been reinforced as luxury brands began to use Internet as a communication tool (Geerts and Veg Sala, 2014).

Luxury Brand & Internet

Some luxury brands have long been reluctant to use the Internet like Hermès or Chanel especially as far as distribution is concerned (Larbanet and Ligier, 2010). The Internet is an important part of brand communication strategies for ordinary consumer goods as well as luxury products (Dall'Olmo Riley and Lacroix, 2003). The Internet has specific characteristics. We note specifically the interactivity (Chaffey and al., 2003), the intelligence (Chaffey et al., 2003), the individualization (Chaffey et al., 2003), the speed and the accessibility. Consumers can easily find information about the brand at any time of the day and night, without even moving (Nyeck and Roux, 1997). The use of Internet is also a risky communication tool because there are the absence of contact (De Chernatony, 2001), and the loss of control (Viot, 2009; Okonkwo, 2009). These characteristics make the Internet an adapted channel of distribution and

communication to the mass audience (Okonkwo, 2009) and consequently we understand the reluctance of luxury brands to use it. Luxury brands represent uniqueness and exclusivity with a strong quality, premium pricing and controlled distribution and communication. However, luxury brands are supposed to be innovative and have to anticipate social evolutions including new trends like social media (Jin, 2012).

Luxury Brand & Social Media Marketing Activities

It has been demonstrated that consumers are spending more money online than ever before which makes the Internet a place where luxury brands must build a presence (Reyneke, 2011). This is especially true for luxury brand presence in social media, where many luxury brands managers might be concerned about the perceived risk for their exclusive brand image in a media such as Facebook, with its 1.3 billion members worldwide (Facebook, 2016). According to Kim and Ko (2010), social media can have a dramatic impact on a brand's reputation. This is why at first, most of the luxury brands were reluctant to use this technology. However the industry has come to consider technology as an opportunity rather than a threat. Unlike earlier predictions, social media do not negate positive brand reputation. Rather, interaction with customers via social media sites builds positive attention and even affection towards brands and stimulate customer's desire for luxury.

Today, traditional designer houses such as Louis Vuitton provide live broadcasting fashion shows on their blogs. Others like Gucci, Ralph Lauren, Chanel have developed I-phone applications in conjunction with Apple. Many luxury brand names create Twitter accounts or create a Facebook presence. Brands and consumers are communicating with each other without any time restriction or place restriction and thus old-fashioned one way communication is changed into interactive two way direct communication (Kim and Ko, 2012). Social media are a Pandora's box for luxury brands because they can serve as a virtual brand community (Muniz and O'Guinn, 2001) and a virtual anti-brand community (Krishnamurthy and Kucuk, 2009) simultaneously because of their versatile and unpredictable nature (Jin, 2012).

Luxury industry must provide values to customers in every possible way. For an effective communication with consumers luxury brands have tilted their eyes towards social media (Kim and Ko, 2012). Social media activities of brands provide an opportunity to reduce misunderstanding and prejudice toward brands. In fact, these platforms allow to increase brand value by creating a platform to exchange ideas and information among people online (Kim and Ko, 2012). The research of Kim and Ko (2012) shows that an advantage of social media is that publications on these platforms divert customers with free contents as well as social network activity. Activities on the brand social media platforms create interactions among users that can lead to the word-of-mouth effects. On social media, a luxury brands focus on hedonic values that can be reached by indirect brand experience. Balwani (2009) mentioned a number of luxury brands that have successfully used social media to engage customers. For example, Gucci has a growing number of followers on Facebook, with over 15 854 000 fans on its official Facebook Page (Facebook, 2016). The company continually updates the page, and introduces new content in the form of commentaries, photographs and videos about the brand in order to keep consumers engaged. The brand monitors the response to these updates each receives over 200 interactions in the form of "likes" and "comments". Gucci has managed to build a thriving brand community. Even though many of the Gucci fans might not be able to afford Gucci products, the Facebook fan page thrives on aspiration - the notion of "one day I'll be able to afford that" - is an integral part of any luxury brand's appeal (Reyneke, 2011).

DATA AND METHODOLOGY

The purpose of this paper is to bring about a better understanding regarding consumers' and non-consumer's expectations towards luxury brands Facebook pages. On one hand luxury brands consumers' perspective is analyzed and on the other hand consumers with an interest on luxury brands but not buying these kind of brands is investigated. In order to reach our objective a two-fold qualitative methodology has been set up.

First in-depth face to face interviews with luxury brands consumers have been conducted in 2016. Second a focus group has been organized in order to gather opinions of consumers who were actually fans of luxury brands without consuming them in 2017.

Study 1: In Depth Interviews with Luxury Consumers

Before carrying out the interviews, various research was performed (websites, scientific articles, books...) on the use of social networks by consumers and the luxury sector. This research allowed us to realize the interview guide used for conducting interviews. In order to gather exploratory information on the subject, individual semi-directive interviews were conducted (Jolibert and Jourdan, 2011). We favored a theoretical sampling to understand the phenomenon studied in different contexts. Regarding the 3 level of luxury identified in the literature, the sample was constructed by taking these 3 categories into account. Interviews were conducted with 2 consumers of Inaccessible Luxury, 2 consumers of Intermediary Luxury, and 2 consumers of Accessible Luxury. Results are presented in Table 1. The respondents consume luxury brands including Dior, Elie Saab, Chanel, Yves St-Laurent, Louis Vuitton, Ferrari, Porsche, Zenith, Rolex, Rado,).

Table 1: Luxury Consumers Participants in Interviews

Name	Profession	Luxury Brands Usually Bought	Fan of Luxury Brands on Facebook
Idil	student	<i>cosmetic</i> : dior, elisab	dior, chanel, balmain, astom martin, bmw i8, nuxe, zénith, rolex
Victorine	student	<i>cosmetic</i> : chanel, ysl, dior <i>leather goods</i> : celine <i>glasses</i> : d&g, rayban	d&g, louis vuitton, jérôme dreyfuss, burberry, chanel, ysl, aqua di parma
Elena	teacher (special education)	<i>leather goods</i> : louis vuitton, lancel <i>jewelry</i> : tiffany <i>clothing</i> : armani, hermès <i>glasses</i> : d&g <i>shoes</i> : chanel <i>makeup</i> : ysl, chanel, lancôme	balmain, vuitton, lancel
Céline	manager of a communication agency	<i>cosmetic</i> : guerlain, dior, armani, mk <i>jewelry</i> : rolex <i>cars</i> : ferrari <i>clothing</i> : lv, louboutin, armani <i>gastronomy</i> <i>luxury hotels</i>	ferrari
Fred	rental management	<i>clothing</i> : hugo boss, armani, lagerfeld et versace <i>jewelry</i> : rado, zenith, omega, porsche design <i>cars</i> : bmw, porsche, jaguar, range rover <i>gastronomy</i> <i>luxury hotels</i>	bmw, mercedes, zénith
Fabio	manager of several communication agencies	<i>cars</i> : ferrari <i>jewelry</i> : rolex <i>gastronomy</i> <i>luxury hotels</i>	rolex, ferrari, hublot

The Table 1 shows the respondents. Interviews were conducted with 2 consumers of Inaccessible Luxury, 2 consumers of Intermediary Luxury, and 2 consumers of Accessible Luxury.

To be part of the sample these respondents had to respect the following criteria: (1) Loving luxury products; (2) Consuming luxury goods; (3) Being a luxury page fan page on Facebook. The interviews, performed in the Spring 2016, lasted between 40 and 70 minutes and were carried out on the basis of an interview guide including main themes pertaining Luxury consumers' expectations on social media of luxury brands. The interviews took place at the respondent's residence. Each interview was recorded with the agreement of the respondents and transcribed. The interviews were analyzed and double coded by 2 different researchers to reveal emerging themes (Miles, Huberman and Saldana, 2014). A manual content analysis, according to a

categorical thematic analysis, was conducted. Table 3 (See Findings section) shows the interview guide used with luxury consumers.

Study 2: Focus Group on Luxury Brand Fans but Non-Consumers

The second part of the study is based on a focus group with 5 women and 4 men aged 21 to 30 years regrouped in Table 2 as a students or employee of the University. All were luxury brand non-consumers but active on Facebook and fans of luxury Facebook pages. The discussion took place in the buildings of the University of Mons in 2017. All participants had the opportunity to surf Facebook pages of their choices and some others suggested by the animator. To ensure a friendly atmosphere, small delicacies were offered. The interview guide covers several topics: the use of Facebook, their relationship with fan pages on Facebook, their relationship with luxury brands and three experiences on luxury brand pages. The focus group was filmed with the agreement of the participants. It was then transcribed and analyzed in terms of categorical thematic analysis. The Table 4 shows the interview guide on luxury non-consumers.

Table 2: Non-Consumers of Luxury - Participants in the Focus Group

Name	Sex	Age	Profession
Pierre	M	22	Student
Florine	F	21	Student
Julien	M	23	Employee
Maryline	F	21	Student
Cécile	F	26	Employee
Romina	F	29	Employee
Laure	F	24	Employee
Tristan	M	21	Student
Corentin	M	21	Student

This Table shows the respondents for focus group. All were luxury brand non-consumers but active on Facebook and fans of luxury Facebook pages.

RESULTS

Luxury Consumers

The topics presented in Table 3 were discussed with the respondents during in-depth individual interviews. Several authors (Roux and Floch (1996); Castarede (2004); Nyeck, 2004; Farhat and Khan, 2012; Kastiya S., 2016) note that luxury can be perceived as a way of life for some, a way of being, consuming and using. In fact, all luxury consumers interviewed think that luxury represents fairly similar characteristics, values and ideas. The respondents agree that luxury is a kind of exclusivity or rarity. Wearing something valuable gives them the sense of being part of a certain elite. These respondents have better self-esteem by wearing luxury goods. Luxury is also a passion for them. They are passionate about some brands and these are part of their life. Wearing luxury is also a guarantee of credibility. Some explained that arriving at a professional meeting with a beautiful watch or a beautiful car, allowed them to feel like a "serious person". *“Having a beautiful luxury watch sounds like being successful in life”* (Fabio, inaccessible and intermediary luxury); *“luxury is all about scarcity, what you do not see very often* (Céline, intermediary luxury); *“it’s the proudness to be recognized by the connoisseurs”* (Frederic, Inaccessible Luxury)

All respondents give importance to the atmosphere of the stores and the experience in the boutiques. *“The salespersons are there, it is more personal”* (Victorine, accessible luxury); *“when you enter the shop, you are being served... there is a service with the salesman or to pack the product, it is a precious moment*

(Frederic, inaccessible luxury). They all seem to be reluctant to buy luxury products on the Internet due to a lack of experience and sensoriality. All respondents see Facebook as a social tool and not as a commercial tool. However, Facebook must integrate marketing campaigns of luxury brands. In fact, Facebook allows users to create profiles and send messages with friends, family and brands.

Table 3: Interview Guide on Luxury Consumers

Interview Guide on Luxury Consumers
Luxury Brands
Why are you interested in luxury brands?
What do luxury brands mean to you? How do you qualify a luxury brand?
What is your favorite luxury brand?
Have you ever bought a luxury product? If so, what do you feel when you buy a luxury product?
How often do you buy luxury brands?
Do you buy your luxury products via internet sites?
Facebook
How do you use Facebook?
Are you a fan of one or more luxury brand pages? If so, which ones and why?
How often will you visit the pages you are Fan (on average)?
Why are you going to visit these pages? (Daydreaming, design of pages, beautiful photos, follow fashion, keep informed, ...)
What does it bring you to be a fan of a luxury brand page?
Do you often "like" the new publications?
What kind of publication are you sensitive to?
Have you ever commented on a publication posted by the brand? If so, can you explain that what was the type of publication and that what were your comments or reactions?
What are your expectations on these luxury pages?
Experiences on Luxury Fan Pages
<i>People will browse the Facebook page of Guerlain, Versace and Van Cleef & Arpels for 3-5 minutes. We will ask them to identify the elements they like the most and displease him the most. A discussion will follow to understand their expectations.</i>
Type of questions:
Do you like this brand? Why?
Did you like this page? Or dislike?
Did the language cause you a problem? Would you like the brand to post their articles or publications in another language?
Did you see videos? If so, what type?
Did you react to a particular post? If yes, explain.
Would you be tempted to buy after seeing the Facebook page? Explain
What were you waiting to see on this page?
<i>For Versace, we find a "buy" button on the page</i>
Did you notice the "Buy" button? What do you think?
Did you try to click on it? What is going on? (Refer to the website)
Would you be tempted to buy more easily with this button?
Why do you think the brand added this button on the page?

This Table 3 shows the interview guide used with luxury consumers. The interview guide includes the main themes pertaining to Luxury consumers' expectations on social media of luxury brands.

As far as luxury is concerned, the official websites remain preferred to the Facebook pages of the brand. Luxury consumers think the website is much more interesting than the Facebook page *“the Facebook page remains less attractive than the website because you stay in the Facebook environment”* (Elena, Intermediary luxury). They think that Facebook's universe tarnishes the image of Luxury and so they prefer to navigate on the official website. They indicate that surfing on the Facebook page of one of their favorite brands, they are looking for information about the brand's news, events they organize and new products *“I love watching the catwalk on Facebook, ... videos are important also, information on new products and advertising”* (Victorine, accessible luxury); *“I am not following brands on a regular basis I just have looked at the news for brands car”* (Fabio, Inaccessible luxury). All respondents believe that luxury brands must be on Facebook *“I am not sure that being on Facebook brings something to the brand but not being on it would be damageable”* (Frederic, Inaccessible luxury). Not finding the brand on Facebook is a sign of an old-fashioned brand. The brand must publish interesting elements related to its actuality. The text is not important to most of respondents. An image must be able to tell the story the brand wants to convey. The production videos of the product are very successful.

Given the price of the products, it is very important for the respondents to know the information about the manufacture of the product *“Luxury is about craftsmanship, showing the manufacture process of the product is really attractive and important”* (Frederic, Inaccessible luxury). It is important to note that Fabio (Inaccessible Luxury) highlights that he never shares the publication of the brand on his profile, because he has 2000 “friends” and he does not want them to know he is a consumer of this kind of brands. While Idil (Accessible Luxury) mentions that she reads comments made by other consumers on brands publication. Some brands like Versace has a "buy" button on their official page. This button returns to the website. *“I find this really interesting, it is easy to find the official website”* (Idil, accessible luxury); *“It’s a great idea! Even for luxury I think it is really interesting it is part of the web browsing process”* (Frederic, inaccessible luxury). Respondents seem to be favorable to this and think that brands should have this button.

Non-Consumers of Luxury Brands

The following topics presented in Table 4 were discussed with the respondents during the focus group. The respondents selected for the focus group are not luxury consumers for two main reasons: they could not afford them or they have other priorities at the moment. But, they declare to be fans of luxury brands Facebook pages. They indicate that luxury represents the dream. Luxury is associated with scarcity, product quality, specific know-how, great designers and originality. Luxury pertains also to expensive products. For non-consumers, luxury divides social classes and allows people to stand out and show their wealth. The brands that make them dream are Chanel, Dior, Rolex, Louboutin, Armani... The respondents think luxury is superfluous and not essential.

The results show that even if they could afford to buy luxury goods, none of them would buy them online. Indeed, they stress the importance of the atmosphere of the store, the advice, the human contact and the service that you can have in physical shops which are part of the product purchase experience. The ability to touch, feel and see the product is very important when it comes to luxury purchases. *Maryline: “I also think that going to the store is important because you pay a lot of money for a product and so you have to make an effort to get it. In the shop, there is a certain atmosphere that you will not find on the internet.”* Moreover, they do not trust the online purchase for such expensive products. They are afraid that the product will not fit with their expectations.

Table 4: Interview Guide on Luxury Non-Consumers

Interview Guide on Luxury Non-Consumers
Facebook
How do you use Facebook?
Are you a fan of one or more luxury brand pages? If so, which ones and why?
How often will you visit the pages you are Fan (on average)?
Do you often "like" the new publications?
What kind of publication are you sensitive?
Have you ever commented a publication posted by the brand? If so, can you explain that what was the type of publication and what were your comments or reactions?
What are your expectations on these luxury pages? (Daydreaming, design of pages, beautiful photos, following fashion, being updated, ...)
Luxury Brands
What do luxury brands mean to you? How do you qualify a luxury brand?
What is your favorite luxury brand?
Have you ever bought a luxury product? If so, how do you feel when you buy a luxury product?
Experiences on Luxury Fan Pages
<i>People will browse the Facebook page of Guerlain, Versace and Van Cleef & Arpels for 3-5 minutes. We will ask them to identify the elements they like most and displease him the most. A discussion will follow to understand what he really interests in this type of "Fan page".</i>
Type of questions:
Do you like this brand? Why?
Did you like this page? Or dislike?
Did the language cause you a problem? Would you like the brand to post their articles or publications in another language?
Did you see videos? If so, what type?
Did you react to a particular post? If yes, explain.
Would you be tempted to buy after seeing the Facebook page? Explain
What were you waiting to see on this page?
<i>For Versace, we find a "buy" button on the page</i>
Did you notice the "Buy" button? What do you think?
Did you try to click on it? What is going on? (Refer to the website)
Would you be tempted to buy more easily with this button?
Why do you think the brand added this button on the page?

The Table 4 shows the interview guide on luxury non-consumers. The interview guide covers several topics: the use of Facebook, their relationship with fan pages on Facebook, their relationship with luxury brands and three experiences on luxury brand pages.

The respondents mainly use Facebook to communicate with their friends and relatives. This tool also allows them to organize events and share files, photos or videos. Regarding the brands they follow on Facebook, they mainly use it to find stores, to know the address or the telephone number and the opening hours. They also pay attention to the opinions of people. They observe if the brand answers directly to messages posted by Internet users, which serves as a sign of credibility of the brand. *Corentin: "The customer feels involved because the brand answers him. Even if the brand remains a dream, the customer will feel flattered as he feels the brand value his comment."* Some even stress the fact that luxury brands should answer immediately to show that they offer a quality service.

Florine: "I think that with 375500 € necklaces, it is normal to have personalized answers of the brand."

It is interesting to note that respondents became fans of some luxury brand pages for a moment but do not follow them actively afterwards. For example, they mention that the posts of Guerlain, Versace and Van Cleef & Arpels had little "likes" in comparison with people who "like" the page. *Romina: "I think people like the reputation of the brand and not necessarily the info they give about this brand. It's the brand that harvests the most likes and not the posts."* According to most respondents, the benefits of being a fan of these kind of pages are to be informed about new collections and new products. They also value awareness of the brand events, advertising or celebrities who have endorsed the brand at the moment *"On the website you will have the new collection, on the Facebook page you will find event or special content which are really complementary to the websites."* (Pierre). Some of them think that posting the videos of product manufacture or storytelling videos helps to strengthen the links between the brand and potential customers. *Corentin: "I find the videos showing the product manufacture interesting especially for luxury brands. If they position themselves as a luxury brand, it is because they pay attention to details and they have to demonstrate that. The brands have to show why their perfume is better than another, from which regions the wood, or the pearls comes from ... This reinforce the feeling to be privileged being in the secret of the brand."* Most of them do not expect to find product prices on Facebook. This will be displayed later in the E-shop on the brand website. However, they do not seem reluctant if the brand is mentioned on Facebook. Surprisingly, most respondents are enthusiastic regarding the "buy button" present on certain Facebook brand pages. *Cécile "I find it interesting, it is well located on the page, much better than the website link!"* ; *Florine "It avoids to waste time and go directly on the official website"*. However, one of them stress the fact that *"the word "buying" is maybe restrictive and Facebook is not a brand catalog to me"* (Corentin).

Qualification of the Groups According to Their Level of Luxury

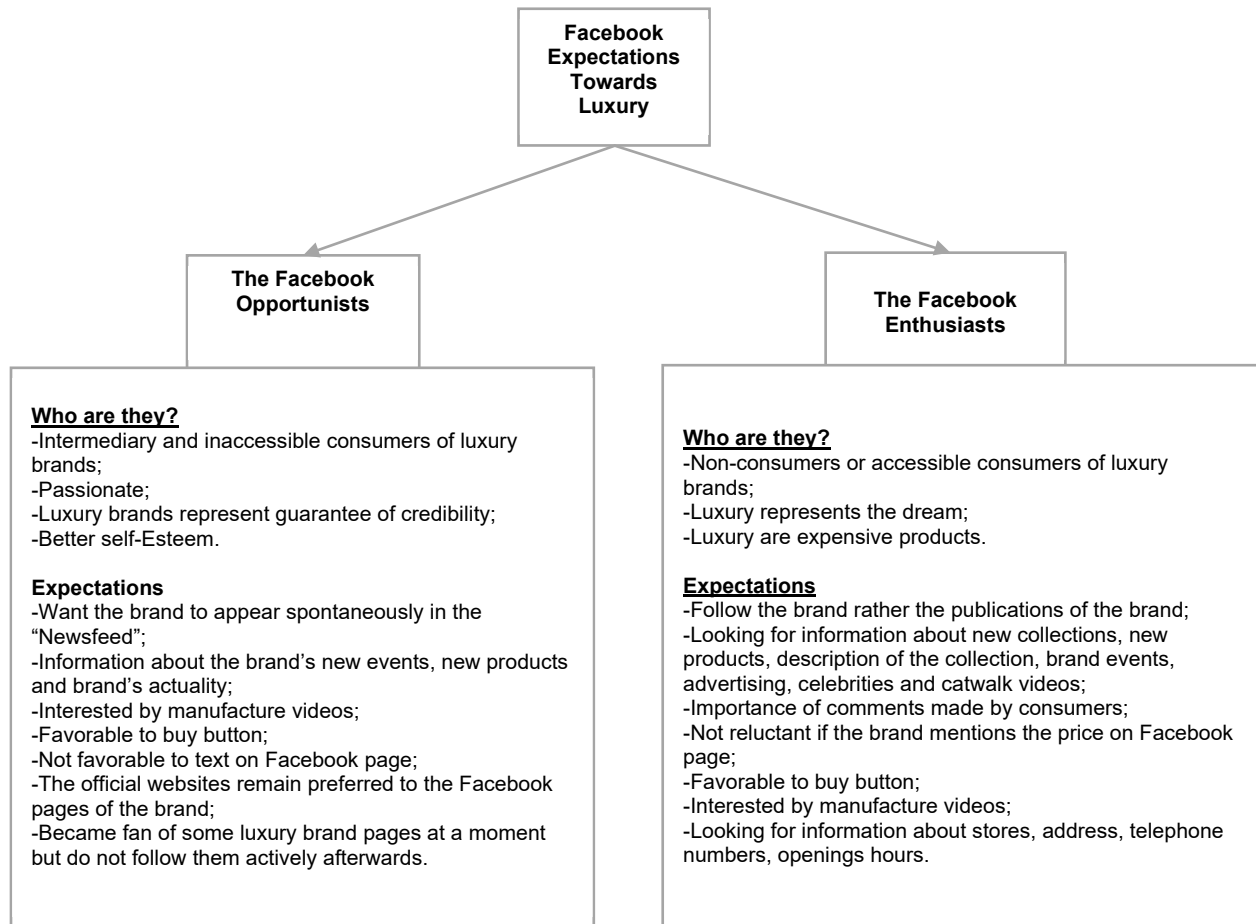
Due to the twofold methodology used in this research, the results show that consumers' reactions are heterogeneous when using luxury brands Facebook pages. According to the design of the research, two distinct samples were interviewed (consumers vs non-consumers). Consumers were also split into three categories according to the luxury level they buy. The result of this study led us to identify two categories of persons regarding their expectations towards luxury brands Facebook pages.

The first category identified is represented by the luxury fans but non consumers and the consumers of accessible luxury, this group are "the Facebook Enthusiasts". The second category is represented by the consumers of intermediary and inaccessible luxury and are called "the Facebook Opportunists". Among the Facebook Enthusiasts, it seems that non consumers and accessible luxury consumers show an interest in finding luxury brands on Facebook. This group expects to find information about the brand, the products, the price and advertising on Facebook pages. They particularly enjoy having access to catwalks and special events through videos, which are generally very private events. It is like having a VIP access to the brand. They are willing to have the opportunity to connect easily to the E-shop through the "buy" button even if they do not intend to buy anything online. They are using Facebook to dream and do not expect to find the same information on social media than on the website. It is a complementary tool according to them.

This could be explained by the "dream equation" of luxury (Dubois and Paternault, 1995; Kapferer and Bastien, 2008) which states that $Dream = -8.6 + 0.58 Awareness - 0.59 Purchase$. So Facebook would be used to make everyone dream and reinforced the "awareness" aspect of the equation to non-consumers and even accessible luxury consumers who are often related to excursionists buyers (Kapferer and Bastien, 2008). Regarding the group of Facebook Opportunist, inaccessible and intermediary luxury consumers' expectations are different. They largely prefer going directly on the website to find information about the brands, new collection, prices rather than on Facebook pages.

They think that luxury brands should be present on Facebook but they are not heavy users or fans of this media to keep the contact with the brand. They will not search on Facebook to find their favorite luxury brands news but still would appreciate if the brands publish news in their “Newsfeed”. When it comes to their expectations on luxury brands Facebook pages, they enjoy all the videos related to product manufacture or craftsmanship. However, they think that Facebook’s universe is always less attractive than the official website of the brand. It is interesting to stress that once they have liked a luxury brand page they do not return to check on it after if the brand is not present on the “Newsfeed”. They nevertheless seem to appreciate the “buy” button which gives direct access to the website and to e-shop. The figure 1 summarizes the respective expectations of both groups.

Figure 1: Expectations of Both Groups



CONCLUSION

The purpose of this paper is to understand the expectations of luxury consumers and non-consumers on the Facebook pages of luxury brands. A two-fold qualitative methodology was implemented by conducting in-depth interviews with luxury consumers and a focus group with luxury brand followers but not consuming these kind of brands. The results of this research follow previous work which highlights that there is not a single type of luxury consumers but many (Dubois and Laurent, 1996; Kapferer and Bastien, 2008). According to the expectations of each group, profiles appear and could enable brands to develop more suitable strategies according to different targets. In terms of managerial implications, the identification of these two categories should help the brand to adapt the content of their Facebook pages. Regarding the

target, they should consider the first category as the real target of their Facebook page. Brands should emphasize content towards the category of Facebook Enthusiasts they are really interested in by using social media with luxury brands. This helps them dream and reinforce the link with the brand. This approach fits with the Dream Equation Strategy: make everyone dream, be only accessible to a few of them (Kapferer and Bastien, 2008).

The brand should also develop special events to share on Facebook like catwalks but also videos displaying manufacture, or creation process to enhance the craftsmanship of the brand. This kind of content will also be appreciated by Facebook Opportunists even if they are not the first target of the Facebook pages. Finally, the study emphasizes that luxury brands should be on Facebook, the question should no longer be raised. Even if the heavy consumers are not heavy followers of the brand, both categories have stressed that it would be disappointing not finding the brand on this social media.

Despite many precautions, this research is not without limitations. First, although our research enabled us to uncover important dimensions of the phenomenon under study, its exploratory nature may have hindered other dimensions which could be highlighted in future studies. It would be interesting to further investigate the behavior of the brand on other social media like Instagram and the expectations of the consumers and non-consumers towards these other platforms. Finally, this research is conducted through qualitative methodology which aims to understand consumers 'perception. It would be interesting to complete this approach with managers 'opinion and the inherent brand strategy.

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CAN ACTIVE FUND MANAGERS BE REPLACED WITH EXCHANGE TRADED FUNDS?

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ABSTRACT

There is a long-standing debate about whether active investment management can outperform a passive benchmark, usually expressed as an index. The debate is usually considered on the manager-level, comparing the active management return of a particular manager against an appropriate index. This paper looks at the topic on a portfolio level. Using the average asset allocation of a large, private foundation, this paper replaces managers with exchange traded funds that invest in a similar strategy. For 2017 the average portfolio return of the average, large private foundation (the actively managed portfolio) produced an average return of 14.3% compared to the portfolio comprised of exchange traded funds (the passively managed portfolio) produced a return of 11.9%. The active portfolio outperformed the exchange traded fund portfolio across every broad asset class.

JEL: G11

KEYWORDS: Active Investing, Passive Investing, ETFs, Active Versus Passive Investing

INTRODUCTION

A popular and pervasive research topic in investing is whether the returns from active management can beat passive returns. Morningstar produces an annual report that compares active managers against relevant benchmarks. In 2016 the report stated that 26% of active managers beat their benchmark, and this increased to 43% in 2017. Conversely it can be said in 2016 passive management outperformed active management in 74% of the observations, and in 57% of the observations in 2017. These findings are not unusual, which usually leads to a discussion of whether active management is worth the fees. Most studies focus at the manager level – comparing the manager to a relevant benchmark. Largely these benchmarks are indices. In some strategies, such as private equity and other alternatives, the index is not investable. While still providing a comparison for determining performance, an index that is not investable does not provide an alternative investment option.

The underlying idea of passive investing is not that you invest in an index, but that you do not pay for management expertise. S&P calculates over 1,200,000 indices on a daily basis – there is most likely an index available for every comparison one would like to make. The large growth in exchange traded funds (ETFs) provides an investment option that allows the investor the ability to invest in strategies at a cost that is much less than active management and with none of the drawbacks of some index funds (the index is not investable, the fund created to mirror the index may not guarantee liquidity, tracking error may be considerable, to name a few). This paper looks at the issue a different way – instead of looking at the active/passive debate at a manager level it takes the average institutional portfolio and replaces all the active managers with ETFs. The ETFs chosen will be within the same strategy as the active manager that they are replacing, to fulfill that same strategy, then compares the return between the actively managed portfolio and the replacement portfolio made up of ETFs. This paper contributes to the literature by expanding the scope of how the research is conducted on the active/passive investing debate from the manager level to the portfolio level. This also opens up the possibility of future research looking at hybrid portfolios – those

that utilize some active management and some passive management, rather than using one or the other. These may also lead to more variations of optimal portfolio strategies.

As it turns out, the actively managed average portfolio outperformed the ETF portfolio in every asset class. This may be based on the process used in constructing the ETF portfolio. The results of this paper hopefully will spawn more research using average asset allocations from different studies (for example, the study of college endowments) and alternatives to using indices as the replacement for active management. This paper also provides ample opportunity for future studies to change some of the protocols in selecting the ETF replacement portfolio and to refine the results, and possibly come to differing conclusions.

The remainder of the paper is organized as follows: the next section is the literature review, where relevant papers are reviewed and discussed, providing examples of other ways the passive vs. active debate has been addressed, and provides a narrative for development of the section that follows, data and methodology. In data and methodology I discuss the process answering the researching question and from where the data is derived. In results and discussion I discuss the results of the empirical test, and in the penultimate section are the conclusions, followed by the final section which provides some concluding comments.

LITERATURE REVIEW

The investing literature is considerably broad when considering the active versus passive debate. A starting point for the review of the literature might be a consideration of why does this debate exist. For many investments there are passive index funds that are investable. Actively managed funds within the same strategy claim superior performance, and hence a rationale for paying manager fees. Research regarding whether active management outperforms passive investing is a good introduction. A series of papers developed this concept starting with a robust data set of institutional-quality equity managers Haber (2012) and found that equity managers consistently did not beat their benchmark on an annual basis over the 11 year period of the data. This was one way to consider the topic – during the 11 years of the study, how many years did the active manager outperform their passive benchmark. The study included 964 institutional-quality funds in 9 strategies. Only 2 actively managed funds beat the index each of the 11 years. This would imply that active management is not worth the fees and that investors are better off in low or no cost index funds. Crane and Crotty (2018) took a different approach.

They started by examining whether active management outperforms passive management not by looking at manager skill, but by looking at the dispersion of the passive performance. They found that there was dispersion in the passive index, which tend to overstate conclusions regarding active versus passive – the conclusions tend to be based on the assumption that any findings are due to the performance of active management (whether this relative performance was outperforming or underperforming) as opposed to the findings arising as a result of the dispersion of the passive performance. Malkiel (2003) found support for passive investing across all asset classes. Comparing the return of an active manager against a passive index on an annual basis and then summing annual wins and losses is one approach. Another is to consider cumulative returns. An investor is more concerned with the cumulative return than an annual win or loss. This was the basis for a follow-on paper by Haber (2013). A thought experiment went something like “if the active manager beat the index 10 out of 11 years they would be considered a failure, since they didn’t beat the index every year. But they could have beaten the index significantly each of the 10 years they outperformed, but slightly underperformed the year they failed to beat the benchmark. Would the investor be pleased or not?” On this basis Haber (2013) found that in the 9 strategies the cumulative active performance exceeded the cumulative passive performance over the 11 years by 84%, 78%, 80%, 79%, 69%, 77%, 94%, 79% and 90%. Significantly different results. Another way to think about the debate is to consider that if passive investing outperforms active investing, then passive investments should garner a majority of the investments, if investors were rational and knowledgeable. Sushko and Turner (2018) found that passive funds represented 43% of US equity fund assets, sizable, but less than one would expect. And

considering that many passive vehicles are used as a transient holding account for funds waiting to be invested, this percentage is likely substantially lower on a permanently invested basis.

There is contradictory evidence about whether active investing outperforms passive investing depending on how the research is conducted. Considering the research that finds that active investing outperforms passive on a cumulative return basis, a question arises as to don't the investors holding these funds know that? A common complaint among investing professionals is the difficulty in finding managers that outperform a passive index. Why do they experience something different? Haber (2013) looked at this dichotomy by considering that a cumulative return over 11 years is only relevant to the investor if they invested for the full 11 years. An investor new to a fund during this time, or one redeeming, would not experience the cumulative 11 year return but a cumulative return based a lesser number of years.

Suppose the 11 year return was driven by an abnormal positive return in one year –the cumulative 11 year return would be influenced by this abnormal, positive return, but not the returns for those entered after or left before. Other research has used the active/passive debate for additional conclusions. Haber (2015a) took the returns of active managers on a gross-of-fee basis and compared the returns to passive indices (no or low fee alternatives) and found that active management outperformed passive. The purpose was to then impute fees on the actively managed funds to determine at what level the fees change the outperformance to underperformance. This turned out to be 160 basis points. If active fund management has a fee lower than 160 basis points it will provide outperformance when compared to a passive index, on average. Leippold (2016), et al, considered the effect ETFs have on stock return correlations. As more vehicles have developed that hold individual stocks, this should have an effect on correlations. They found that prior to growth of ETFs correlations were largely driven by fundamentals, but since the growth of ETFs correlations are also driven by the trading activity in ETFs. Da and Shive (2016) found a similar result, that ETFs contribute to equity return comovement using a sample of 549 US equity ETFs and 4,887 Stocks over a seven and a half year period, Managers are put through a rigorous due diligence before being hired. Indices are not subject to the same scrutiny. One paper Haber (2015b) took the S&P 500 index and looked at its returns over 11 years as if it were the returns of a manager. The first three years the index was in the 2nd quartile, the next three years the index was in the 3rd quartile, in the 7th year the index was in the 4th quartile, and for the remaining four years the index was in the 3rd quartile. It is unlikely a manager would survive due diligence with this quartile performance.

A reasonable question could be whether ETFs are a good choice for an institutional portfolio. Fender (2003) notes that ETFs are highly liquid, can be bought quickly or sold short and have been able to replicate many strategies on a low cost basis. The literature provides a rich and robust archive of research that identifies a debate over whether active management can outperform a passive index on a manager level, and that ETFs have become an important investment vehicle. This paper takes a portfolio consisting largely of active management and replaces the managers with ETFs. The ETFs that were selected were designed to be low-expense and not an active manager within an ETF framework. This provides a meaningful and useful extension of the literature.

DATA AND METHODOLOGY

There are many publications that look at average portfolios of institutional investors. This paper will use the “2017 Study of Investment of Endowments for Private and Community Foundations” (the “Study”) prepared by a joint effort of the Council on Foundations and the Commonfund Institute. The Study divides the population into three size tiers, large (total assets over \$500 million), mid-size (total assets between \$101 and \$500 million) and small (total assets under \$101 million). The Study also further breaks down the respondents based on the type of foundation (private – independent, private – family, community). This paper will use large, private foundations as the baseline against which the passively managed ETF portfolio

will be compared. The Study included 23 private foundations where each held over \$500 million in investments. The average asset allocation of these private foundations are shown in Table 1.

Table 1: Asset Allocation

US Equities	22%
Fixed income	7%
Non-US equities	21%
Alternatives	48%
Cash, short-term	2%
Total	100%

This table shows the average asset allocation of a large, private foundation based on the broad asset class designations

The average foundation held 43% in equities (22% in US equities and 21% in non-US equities), 7% in fixed income, 48% in alternatives and 2% in cash and short-term investments. Roughly 90% of the portfolio was in equities and alternatives. The Study contained additional data to make more granular asset allocation decisions. Table 2 shows the composition of the allocation of 22% to US equities.

Table 2: Components of US Equities

Active	18.26%
Passive	3.74%
Total	22.00%

This table shows the components of the 22% allocation to US equities, which is 18% active, 4% passive

Most of the allocation to US equities was invested in active strategies (82% of the allocation to US equities (18% of the total portfolio) was held by active managers and 18% (4% of the total portfolio) was held in passive. Table 3 shows the composition of the allocation of 7% to fixed income.

Table 3: Components of Fixed Income

US Investment Grade (Active)	4.62%
US investment grade (passive)	1.96%
US non-investment grade	0.35%
Non-US investment grade	0.07%
Emerging markets	0.00%
Total	7.00%

This table shows the components of the 7% allocation to fixed income, which is 5% to US investment grade (active) and 2% to US investment grade, passive

Among the many possible fixed income strategies, only two were accessed by the average foundation in the study. Both were US investment grade fixed income investments, 71% of the fixed income allocation (5% of the total portfolio) was invested on an active basis and 29% of the fixed income allocation (2% of the total portfolio) was invested on a passive basis. Table 4 shows the composition of the allocation of 21% to non-US equities.

Table 4: Components of Non-US Equities

Active MSCI, EAFE	13.65%
Passive index MSCI, EAFE	1.68%
Emerging markets	<u>5.67%</u>
Total	21.00%

This table shows the components of the 21% allocation to non-US equities, which is a 14% allocation to a fund actively managed to an index (MSCI, EAFE), a 2% allocation to a passive index (MSCI, EAFE), and a 6% allocation to emerging markets

There were three strategies employed for non-US equity investing, active (66% of the allocation and 14% of the total portfolio), passive (7% of the allocation and 1% of the total portfolio) and emerging markets (27% of the allocation and 6% of the total portfolio). Table 5 shows the composition of the allocation of 48% to alternatives.

Table 5: Components of Alternatives

Private Equity	8.64%
Marketable alternatives	17.76%
Venture capital	8.16%
Private real estate	4.32%
Energy, natural resources	4.32%
Commodities and managed futures	0.96%
Distressed debt	<u>3.84%</u>
Total	48.00%

This table shows the components of the 48% allocation to alternatives, which is a 9% allocation to private equity, an 18% allocation to marketable alternatives, an 8% allocation to venture capital, a 4% allocation to private real estate, a 4% allocation to energy and natural resources, a 1% allocation to commodities and managed futures and a 4% allocation to distressed debt

The alternatives used were private equity (18% of the allocation and 9% of the total portfolio), marketable alternatives (37% of the allocation and 18% of the total portfolio), venture capital (16% of the allocation and 8% of the total portfolio), private real estate (8% of the allocation and 4% of the total portfolio), energy and natural resources (8% of the allocation and 4% of the total portfolio), commodities and managed futures (2% of the allocation and 1% of the total portfolio) and distressed debt (8% of the portfolio and 4% of the total portfolio).

To build the hypothetical portfolio this paper uses \$750 million as the amount of the ETF endowment. The Study had \$500 million as the minimum asset size to qualify for the largest class, but did not present the average size investment portfolio for the private foundations included in this largest class. Given that the average asset size for the group in this class has to be larger than \$500 million, an increase to \$750 million to represent an estimate of the average would seem to be reasonable.

In selecting the number of managers to be used for any allocation, a useful heuristic is that no manager can represent more than 5% of the portfolio. Therefore, the maximum amount placed in any ETF could not exceed \$37.5 million (\$750,000,000 x 5%). Depending on the allocation to the asset class this means that often more than one ETF had to be selected for certain asset class allocations.

From Table 2: Components of US Equities the allocation to active strategies was 18.26%. This percentage times the portfolio value of \$750,000,000 provides an allocation of \$136,950,000. With a limit of \$37,500,000 per manager, it will take 4 managers to fill out this strategy. So \$136,950,000 divided by 4 produces an allocation of \$34,237,500 to each of the 4 managers. This procedure was then followed for each of the allocations. The granular asset class allocation is shown on Table 6.

Table 6: Granular Asset Allocation

US Equities	165,000,000
Active	34,237,500
Active	34,237,500
Active	34,237,500
Active	34,237,500
Passive	28,050,000
Fixed income:	52,500,000
US investment grade (active)	34,650,000
US investment grade (passive)	14,700,000
US non-investment grade	2,625,000
Non-US investment grade	525,000
Emerging markets	0
Non-US equities:	157,500,000
Active MSCI, EAFE	34,125,000
Active MSCI, EAFE	34,125,000
Active MSCI, EAFE	34,125,000
Passive index MSCI, EAFE	12,600,000
Emerging markets	21,262,500
Emerging markets	21,262,500
Alternative investments:	360,000,000
Private equity	32,400,000
Private equity	32,400,000
Marketable alternatives	33,300,000
Marketable alternatives	33,300,000
Marketable alternatives	33,300,000
Marketable alternatives	33,300,000
Venture capital	30,600,000
Venture capital	30,600,000
Private real estate	32,400,000
Energy, natural resources	32,400,000
Commodities and managed futures	7,200,000
Distressed debt	28,800,000
Cash, short-term	<u>15,000,000</u>
Total	750,000,000

This table shows the dollar allocation to the various asset classes

The next step was to fill the slots with ETFs. Using the E*TRADE platform, all the ETFs offered were downloaded. The first step was to eliminate any return information. Since this paper is comparing 2017 returns and those returns are already known, all return information was eliminated to remove the bias in selecting better performing managers. The list was then sorted by fund category (strategy). In order to use only passive ETFs and not actively managed funds marketed in an ETF format, all funds with an expense ratio of greater than 0.19% (19 basis points or bps) were eliminated. For allocations denoted as passive, the ETF chosen was an index-replication strategy. Because some strategies were represented by many ETFs the one (or more) chosen was based on using Morningstar rankings and whether they were considered “All Star ETFs.” When there were multiple managers to be selected (such as the 4 managers needed for the active US equity allocation) a variety of strategies were chosen. For the 4 US equity ETFs, the strategies chosen were mega- cap growth, large cap value, mid-cap value and mid-cap growth. For the active non-US equities all three of the ETFs chosen were large blends because of a lack of differentiation available. The 2 emerging market equity ETFs were both listed as diversified, again due to a lack of availability of a more granular strategy.

Selecting alternative investment ETFs was difficult using the E*TRADE platform. There were limited choices, and often the expense ratio was near active management pricing (200 bps). Doing an internet search turned up potential matches, but none that met the less than 20 bps threshold. Therefore, for ETFs replacing alternative allocations, a higher limit of a maximum of 79 bps was used. Given the illiquid nature of many alternative asset strategies (such as private equity, real estate, private real estate, venture capital) some of the ETFs may not be as close a replacement as one would have liked. After the asset allocations within the replacement portfolio were populated with ETFs the returns were calculated.

RESULTS AND DISCUSSION

The ETF portfolio produced a return of 11.94%. This compares unfavorably against the Study return of 14.30%. The return calculation is detailed in Table 7.

Table 7: Return Calculation

		2017	01/03/17	12/29/17
	EFT	Allocation	Net Return	Open
				Close
US equities:		165,000,000	18.39%	
Active	MGK	34,237,500	27.15%	87.56
Active	VYM	34,237,500	12.33%	76.23
Active	VOE	34,237,500	13.88%	97.97
Active	VOT	34,237,500	19.96%	106.47
Passive	VOO	28,050,000	18.68%	206.68
Fixed income:		52,500,000	1.86%	
US investment grade (active)	VCIT	34,650,000	2.27%	85.45
US investment grade (passive)	BIV	14,700,000	1.23%	82.81
US non-investment grade	VMBS	2,625,000	0.17%	52.35
Non-US investment grade	BNDX	525,000	0.50%	54.10
Emerging markets		0	0.00%	
Non-US equities:		157,500,000	25.02%	
Active MSCI, EAFE	IEFA	34,125,000	22.71%	53.86
Active MSCI, EAFE	IXUS	34,125,000	24.20%	50.79
Active MSCI, EAFE	VEU	34,125,000	23.05%	44.47
Passive index MSCI, EAFE	VXUS	12,600,000	22.94%	46.21
Emerging markets	VWO	21,262,500	26.89%	36.18
Emerging markets	IEMG	21,262,500	32.60%	42.91
Alternative investments:		360,000,000	5.26%	
Private equity	BDCS	32,400,000	-8.95%	22.80
Private equity	BDCL	32,400,000	-18.12%	20.09
Marketable alternatives	MNA	33,300,000	5.65%	29.39
Marketable alternatives	QAI	33,300,000	6.03%	28.71
Marketable alternatives	PBP	33,300,000	0.56%	21.33
Marketable alternatives	MRGR	33,300,000	1.71%	35.65
Venture capital	IPO	30,600,000	35.49%	20.82
Venture capital	IWC	30,600,000	10.96%	86.26
Private real estate	USRT	32,400,000	1.99%	48.64
Energy, natural resources	VAW	32,400,000	20.60%	113.35
Commodities and managed futures	GSP	7,200,000	5.79%	14.69
Distressed debt	ANGL	28,800,000	3.85%	28.84
Cash, short-term	VGSH	<u>15,000,000</u>	-0.63%	60.66
Total		750,000,000	11.94%	60.28

This appendix provides details on the calculation of the replacement portfolio return. For the year the return was 11.94%, with US equities returning 18.39%, fixed income returning 1.86%, non-US equities returning 25.02%, alternative investments returning 5.26% and cash and short-term investments losing 0.63%

A comparison of the broad asset class returns shows that the Study was also superior in each asset class return. Table 8 compares the returns shown in The Study against the returns of the ETF replacement portfolio.

Table 8: Return Comparison

Asset Class	ETF Portfolio	The Study
US equities	18.39%	21.50%
Fixed income	1.86%	3.80%
Non-US equities	25.02%	28.20%
Alternative investments	5.26%	9.80%
Cash, short-term	-0.63%	0.80%
Total	11.94%	14.30%

This table compares the returns of the two portfolios, in total and by asset class. The average portfolio in The Study outperformed the ETF portfolio

The returns in The Study outperformed the ETF replacement portfolio in total return, as well as in every asset category. The process for selecting ETFs for the replacement portfolio was a process that, at best, could be described as “naïve.” A more typical process would have involved reviewing past returns, examining lead portfolio manager succession plans, governance ratings, reviewing risk management procedures, consideration of volatility and other steps that usually would be performed during an initial due diligence process. None of that was done in selecting the ETF portfolio. Using the Morningstar rating and whether or not the ETF was classified on the E*TRADE site as an “All-star ETF” was the sole selection criteria among ETFs in a given strategy.

Once the ETFs populated the asset allocation the annual return was applied to the allocation for the individual ETF. There was no rebalancing or the use of monthly returns, only annual. Lastly, the data set for private foundations over \$500 million was small and seemingly varied. Reviewing the names of the private foundations that responded to the survey shows great diversity in size, geography and how they manage their portfolios, even though this portion of the survey had only 23 respondents. Areas for additional research include using prior returns as a basis for choosing ETFs, considering more factors in the return calculation (monthly returns, rebalancing), extending the time frame beyond one year, using a study with more respondents and doing a similar procedure with college endowments. The last, and probably most important limitation is that this paper covers a single year. For many reasons that makes the results applicable to only 2017 and not generalizable to other periods.

CONCLUSION

This paper provides a different approach to the question of whether active investment management can beat a passive benchmark return. Using the average asset allocation of a large foundation, as shown in the study conducted by the Council on Foundations-Commonfund (2017), each of the managers was replaced with an ETF fund that followed a similar investment strategy. The ETFs chosen came from a list of ETFs available on the E*TRADE platform. Since the comparison was for a prior year, and the relevant returns for the ETFs are known, it was important in the design to ensure that no bias was introduced by selected ETFs that had performed better. No return information was used, even for prior years. The only differentiation and selection protocol used when there were multiple, suitable ETFs was to select those with a higher Morningstar rating and/or a designation of “All Star ETFs.”

The average foundation portfolio outperformed the ETF replacement portfolio on an overall basis (14.30% versus 11.94%, as well as in each broad asset class (US equities, Fixed Income, Non-US equities,

Alternative investments and Cash, short-term). One of the limitations of this paper is that the ETF portfolio was “naïve.” Conventionally when a portfolio is selected prior returns are a critical metric used in the decision process. This paper could have used the 2016 and earlier returns to select the ETFs to be used. This is an area for future research. The results show that active management can outperform a passively managed portfolio, given the limitations in assembling the passively managed portfolio. That assumes the foundations included in the Study (whose average asset allocation and returns provided the comparison) are representative of the foundation community as a whole. If there was bias in which foundations provided data to the study (such as only better performing foundations chose to be included) then the results are not generalizable. Another limitation is that a one-year result can be an anomaly for one of many reasons. An area for future research is to conduct the study over a longer time period. This would provide a useful extension of this paper.

CONCLUDING COMMENTS

The debate over whether active management can outperform a passive index is long-standing, with support for both sides of the argument. The topic has proven to be a rich one for research, offering a multitude of approaches. Typically, the research has been focused at the manager level, comparing managers against appropriate indices. This paper takes an entire portfolio and replaces the managers with ETFs. Further, the ETFs were chosen without any of the normal due diligence and risk management procedures performed. Further research should select EFTs with a more typical process (reviewing prior returns, news feed searches for enterprise information of the ETF, strategic combining of ETFs with other vehicles, as well as possibly retaining some active management in those limited allocations where there isn’t a suitable alternative.

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