# Algorithmic Trading Deconstructed : Linguistic Redundancy and Technical Nuance in Modern Finance?

## Abstract

**In the rapidly evolving world of finance, the word “algorithmic trading” has become a staple in the context of modern market discourse, yet its linguistic construction poses a conceptual contradiction. Moreover, all trading, already by definition, follows an algorithmic structure , as it consists of systematic decision-making that governs the buying and selling of assets. However, this raises an intriguing question: does the addition of “algorithmic” to “trading” not create a redundancy that obscures the technical nuance of market automation? Also, what then should automated markets with technical nuances more than merely algorithmic, be referred to as? This paper critically examines the term “algorithmic trading” by evaluating its linguistic and technical acreage. By deconstructing this linguistic inconsistency, we argue for a more precise categorization of trading strategies, suggesting alternative terminologies that better capture the distinctions between human-assisted, automated, and AI-driven market activities.**


***Keywords: linguistically redundant, modern finance, high-frequency trading, automated trading, vibe trading, technical nuance.***


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## 1.0 Introduction

The term “Algorithmic Trading”, a dominant phrase in financial markets, refers, fundamentally, to the use of automated systems to execute trades based on predefined rules or algorithms. These systems analyze market data, identify opportunities, and execute orders without human intervention. These systems are usually computationally intensive. Computations, more than merely providing solutions to predefined rules. But when we refer, on the other hand, to **traditional trading**, we are indeed referring to the **usual or conventional way of trading** at a given point in time. Historically, this has been **manual trading –** with a bit of automation, where human traders make decisions and execute trades based on their analysis, intuition, and experience. Thus, what is considered "traditional" can evolve over time.

However , this makes the term “algorithmic trading” itself linguistically redundant, as all trades inherently follow an algorithmic structure, whether executed manually by human

decision-makers or autonomously by machines. The addition of "algorithmic" to the term "trading" suggests a distinction that, while meaningful in a technical sense, fails to adequately capture the spectrum of automation in financial markets.

This paper critically examines the historical evolution of trading methodologies and the linguistic limitations embedded in the terminology of modern finance. It argues that "algorithmic trading," as a phrase, is both redundant and misleading, failing to clearly differentiate between manual, rule-based, and fully automated trading strategies. Moreover, this lack of precision in financial language has broader implications, influencing regulatory frameworks, public perception, and academic discourse surrounding market automation.

By deconstructing the conceptual inconsistencies within the term "algorithmic trading," this study seeks to propose a more refined taxonomy for distinguishing between different levels of trading automation. In doing so, it aims to contribute to a more nuanced understanding of financial market operations and the language used to describe them.

# II The Algorithmic Nature of All Trading

2.1 What is an Algorithm?

An algorithm is fundamentally an organised set of instructions or rules that are designed to perform a specific task or achieve a particular goal. While often associated with computer science and mathematics, algorithms exist in nearly every domain of human activity. In trading, an algorithm can be as simple as a decision tree followed by a trader or as complex as an artificial intelligence model executing high-frequency transactions.

By this definition, traditional trading strategies could be considered algorithmic. For example, a trader who buys stocks when prices drop below a certain threshold and sells when they rise above another threshold is, in effect, following an algorithm—albeit a simple, manual one.

**Examples of Implicit Algorithms in Traditional Trading S**

1. **Trend Following** :- A trader identifies a trend in the price of a stock and makes an order in expectation of a continued price movement in such direction. As simple as it is, this strategy follows an implicit algorithm: *if the price is rising, buy; if the price is falling, sell.*

2. **Mean Reversion**: A trader buys a stock when its price deviates significantly below its historical average, expecting it to revert to the mean. The implicit algorithm here is: *if the price is below the mean, buy; if the price is above the mean, sell.*

3. **News-Based Trading**: A trader buys or sells stocks based on news events, such as earnings reports or macroeconomic data. The implicit algorithm is: *if the news is positive, buy; if the news is negative, sell.*

These exemplifications illustrate that even in manual (or in any other traditional) trading, decision-making follows a set of rules or instructions – albeit subjectively or informally. This raises the question: if all trading involves algorithms, is the term "algorithmic trading" redundant?

# III. The Evolution of Trading and Market Automation

### A. The Transition from Manual to Automated Trading

The history of financial markets has been characterized by a gradual shift toward automation, beginning with simple computational aids and evolving into fully autonomous trading systems. Key milestones in this transition include:

- **1970s:** The introduction of **electronic trading systems** in major exchanges.

- **1980s–1990s:** The rise of **quantitative finance** and the use of programmed execution strategies.

- **2000s:** The emergence of **high-frequency trading (HFT)**, where algorithms execute trades in microseconds.

- **2010s–Present:** The incorporation of **machine learning and AI** in trading models, further reducing human intervention.

# IV. The Linguistic Problem: Why ‘Algorithmic Trading’ is Misleading

## A. The Redundancy of the Term

The core linguistic flaw in "algorithmic trading" is its implied contrast with **non-algorithmic trading**, which **does not exist**. Since all trading follows an algorithmic process (whether manually executed or automated), and also because what trading strategy is “traditional” , is a question of the era in context and the strategy’s conventionality,  the phrase does not adequately clarify and conceptualise what aspect of trading is being emphasized.

## B. The Misconceptions it Creates

The vague nature of "algorithmic trading" has led to misinterpretations in financial regulation and media narratives:

- **Regulatory confusion**: Some policymakers treat all algorithmic trading as high-frequency trading, leading to overgeneralized policies.

- **Public misconception**: The term contributes to the belief that algorithmic trading is inherently dangerous**,** opaque**,** or manipulative, when in reality, most automated strategies improve liquidity and efficiency.

- **Lack of precise academic discourse**: Researchers often use the term inconsistently, making it difficult to compare studies on market automation.

## C. Toward a More Precise Terminology

To address this, we propose a refined classification of trading automation:

- **Manual Trading with Algorithmic Decision-Making (MT-ADM)** – Traditional traders using **rule-based heuristics**.

- **Algorithm-Assisted Execution (AAE)** – Traders leveraging **execution algorithms** to optimize orders.

- **Fully Automated Market Strategies (FAMS)** – AI-driven, self-executing trading strategies.

By adopting clearer terminology, we can improve discussions on trading automation without falling into the linguistic trap of redundancy.