

## Memorandum of Understanding

22th May, 2020

**TOPXIGHT Research Labs (India) Pvt. Ltd.**

#78, 1st Avenue, Indira Nagar

Adyar, Chennai- 600 020

Tamil Nadu

TopXight Research Labs (India) Pvt. Ltd. on behalf of ALPHABETA INC (a TOPXIGHT Labs company) is pleased to announce the partnership with the **RV Institute of Management, Bangalore**, to promote ALPHABETA run courses among the students at scale. The primary responsibilities, agreement details and proposal plan that will constitute a part of this agreement are detailed below.

The MoU is valid for a period of 3 years from the date of signing.

### **Description**

**Course: Introduction to Investing & Equity Portfolio Management (Certified by ALPHABETA):** This course will enable students to learn about the basics of portfolio management.

- a. Topics covered:
  - i. Covering asset classes- Stocks, Bonds, Commodities (covering Gold), measuring performance- Risk, Return, Alpha, Goal based investing etc
  - ii. Introduction to Passive investing (Exchange Traded Funds)
  - iii. Introduction to Active Management (Stocks, Mutual Funds)
  - iv. Actual Investment Strategies used by fund managers, investment banks
  - v. Factor based investing with Momentum, Value, Volatility and size considerations
  - vi. Pairs Trading (Relative value arbitrage)
  - vii. Build portfolio and compete with peers on near real time basis
- b. The concepts that the participants learn as a part of these programs are used by leading real-world Portfolio/Fund managers. The participants will understand how leading portfolio managers base their decisions grounded on strong academic theory and research.
- c. The objective of the course, and of ALPHABETA as a platform, is to connect this theory to practice. The participants in the program will start with simple concepts and graduate progressively to more complex strategies using both statistical and fundamental methods. At the end of the course, participants will be able to

confidently articulate about portfolio management concepts and leading strategies deployed by the Portfolio Managers.

### **Course Delivery**

The course will be delivered by faculty of RVIM, with appropriate training provided by TOPXIGHT team, to enable RVIM to independently deliver the curriculum.

ALPHABETA personnel will spend 3 days training the faculty on campus, additionally live-interactive webinar sessions with ALPHABETA accredited mentors can be arranged based on need.

### **Course Prerequisites**

Prerequisites for the program are basic mathematical and reasoning skills, along with a healthy mix of curiosity and enthusiasm, without the fear of failing! Students from all years and fields of study are eligible. Investment management courses have a gradual learning curve. Once you are familiar with the basic learning topics, it'll be very easy to understand and apply the more advanced concepts.

As a prerequisite, high school level mathematics and reasoning skills are required. Basic knowledge of finance and accounting will be an added advantage.

### **Course Goals**

Using the highly interactive ALPHABETA app, the learning is driven by lab experiments that allow participants to visualize stocks, learn concepts, make decisions, and create trades like a portfolio manager.

### **Participant Learning Objectives**

The basic concepts of finance and trading are bundled as modules which have one or more sessions.

1. For each session, participants will have supplementary access to a video lecture, a lab experiment, a presentation supplement, and a quiz. Each session, participants will learn one new concept in each category and apply them in the corresponding lab experiment on the ALPHABETA App.
2. At the end of each module, the participant will have an assignment that will be heavily based on the lab experiments, simulations, and reading & interpretation of the academic papers for additional credit. Learning session will be group concepts as:
  - a. Analytical - based on finance theory
  - b. Quantitative - based on math, and
  - c. Heuristic - based on best practice acquired through repetition

3. From start of the course, the participants will start managing a virtual portfolio and participate in an equity trading competition measuring their performance on various parameters as will be outlined in the first session

### **Course Duration**

Introduction to Investing & Equity Portfolio Management (7 weeks, Delivered by faculty of RVIM)

Students will have permanent access to Learn and Simulate mode on the ALPHABETA-guide App and Compete mode for 52 weeks from the start date.

### **Start Date**

Batches start September 2020.

### **Course Material**

ALPHABETA Guide app on iOS, Android, Mac OS X, or Windows available from [alphabeta.io](http://alphabeta.io) with user access details supplied as part of the enrollment process.

Presentation materials, video lectures and Assignments delivered through the Learning Management Software - ALPHABETA Guide app.

### **Topics Covered**

#### **Course : Introduction to Investing & Equity Portfolio Management**

1. Portfolios and trading
  - a. Introduction to a portfolio
  - b. Introduction to the market and different asset classes
  - c. The need to manage portfolios
  - d. Risk v/s. Return
2. Passive investing
  - a. The principle of diversification
  - b. Equity indices
  - c. Commodity indices
  - d. Benchmark construction and Index funds
  - e. Asset allocation and risk
3. Active investing
  - a. Beating the benchmark
  - b. Portfolio performance parameters
    - i. Alpha , BETA, Sharpe Ratio, MRAP
  - c. The math behind leveraged positions
  - d. The plus and minus of short positions
  - e. Hedging your portfolio
4. Introduction to stock markets
5. Review of finance and accounting concepts

6. Investing objectives and styles
  - a) Fundamental vs. Statistical Approaches
  - b) Investment horizons
  - c) Systematic approaches – alpha, beta, passive beta
7. Introduction to systematic approaches and market phenomena
  - a) Use past Momentum to predict future returns
  - b) Identify similar stocks and profit using Pairs Trading
  - c) Value Investing to discern underpriced and overpriced stock
  - d) Use Accruals and Cash flow to differentiate stocks based on earnings quality
8. Underlying theories in portfolio management
  - a) Capital asset pricing model (CAPM)
  - b) Risk return trade off
  - c) Statistical methods – regression, correlation, law of large numbers
  - d) Trading techniques – short selling, basket trading
  - e) Fundamental analysis – market and book value, earnings, accruals
  - f) Ratio analysis for value investing – monotonic functions, ratio selection
  - g) Risk management – diversification, hedging, market and sector neutral approaches
  - h) Judgment and heuristics in markets and trading

### Grading

This course follows the faculty approved grading guidelines, with weightages for the following. More details will follow once the course begins.

1. Individual –
  - a. Learn using the ALPHABETA Guide Lab experiments and supporting LMS
  - b. Quizzes and Assignments
2. Teamwork and class participation –
  - a. 3 strategy sessions where you will present as a team
  - b. Group discussions will be encouraged and questions asked
  - c. Learn from your group peers and your ALPHABETA mentors
3. Leaderboard ranking –
  - a. Managing your virtual real-time portfolio on ALPHABETA Compete
  - b. Investment management using a combination of systematic strategies and freeform portfolio(s), as applicable for each course

### Certification

Based on the above grading criteria, students attaining a minimum score as prescribed by the course mentors, will be awarded digital certificates specifying their letter grade (A, B or C) post the completion of the course.

### Course Fee

ALPHABETA/Topxight proposes a special discounted courses fee structure for the year 2020. This price will be reviewed and mutually agreed on an annual basis.

\*Course fee in INR

Course	Course Fee per student license in INR
<b>Introduction to Investing &amp; Equity Portfolio Management</b>	5,000 (+GST) = 5900

\*The retail fee for the course is INR 36,100 per license. The above rates are specially discounted for RVIM students

### Revenue Share and Invoicing

1. ALPHABETA will share 20% of the revenue with RVIM.
2. Topxight Research Labs India Pvt Ltd, as an authorized reseller of ALPHABETA will invoice RVIM to the extent of total fee collected from the students, less of 20% RVIM share.
3. Payments will be made prior to the start of the course.
4. ALPHABETA reserves the right to change the Authorised Reseller in India and in that event will inform RVIM if the change in Invoicing Process ; other terms and conditions in this MOU will remain the same.

### The following are included as a part of the course-

1. **ALPHABETA League (contingent upon min batch of 20 students):** The equity trading competition (the ALPHABETA League) will start 3 weeks into the course. Students who have enrolled in the course will be eligible to participate in the competition and build their own, individual virtual trading portfolios. **The competition will run for a period of 3 months, at the end of which, 3 winners will be chosen and certificate of merit will be awarded to them. Students need to show active engagement to be eligible by making at least one trade per month in the virtual portfolio.** The winners will be based ALPHABETA Rank, which is based on the risk adjusted return and alpha performance of the portfolio created by students. The Leaderboard will be transparent updated on a real-time basis.
2. **Digital certificates will be issued for each of the courses** based on final grades (as calculated above). Students who do not qualify will not be eligible for the certificate.

We look forward to bringing the power of Active learning and Augmented Intelligence at one of the most prestigious institutes in the country and believe that this will help learners build careers in the area of investment management.

### Expectations from the RVIM

1. Promoting the course amongst its student base
2. Facilitating fee collection and payment to ALPHABETA designated firm in India
3. Arrangement for demos, workshops as and when necessary
4. Delivery of the course by the staff of RVIM
5. Maintain students performance data

### Expectations from ALPHABETA

1. Product and content management
2. Query resolution and quality assurance
3. App deployment and customer service
4. Train the staff of RVIM to successfully deliver the curriculum

Please indicate your acceptance of this agreement by signing in the space below. A copy should be retained for your records.

Sincerely,



Sathyanarayanan Palaniappan  
TOPXIGHT Research Labs (India) Pvt. Ltd.  
[sathya@topxight.com](mailto:sathya@topxight.com)

### Please sign and state the date below:

We accept this memorandum of understanding and state that we have understood the terms and conditions of the Courses.

Name & Designation Dr. Pusushottam Bung

Signature 

Date 22.05.2020