

# BRINGING MACHINE LEARNING TO FINANCIAL SERVICES

INNOVATING BANKING AND FINANCIAL SERVICES



**FINBOTS**<sup>™</sup>  
BY STRAITSBRIDGE

## OVERVIEW

In line with Intelligent Automation and Data Science; Machine Learning has made its way to the financial services sector carving a niche for itself amongst other emerging technologies. In this brochure, we explore how Machine Learning now plays an integral role in the financial ecosystem.

## Machine Learning Tools

# CURRENT AI TOOLS FOR FINANCIAL SERVICES

1. Annual report parser
2. Market News – Data harvest to extract meta data
3. Financial Markets Analysts report

## APPLICATIONS USED :



## ANNUAL REPORT PARSER



Annual reports



Machine Learning tools



Data Extraction

Variable	Current	Historic	Quantum	Currency
Sales revenue	3501.008	3617.223	Billion	JPY
Cost of sales	(2736)	(2789.6)	Billion	JPY
Selling, general and admin...	(380.3)	(497.167)	Billion	JPY
Research and development	(176.2)	(167.371)	Billion	JPY
Total operating costs and ...	(3293)	(3454.1)	Billion	JPY
Operating profit	207.685	163.079	Billion	JPY
Share of profit of investme...	49.129	45.097	Billion	JPY

Natural Language Commentary

\*In 2016Q3 Operating profit is increased by 44,606 BJPY , up by 27.35% compared to 2015Q3 value 163.079 BJPY

\*In 2016Q3 Profit for the period is increased by 47,357 BJPY , up by 34.04% compared to 2015Q3 value 139.121 BJPY

\*In 2016Q3 Basic and diluted is increased by 24.76 JPY compared to 2015Q3 value 68.91 JPY

Natural Language Commentary

# NEWS FEED – DATA GATHERING

The screenshot shows a news feed interface with a navigation bar at the top (All, Nordics, BSE 60, DAX 30, S&P 100, US, EU, JP, FR) and a heartbeat indicator. The main content is divided into two sections: 'Corporate Events' and 'Earnings/Calendar'.

**Corporate Events:** A report titled 'Outokumpu – Tulokset ja tohtamishjelmat etenevät' (Outokumpu – Results and investment programs progress) dated 15:24:59.490. It includes a summary and a detailed text block starting with 'Outokumpu – Tulokset ja tohtamishjelmat etenevät' and 'OUTOKUMPU OY J OSAVUOSIKATSAUS 29.4.2014 klo 9.00'. The text discusses the company's performance in Q1 2014, mentioning revenue growth and operational improvements.

**Earnings/Calendar:** A table showing earnings data for 'Alfa Laval | Q1' and 'Cargotec | Q1'. The table has columns for 'Actual', 'Prev', and 'Vi' (likely 'V' for 'Verrattava' or similar). The data includes metrics like 'order intake', 'net sales', 'profit before tax', 'EBITDA', 'operating profit', 'profit after tax', and 'EPS'.

Unstructured Data from Reuters Bloomberg (etc)

Automatic structuring

# FINANCIAL MARKETS ANALYSTS REPORT



Announcements steps initiated in various forums

Email regarding funding status

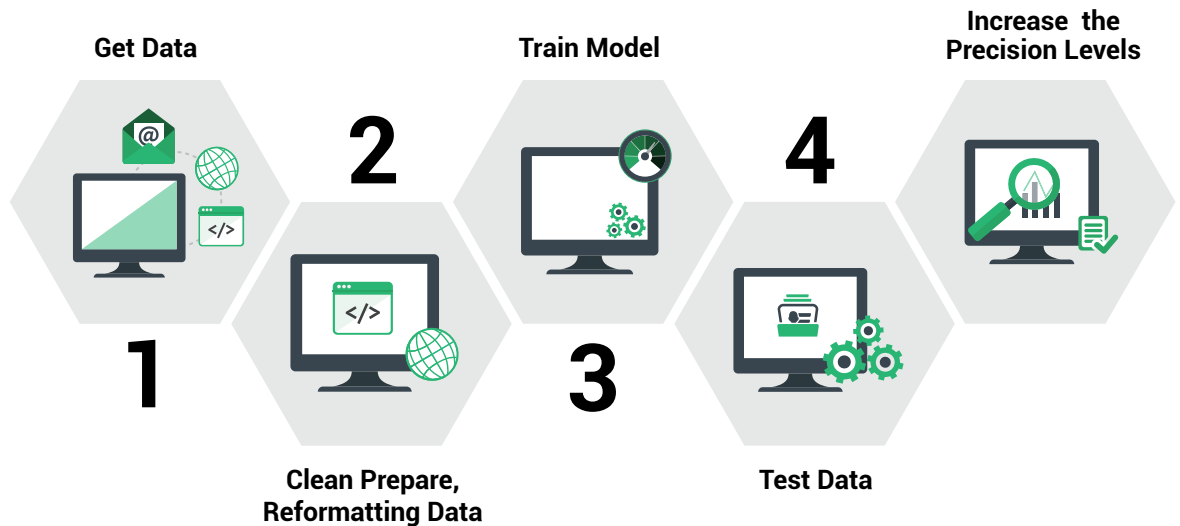
Front Desk analysts compiling various reports

Any other unstructured information



- › Metadata Extraction
- › Information Extraction
- › Cross Reference
- › Index Creation
- › Foot Note Mapping
- › Mismatched Content Identification

# METHODOLOGY



- › **FINBOTS** Machine learning tool will estimate a predictive model that best generalizes to emails received from external sources.
- › Therefore, generating the report by machine learning, it is imperative to have a great number of examples that can be used by the learning algorithm to understand the system's behavior.
- › Tools we will use are Dot Net, Visual Studio 2015 or above, Mail-downloader, Agility package, Windows 10

## ABOUT US

**FINBOTS** is a Singapore-based Intelligent Automation firm focusing on Finance, Risk & Operations area.

We offer consultancy services on how you can re-imagine the process and use data effectively through Intelligent Automation, Data Science and Machine Learning.

We take pride in our integrated approach to intelligent automation. **FINBOTS** is a part of STRAITSBRIDGE ADVISORS PTE. LTD., Singapore.