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## How Artificial Intelligence (AI) Write the Personalized Communications of Financial Reports Automatically with Responsible Innovation Combining with Trust & Respect

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**Abstract:** *As monetization strategies shift from neatly defined, one-time purchases to subtler long-term relationships that are built on a combination of ongoing product and service-based cash flow, financial professionals need to define a distinct and automatable process for generating innovative, accurate, clear and thorough financial reports combining elements of trust and respect intact.*

**Keywords:** *Financial Reports, Artificial Intelligence, Personalized Communications.*

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### I. INTRODUCTION

Nowadays the industry, which has been hurt after the financial crisis, is being faced with numerous challenges such as regulation, Fintech, Internet-enabled business models, non-financial players, liquidity etc. being literally in the verge of disruption. In that respect, the discussion around the financial industry activities becomes topical especially in the eyes of the global financial crisis and in relation to the evaporated public trust in financial institutions threatening their legitimacy. There are companies into analytical tools which are focusing on empowering the actual Business Users, who can get the data which they want besides having no knowledge of data science or analysis (Coker, 2014). Developing both your human relationship and technical skills is important if you want to excel in any endeavor. Focus too much on the technical, and you risk losing touch with what causes people to listen to you. Focus too much on sales and communication, and you risk becoming an empty shell - maybe a pretty shell, but with nothing valuable inside.

Open innovation, or innovation with ultimately no boundaries, has become one of the main managerial buzzwords, experiencing an unprecedented research trajectory. However, we still see that it has not yet become a permanent practice, mainly due to the fact that it brings an entirely different logic that is causing fundamental changes in the structure of the business, changes that many organizations are not ready to face (Computer World, 2013).

### II. FINANCIAL COMMUNICATION

It could be extremely helpful to dedicate an Artificial Intelligence system to postulating, simulating, and analyzing the relative merits of alternative economic models/monetary systems. Financial communication is maintaining the investor or buyer interest. Investor relation has a big role in the financial communication because the client<sup>1</sup>, shareholder, and stakeholder are dealing with them.

Now the question becomes, how can financial statements auditing be performed solely through artificial intelligence? The most intelligent man of the 20th century, Albert Einstein is hard to imitate. Einstein is known for his intellectual ability and ability to solve seemingly intractable problems. In the film A.I.: Artificial Intelligence, he was portrayed as a holographic personality called

Dr. Know (Wolfe, 2001). Einstein's method was fundamentally innovative: it aimed to push cognitive limits of the human being, to train the mind to be a powerful tool for analysis and at the same time very flexible.

Eventually, sending out requests, viewing invoices or payments are made possible in form of these personalized automated financial reports which are bound to include cognitive elements of trust and respect based on Einstein's method.

Furthermore, it is also deep to understanding because it depends on the current environment around individual, cultural and organizational readiness. For instance, here is one potential scenario where Artificial Intelligence algorithms will impact your life and will you even be aware or know: Your application for a mortgage or financial service is automatically declined by an Artificial Intelligence process simply based on automatic inputs it derived from your existing financial accounts and information across banking networks. Such a situation is dealt with Monte Carlo methods in Finance (Carmona, Del Moral, Hu, & Oudjane, 2012).

### **2.1 Artificial Intelligence help write personalized communications of financial reports automatically**

Like other sectors, financial sector too is seeing the emergence of Artificial Intelligence. As for the problems could Artificial Intelligence solve in Financial Services, it can be used to the simulation of a simulation and analysis purposes (Harper, Grow Financial Services Business Sales through a CRM Software, 2017). They can read, review and analyze vast quantities of disparate data, provide insight into how customers feel about a company's products or services and why they feel the way they do. Hence, helping to better the efficiency of operations with responsible innovation combining trust and respect.

In newer organizations, the metrics that are the source of the "data" are often under construction or maybe even wrong. For example, some B2B startups obsess about call counts and talk-time but downplay or ignore the results-ratios of those things. So their "data" will lead them astray more often than not. This is only preventable via human wisdom applied to the raw numbers (Rajarshi Das, 2001).

### **2.2 Many principles of artificial intelligence are used in Algorithmic trading**

Artificial Intelligence technologies can follow, interpret news, trends and compare it with statistics from tons of data sources. This is extremely helpful to determine the performance of a stock or an investment tool, and take action accordingly. A very successful use of Artificial Intelligence in the financial industry is the story of Jim Simmons, who made Billions by applying AI and machine learning techniques to crack the secrets of the stock market (Simons).

On April 23, 2013, a fake tweet appeared on the AP Twitter account, which has more than 1.9 million followers:



**Figure 1: A good Example Where Things Went South**

The Dow Jones Industrial Average plummeted, falling more than 150 points. The price of crude oil fell, then climbed back. The yield on the benchmark U.S. government bond, the 10 real-year Treasury note, briefly dropped as traders shift money into low-risk investments.



Figure 2: The Initial Reaction Came From Bots that Had Interpreted the Tweet, and Instantly Started Selling

### 2.2.1 Follow the ‘Expectancy Principle’

Investment is not like gambling. A good investor should rely on a calculated expectancy in order to certainly profit from his strategy. It is also important to be clear about whether you are investing for fun, or for profit. ‘Growing wealth’ is a science that is based on the fundamental principles of mathematical expectation. Financial services firms can use machine learning to enhance their investment research. Firms can analyze foot traffic at an individual set of retail stores or compare the current number of hours worked at a manufacturing company to the last week or quarter in real time to identify what a company’s performance might look like before it’s announced (Preis, Paul, & Schneider, 2008). This applies relying on a systematic and analytical investment plan. Any other strategy will not give you the confidence to eventually profit.

### III. EVERY BUSINESS IS OUT THERE TO MAKE A SALE

The usual methodology of defining one’s target audience has changed, mainstream social science research has long since stopped relying exclusively on statistical significance, which can be strongly influenced by sample size. Instead, most consumer reports now supplement tests of statistical significance with reliance on effect size, the interpretation of which is independent of sample size, for example, social media insights, website traffic are considered modern day indicators.

### 3.1 Endless Possibilities with Power Business Intelligence

Imagine being able to access all your data everywhere, being able to view the data in different visualizations, analyze and drill into the data, drag and drop to create new reports and dashboards that you can share, have it automatically refresh, type in questions in natural language, get out of the box reports in seconds with content packs, build reports with a tool that does a lot of the work for you, and have all this updated constantly by Microsoft and community input.

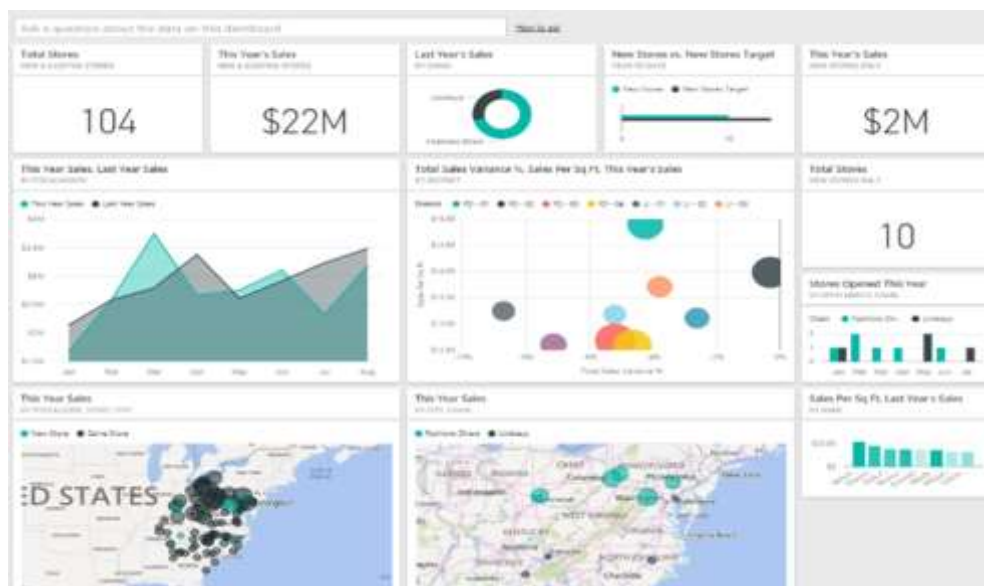


Figure 3: All (above) is Possible through Power BI

### **3.2 Due to a Financial Communication Tool**

A due is an accounting tool designed to help business owners keep track of their finances, especially when tax season rolls around. This program (Hendricks) is meant to be a complete accounting solution and is filled with features that take care of automating virtually every part of the business's financial records.

### **3.3 Evaluating Tech to Automate Revenue -Recognition**

Revenue recognition is a core component of accrual-based accounting. Revenues (and expenses) are recognized at the time when they are considered delivered and not necessarily when cash is received. It sounds simple, but in practice can be challenging to determine what has been committed, how much, and when revenue should be recognized (go Transverse).

## **IV. CONNECTING CRM DATA AND SALES**

There are not enough data scientists in the world, so Salesforce relies on automation and an application-centric approach to bring Einstein's artificial intelligence capabilities to the public. The use of a CRM, according to Salesforce research, dovetails closely with increased sales. Salesforce reports that a CRM can increase sales by up to 29 percent. However, an increase in sales is not the only improvement a CRM offers. Turning to Salesforce data once again, the research shows that sales productivity may rise by up to 34 percent through the use of a CRM, and the forecast accuracy of sales grows by some 42 percent (Harper, Connect Salesforce to Your Phone System Now). Only due to personalized financial communications such as user friendly invoices and easy to understand Taxing templates.

## **V. WILL THE AI PROCESS MAKE THE RIGHT CHOICE, THE ETHICAL CHOICE IF NEEDED?**

Take for example the case where we need to figure out the best way to automatically track financial purchases of elderly family members. If you have a joint banking account with your parents and if you jointly share their credit cards (especially AMEX) one can set "trigger values" on line so that you will receive an e-mail anytime the trigger value is met (Chugh, 2013). However, that requires (due to privacy issues) a Joint account for everything. This is where responsible innovation combining trust and respect comes into play.

## **VI. CONCLUSION**

The financial industry, the locomotive of worldwide economic and business activities, despite its foundational importance and contribution to the worldwide economy, depicts an inherent difficulty to celebrate the personal and collective freedom that allows innovation to flourish, both due to trust and respect factors. This concern is turning into an opportunity while artificial intelligence taking control of personalized financial communications in technically innovative and morally bankable ways.

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