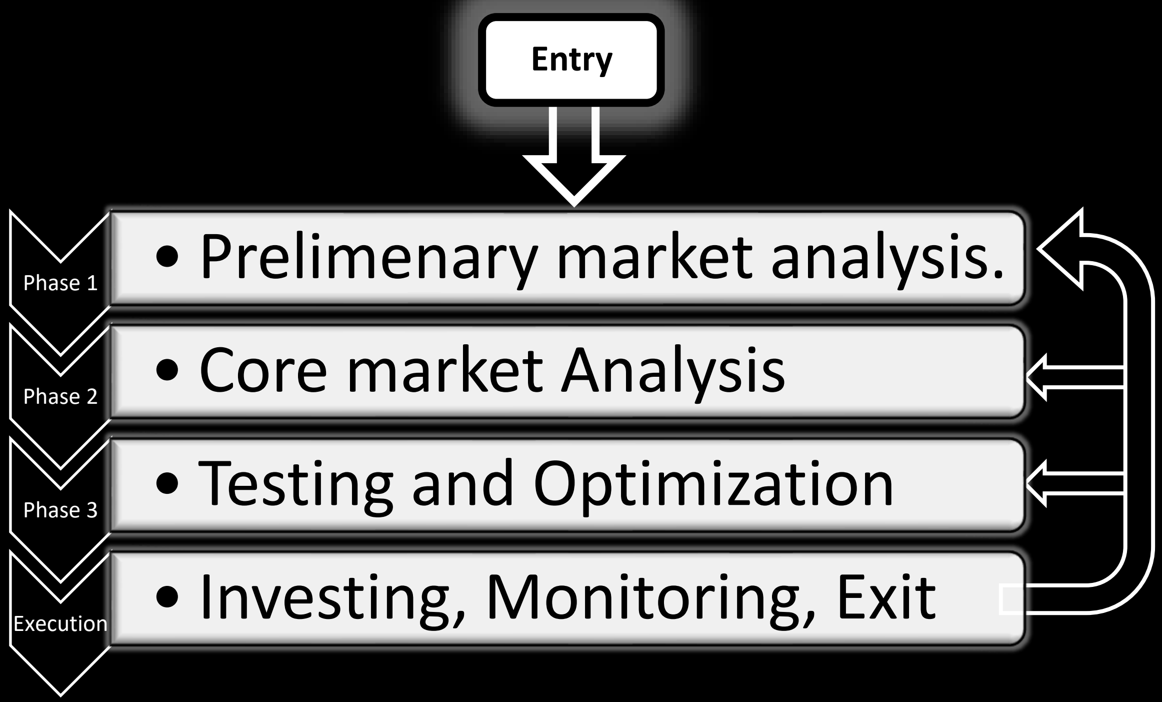
Infi-flux

Generic Basic Investment Architecture

G-BIA

The following Architecture is just one way to structure your approach to Investment Architecture. There are various versions of these concepts catering to different goals. From individual investment to huge portfolio management, the structure changes accordingly. This document intends to give you a generic overview, thinking, and a system that explains in detail pre-components before making any investment decisions in a structured fashion. The below architecture's version is super generic and may not cater to your goals as it is meant to just give a basic idea of the structured thinking that goes into making any investment decisions in our opinion. We urge you to design your architecture that caters to your style of investing [Intraday, long-term, long, short, arbitrage, funds, options, derivatives, commodities, Real Estate, Metals, forex, Treasury securities, CDs, ETFs, startups, Annuities, Dividend stocks, Preferred, Junk bonds, Structured products, MLPs, crowdfunding, AI Tech, SRI, Real assets, etc].



The above figure is a higher overview of the generic Basic Investment architecture. The architecture is inspired by one of the phrases which is a common adage and doesn't have a specific attributed author. The simple phrase is "Study the past, know the present, predict the Future". This document is meant to be the summary of the Guide section of our website. The following diagram gives the detailed structure of our generic architecture. Followed by the details of how the rest of the documents in our Guide section and our products fall under which entity. And how everything connects.

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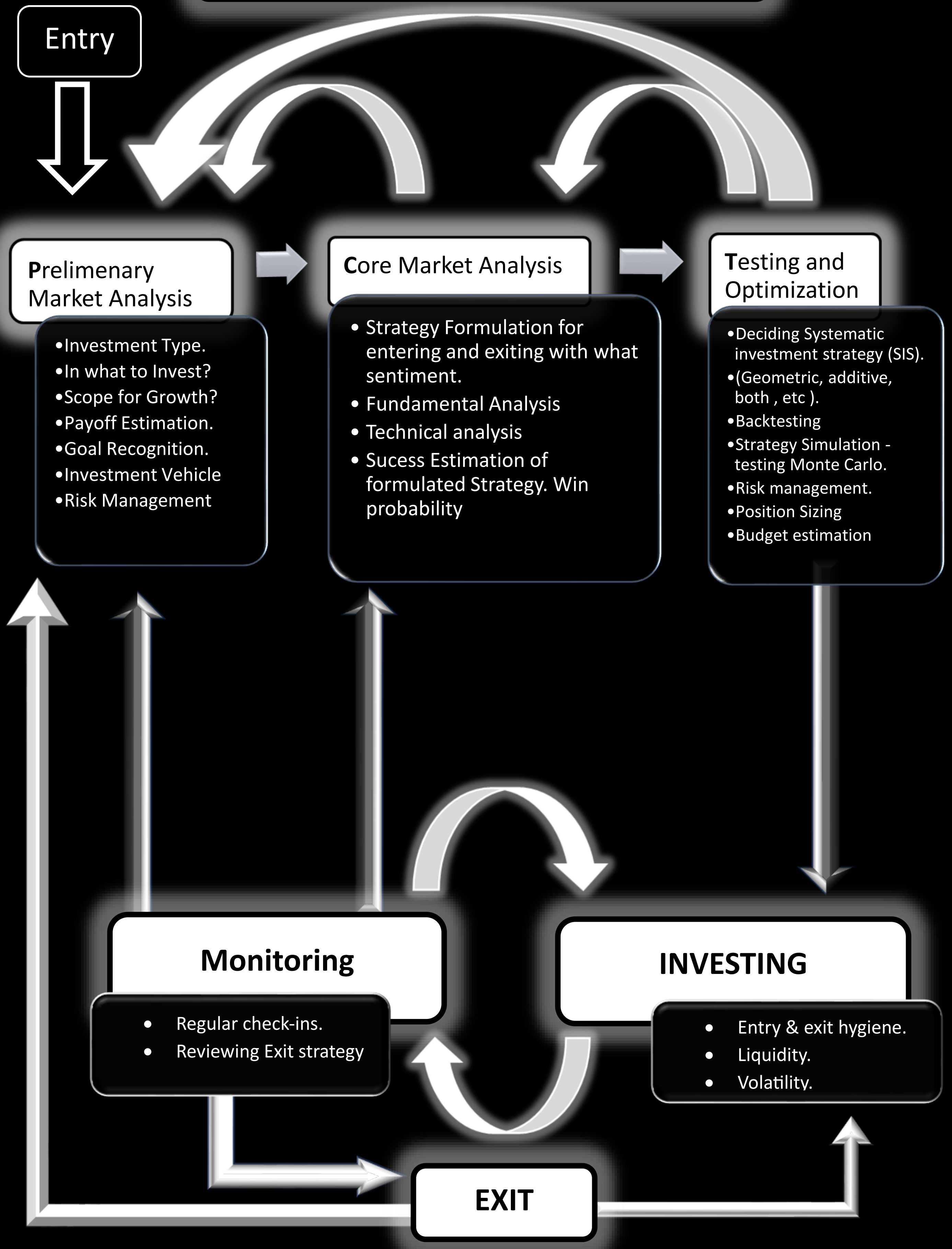

Phase 1

Whenever entering into any business, we were taught to find the answer to one simple question. What is the upper-lower limit, Maximum – Minimum output that could be made in this particular endeavor?
In our case, the Payoff estimation for Bullish and bearish sentiment for a particular instrument of a stock market. These values can be extracted using the document dedicated to **The Game of Curiosity**.

It simply takes data and uses simple logic of Aggregation based on combinations of variables, just to generate possible trades, what if one could make without any mistakes on the past recent data? This is studying the Past. One can introduce multiple concepts to make a detailed analysis of past data by introducing complex concepts like probability distributions, correlation, etc.

In this phase, it's essential to clearly define the type of investment that aligns with your financial goals. The array of goals is extensive, and some key ones include:

- Short-term goals
- Income generation
- Wealth preservation
- Financial independence
- Safety net establishment
- Legacy planning
- Passive income generation
- Diversification of investments
- Investment growth
- Risk mitigation
- Early retirement planning
- Financial security enhancement
- Retirement planning
- Education funding
- Emergency fund establishment
- Debt payoff strategy
- Estate planning
- Healthcare expenses provision
- Tax-efficient investment strategies
- Savings accumulation
- Philanthropic endeavors
- Pursuing hobbies
- Environmental, Social, and Governance (ESG) investing
- Income replacement planning
- Asset preservation
- Entrepreneurial ventures
- Long-term financial goals
- Building generational wealth
- Business expansion initiatives
- Lifestyle enhancement
- etc

These goals provide a comprehensive framework for aligning investment strategies with individual financial aspirations.

Each country have its unique set of brokers tailored to specific stock markets. Domestic brokers distinguish themselves with an extensive catalog encompassing every instrument available within the local stock market. They typically offer comprehensive data, ranging from OHLCV data to balance sheets, empowering consumers to make informed investment decisions. Moreover, they provide insights into the legality and volatility of each instrument. Choosing the appropriate investment vehicle and executing trades in the respective stock markets are crucial decisions for investors. While international brokers also offer competitive services, differences exist. It's imperative to select the one that best aligns with your requirements, ensuring long-term benefits and success.

Upon recognizing the investment opportunity, the next step involves determining the sector in which you intend to invest. This decision hinges on various factors, including economic indicators such as GDP growth and prevailing interest rates, as well as industry trends and emerging topics. Considerations may include evaluating initial public offerings (IPOs), distinguishing between emerging and developed economies, assessing emerging industries, and distinguishing between cyclic and defensive sectors. Additionally, understanding regulatory requirements for trade settlements, including settlement timelines (T+ days), is crucial.

Analyze competitive dynamics, such as market structure (mono-duo-oligo-poly) and associated barriers to entry. Consider factors like active consumer engagement, technological advancements relevant to the industry, and predicting consumer behavior, including spending patterns and demographics. Define your investment budget and compile an extensive list of investment instruments across various categories, such as stocks and forex. It's essential to integrate risk management principles from phase 1 into this process.

During phase 2, investors must meticulously assess each instrument, considering both systematic and unsystematic risks. This evaluation will aid in determining whether to retain or eliminate each instrument from the investment list. Refer to the risk management document provided in our guide section for comprehensive guidance on managing investment risks.

Phase 2

To summarize Phase 2 concisely, its outcome is a strategic plan delineating where to position BUY/SELL (LONG/SHORT) orders for specific instruments, including exit points for short-term goals. Additionally, it assesses the probability of the strategy's success or failure over the long term for the predetermined number of trades. This strategic output serves as the foundation for Phase 3 activities, encompassing backtesting, forward testing, Position Sizing, and Monte Carlo simulation to estimate the probable growth rate of invested capital after executing N trades.

In our Educational category's re-creation section, we've provided a link to an Introduction to the Kelly Criterion[1], which elucidates its significance. However, it's crucial to heed the cautionary note in the video, highlighting the inherent uncertainty in accurately determining probabilities. Thus, while the strategy and its probability estimation form the core of the investment process, it's essential to acknowledge the complexity of stock market analysis. Developing a strategy entails forecasting future market movements, drawing on a myriad of analytical techniques from Fundamental and technical analysis to sentiment analysis and beyond.

While we've curated a list of basic skills required for Fundamental and technical analysis, it's important to recognize that each skill could warrant extensive discussion. Therefore, we recommend leveraging advanced language models like ChatGPT 3.5 or bard for comprehensive definitions and real-world applications of these skills. The documents provided serve as introductory guides, complemented by anecdotes and stories to facilitate understanding. We encourage continuous learning, recognizing that the stock market landscape is ever-evolving.

Our Respective Products **DayBreak & MidDay** can be considered to have a specified strategy with a probability estimate that spans over 30 back-tested historical days and the spread of errors occurred on the nth day in between these 30 days in the form of **OPINIONS.** Currently, we are tracking 234 indices for 25+ stock markets across the Globe.

The potential strategies for entering and exiting the stock market are vast. It's imperative to design a strategy, test it rigorously, simulate its performance, and analyze whether it aligns with your investment objectives. If the strategy proves effective, proceed with investment (at your own risk); if not, return to the drawing board. This iterative approach underscores the dynamic nature of investing—it's a continuous process of refinement and adjustment. No trader or investor can claim infallibility; every participant in the market experiences both successes and setbacks.

Phase 3

Phase 3 is straightforward yet essential in the investment process. In our document titled "Story and Tools," we provide various approaches, including a collaborative notebook for Position Sizing. Links to these notebooks are embedded in the documents, facilitating practical implementation. While we won't delve into the specifics of accessing these notebooks here, we encourage users to explore the documents first. Updates to these notebooks will be periodically shared with subscribers to our newsletter, which is available free of charge in our guide section.

The "Story_Tools" document illustrates the implementation and simulation of Phase 2 outputs through a game-like scenario. Additionally, it offers a basic introduction to backtesting. The primary focus of this phase should be on estimation, specifically estimating the long-term growth rate of invested capital. Another concept introduced here is forward testing, which involves testing the strategy on future data to gauge its effectiveness. This entails implementing the strategy using simulated (paper) currency to forecast its performance in real market conditions.

Upon completion of Phase 3, investors are poised to proceed with their investment decisions. It's important to note that the preceding phases offer a high-level overview of structured investment decision-making. In actual practice, the process is significantly more intricate, often involving complex diagrams and dedicated teams comprised of 4-5 seasoned professionals. These teams operate within an Agile Framework, efficiently tackling various tasks within the finance industry. We encourage individuals to craft their own investment strategies, tailored to their unique circumstances and objectives.

Execution phase: it includes placing the type of orders, entry and exit hygiene, liquidity estimation for easy entry & exit in the market keeping volatility(short-term and long-term fluctuations) in check.

An Overview Explanation for the Flow of the Digraph

Every single arrow depicted in the graph has a logical meaning to it. Considering boxes as states. In case of inefficiency, low performance, a further requirement of development, learning requirement, etc. The arrow will be pointing to one of the previous states assuming that some things were left out or assumptions made were wrong and it urgently needs to be rectified. The backward arrows happen only in case of negative feedback from your investment process. In case of positive feedback, the current state will revolve around Invesing, monitoring, and exit state. Note, at the exit state, if your trades are of loss, the diagram directs you to the very first state called the preliminary market analysis state. If you know in which state you have gone wrong, you can skip the unnecessary state to save time. As we stated earlier, we urge you to create your investment architecture that caters especially to your needs and helps you to accomplish your goals.

As we conclude this document, it's worth noting the absence of definitive end states in the digraph (Directed graph) Diagram. The world of investment operates within a perpetual and cyclical framework. While certain investors may assert that they've exited the market and discontinued investing, the introduction of a new Initial Public Offering (IPO) frequently rekindles interest and triggers a reassessment of investment strategies. However, it's essential to recognize that investment decisions are multifaceted and subject to a myriad of influences. These include individual financial objectives, risk tolerance levels, prevailing market conditions, and personal circumstances.

Reference:

1] https://youtu.be/-9JM9suCIHs?si=KJ3BRYuDI4l9yCL5

Thank you,

Happy Investing.

Be Careful

By Infi-flux