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EXECUTIVE SUMMARY

Online learning is taking over traditional classroom learning. Coding Ninjas is one such EdTech company striving to provide quality online coding courses to engineering students. The company was established in 2016 and quickly established itself as a premier brand for beginners to learn coding in a structured manner.

For almost two years, the pandemic had seen college campuses shut down and switch to online learning. This is when many students first experienced an EdTech learning brand and the importance such companies play in students' academic and professional aspirations. College campuses have finally started opening with students attending classes on-campus and interacting with each other.

This allows EdTech companies to try on-campus BTL strategies. This research paper delves deeper into the effectiveness of on-campus BTL promotional activity for Coding Ninjas. This research allowed me to interact with engineering students from various colleges and analyze how students perceive and interact with online coding courses and their requirements and problems faced with such online coding courses.

The impact of the on-campus BTL campaign on an engineering student's enrolling decisions is studied by conducting on-campus BTL activities in five select colleges of Telangana and Karnataka, and a questionnaire was shared with students and the responses analyzed. This paper also provides strategic business recommendations based on how Coding Ninjas can best increase their brand presence in the southern

states of India. The papers also provide short-term, long-term, and cluster-based strategies to increase student enrolments on the Coding Ninjas platform.

Chapter 1: INTRODUCTION

Industry Overview

Education Technology, more commonly known as “EdTech,” blends IT tools into the classroom environment to create an engaging and personalized learning experience. The sector has witnessed ascendance because of the scalable personalized learning potential. This industry has fundamentally changed how teachers and students interact. Students stand to gain the most as every student can learn at their pace and has access to a large pool of learning material at their disposal 24/7. EdTech tools engage students by gamification of assessments and problems, leveraging infographics to explain complicated topics, record and playback reading, global student engagement, and more.

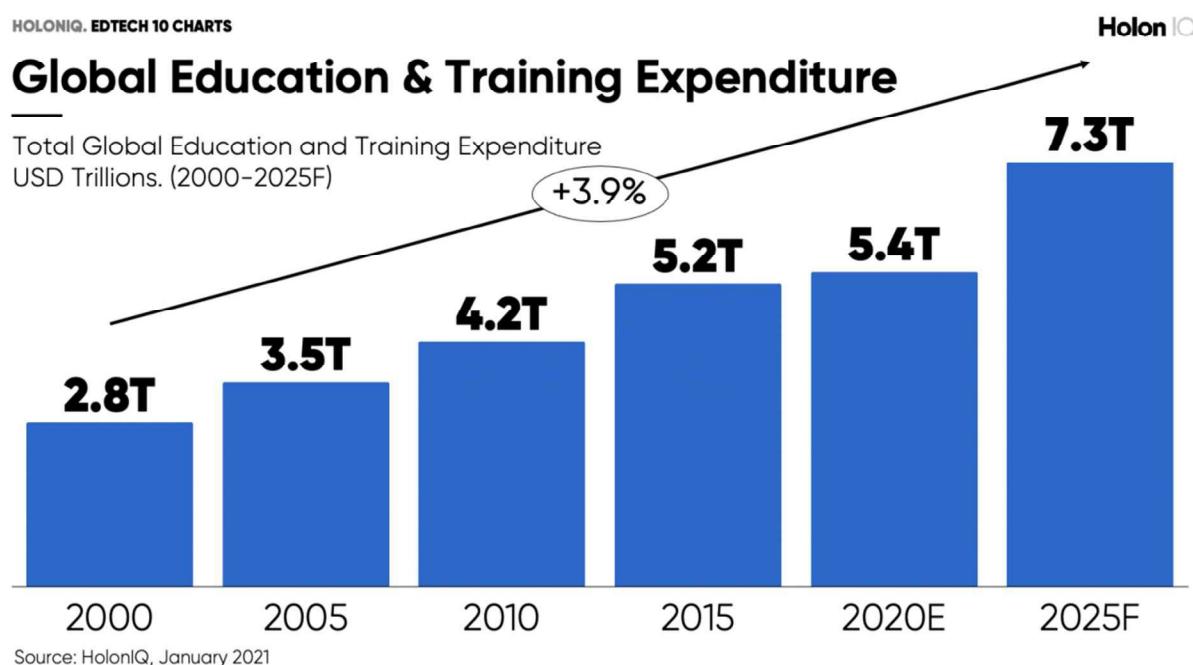
Figure 1: Blended Classroom



Source: (Author). S. P. (n.d.). Impact of promotional activities on organizations sales. GRIN. Retrieved October 25, 2021, from (PRADHAN, 2018).

Globally, education is one of the world's largest industries, comprising 6% of the world's GDP. In 2020, the spending on education was estimated to be at \$5.4T and expected to reach \$7.3T by 2025. Despite being a big industry globally, the Education sector lags in the digital age, with less than 4% of education spending in the digitization of the education sector (HolonIQ, 2021).

Figure 2: Global Education & Training Expenditure

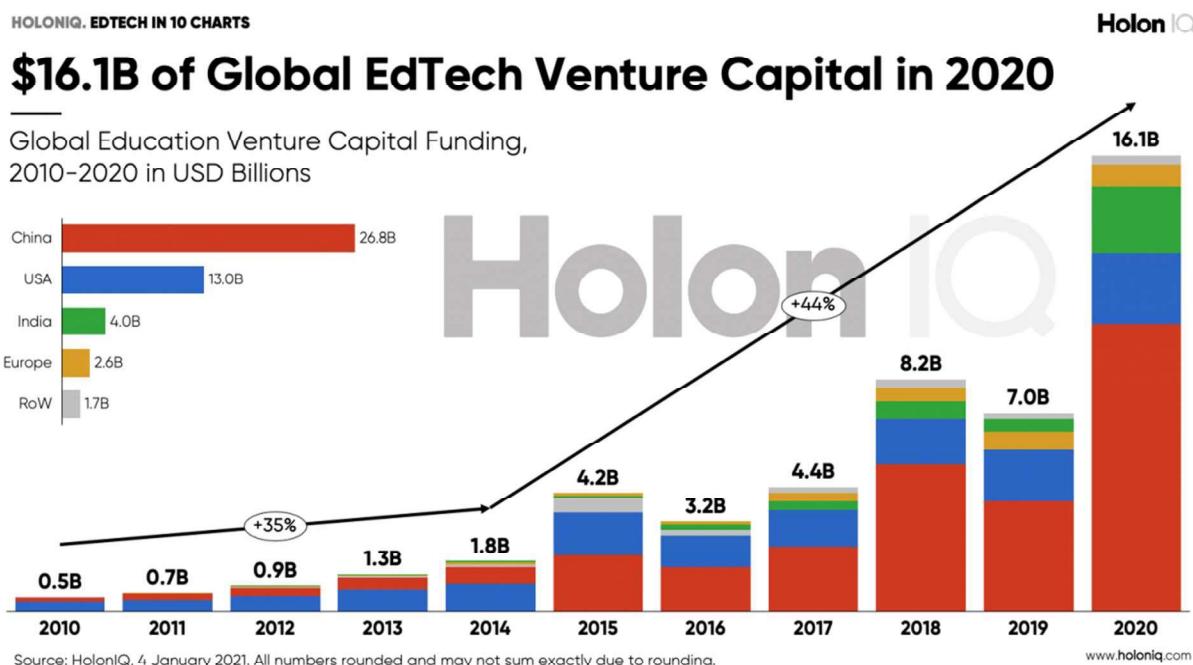


Education has evolved away from the brick-and-mortar model in the past couple of years. VC funds have been investing in EdTech firms that fueled innovation in this industry. The increasing penetration of mobile devices, mobile internet, increasing demand for eLearning solutions, and need for online teaching models to keep the traditional education system running during covid lockdown catapulted the EdTech industry to a global

phenomenon status. The EdTech sector has been steadily growing over the past couple of years and emerged as one of the fastest-growing sectors during covid-19.

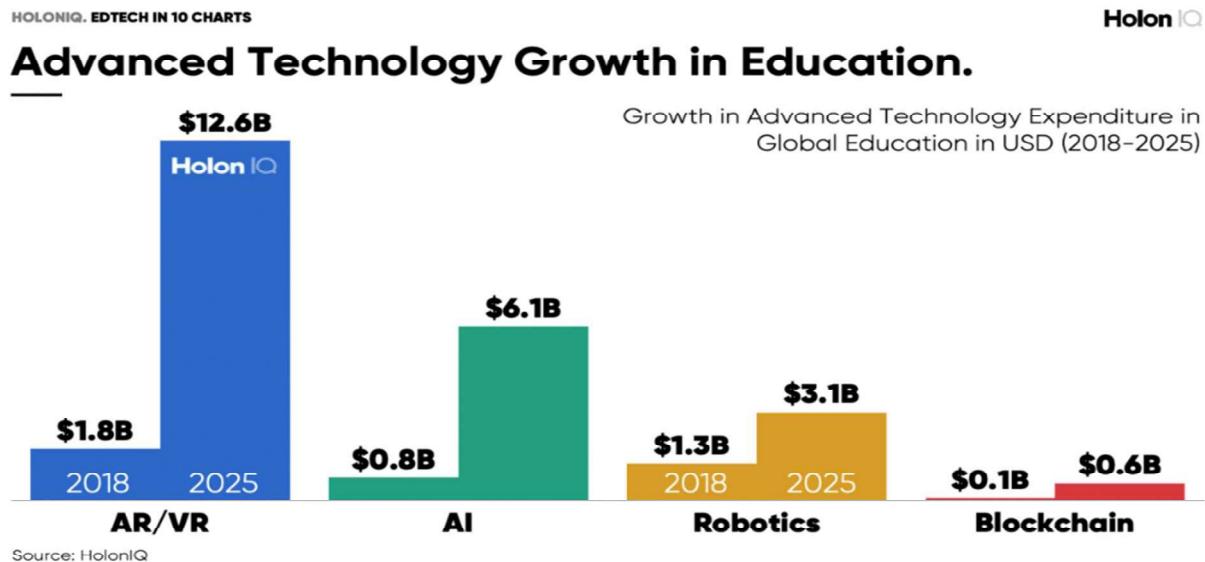
The global EdTech industry was valued at approximately \$84.5B in 2020. This sector is estimated to grow by 19.9% CAGR for the next decade. Many VC funds also see favorable dynamics in the EdTech industry, and investment in this sector has increased 2x since 2018, from \$8.2B to \$16.1B in 2020 (HolonIQ, 2021).

Figure 3: Global EdTech VC in 2020

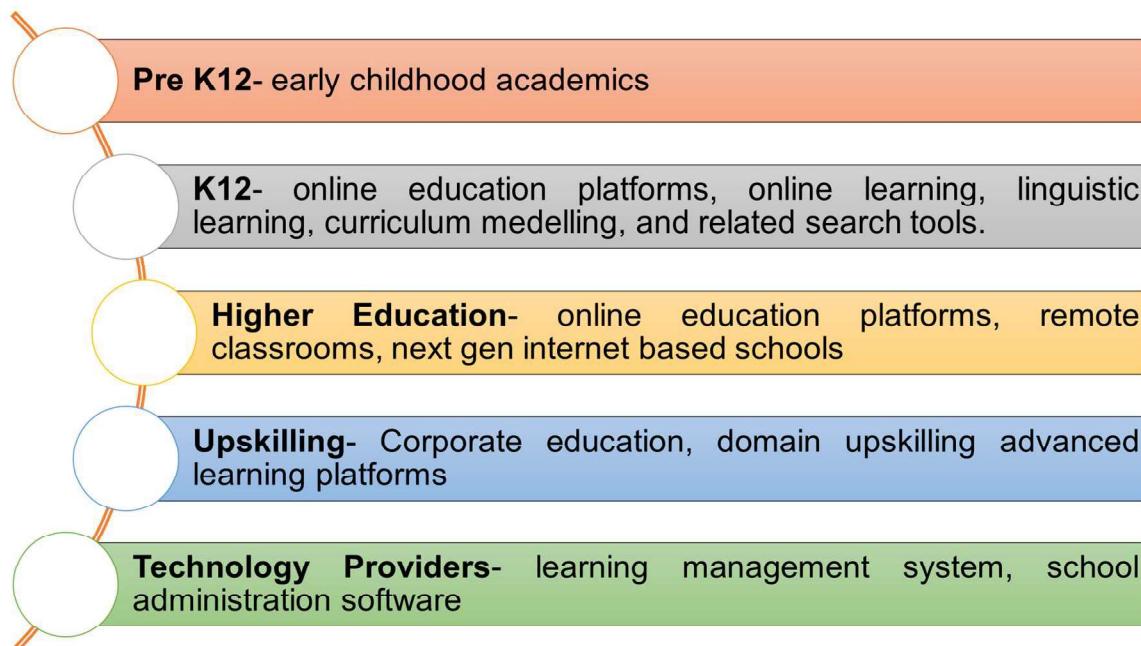


EdTech is forecasted to develop in line with advanced technologies such as the Internet of Things (IoT), Artificial Intelligence (AI), Augmented Reality (AR), and Virtual Reality (VR).

Figure 4: Advanced Technology Growth in Education

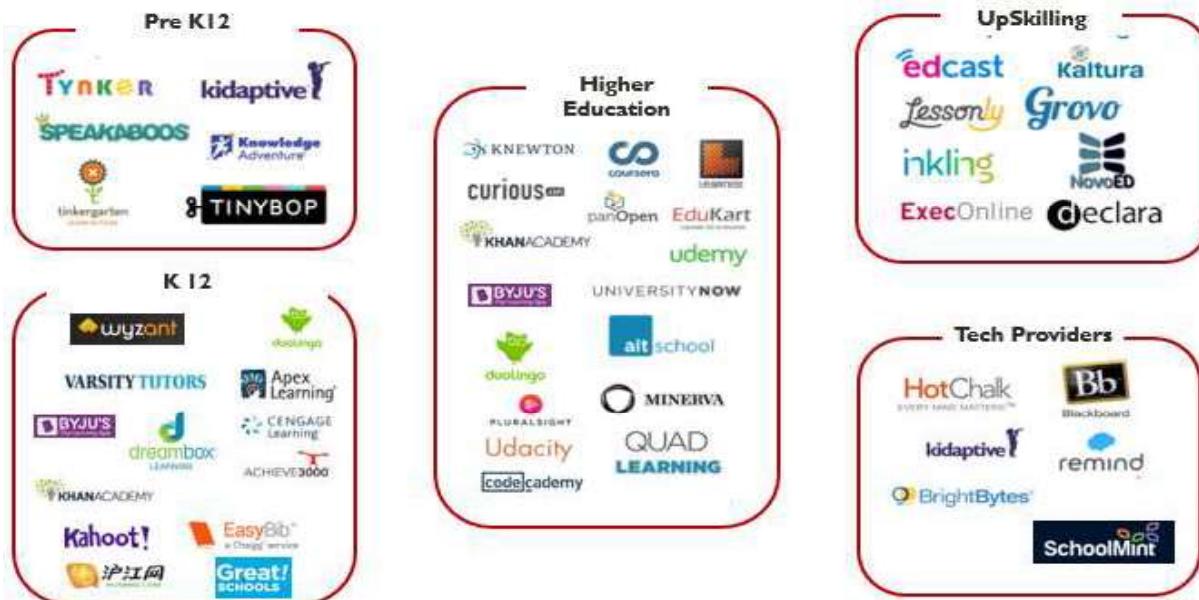


Worldwide EdTech setting majorly consist of the following classifications containing different characteristics:



Online learning and tech learning platform providers overlap each other as they offer solutions for Higher education and K12.

Figure 5: Categories in EdTech Industry



Source: 10 charts that explain the global education technology market. HolonIQ. (2021, April 15). Retrieved October 25, 2021, from <https://www.holoniq.com/edtech/10-charts-that-explain-the-global-education-technology-market/>.

Industry Overview in India

The EdTech market in India is at present about \$700-800 million, which is forecasted to reach a \$10 billion market in the next five years and \$30 billion in ten years (Chandrasekaran, 2021), (Department, 2021). The sector was already seeing tremendous traction but with COVID-pandemic led lockdown, the EdTech industry has observed exponential growth. In 2020 alone, the EdTech sector collected \$16.1B in VC financing, a 32x increase from 500M collected in 2010, as seen in Figure 3 (HolonIQ, 2021).

Company Overview

“As many as 97 percent of graduating engineers want jobs either in software engineering or core engineering. However, only 3 percent have suitable skills to be employed in software or product market, and only 7 percent can handle core engineering tasks” (Chakrabarty, 2016). Coding Ninjas was established to close this gap between campus education and corporate skills.

Coding Ninjas, an online EdTech platform, focuses on teaching coding and other software development courses to novices, especially undergraduates from engineering colleges. Started by Ankush.S, Dhawal.P., and Kannu.M, Coding Ninjas possesses world-class tutoring staff and a state-of-art knowledge platform for coding education with faculty alumni of IIT, Stanford, IIIT, and Facebook. Coding Ninjas tutors 17+ Programming courses in Foundation, I Advanced, Data & Development courses such as Machine Learning, Data Science, Web Development, Android, and more. The Coding Ninjas system contains 40,000+ learners and alumni, 1000+ College Ambassadors, 2000+ Teaching Assistants, and 150+ employees (Ninjas, n.d.). The company was started in 2016 and headquartered in the capital city of New Delhi. The company first started as a brick-and-mortar teaching center and then soon converted to an EdTech platform when the company moved online with pre-recorded content and practice platforms. This conversion empowered the company to reach out to abundant students without demographic restrictions. The product is concentrated around college students looking to learn new programming skills or upskill.

Problem Statement

Coding Ninjas is one of the leading ed-tech startups in India with the aim to bridge the knowledge gap between universities and industry. The company aspires to be the go-to brand for engineering students to learn coding in a structured manner and become a competitive programmer.

Coding Ninjas is well established in the northern regions of India as compared to the southern region of the country. Most students from the country's southern region are unaware of the brand. Given the COVID-19 lockdown protocols, most colleges remained closed, and students were attending classes online from their homes. Coding Ninjas focused on digital marketing and online campaigns for marketing to generate leads and acquire new customers. However, with many students receiving vaccination shots and the covid-19 pandemic currently under control, many colleges have again opened their gates to students. Engineering students are now attending classes as they would traditionally in a classroom environment before the lockdown.

With lockdown restrictions lifted and colleges resuming campus classes, a new channel for the company to market itself has opened. This BTL campaign shall be the company's first attempt to market offline in over two years and the first in the southern parts of India. Hence, this requires a meticulous approach to strategically brand itself and acquire new customers.

Key Issues:

1. How to increase Coding Ninjas Brand presence and awareness in the southern states of India?
2. Engineering students learning requirements from online coding courses.
3. To reach out to students in south through on-campus BTL promotion and in-turn increase leads and paid enrolments.

Scope & Significance

In-Scope

- Research to be conducted in select five Karnataka and Telangana colleges.
- Coding Ninjas will carry out the promotional activity.
- Survey questions to be handed out to students attending the BTL promotional activity in the college.
- Capture responses to survey and provide analysis.
- Costs benefit analysis of the promotional activity.

Out of Scope

- A survey among any non-student personnel at the campus
- Colleges that are still running only online
- Graduates or students who have already completed their degree

Significance

This project will give a clear insight into the effectiveness of the BTL campaign to profitably generate business sustainably.

Chapter 2: LITERATURE REVIEW

PESTEL

Political

- The Government of India (GoI) is promoting online learning through initiatives like the SWAYAM program and DIKSHA
- Because of lockdown, GoI encouraging Institutions to switch to online education

Economical

- "India is economically well-off, ranking 26th out of 40 countries, scoring 56.5 points in the Index of Economic Freedom." (Byju's, 2021)
- EdTech Industry in India is expected to grow 10x in the next five years.
- "FICCI predicts India's GDP to grow at 9.1% in 2021-22." (PTI, 2021)
- "Online education is an economical alternative to regular education since it does not require the live presence of teaching staff." (Bush, 2019)

Social

- There is a skill gap in traditional higher education to provide students the skill necessary to get jobs in the present situation.
- "As many as 97 per cent of graduating engineers want jobs either in software engineering or core engineering. However, only 3 per cent have suitable skills to be employed in software or product market, and only 7 per cent can handle core engineering tasks." (Chakrabarty, 2016)
- Indians see education as a way to a better standard of living and spend a significant portion of their income on learning.

Technological

- "There are about 624 million active internet users in India as of February 2021" (StartupLab, 2021).
- "India has more internet users in rural areas than in urban cities." (IAMAI) and Nielsen showed rural India had 227 million active internet users, 10% more than urban India's about 205 million, as of November 2019 (Chanchani, 2020).

Legal

- There are government imposed internet restrictions to deal with.
- "India can become world's edtech capital: NITI Aayog CEO Kant" (Sharma, 2021)

PESTEL analysis gives a bird' eye view of the market. Politically the country is invested in EdTech as the bureaucracy has taken initiatives to promote the industry. Education is also crucial in the country, but there is a skill gap, and customers will seek quality education addendum to the traditional institutes. A country with a high population has also

seen mobile internet penetration across rural areas, which will only increase the user base for the EdTech Industry.

PESTEL Conclusion

the PESTEL of EdTech in India indicates that the market is favourable for EdTech businesses. The bureaucracy views this industry as a potential game-changer for the country and a tool to increase overall literacy.

Porter's 5 forces

BUYER POWER: HIGH

- Consumers tend to choose more robust products, influence standard of product
- High competition and high supply have increased bargaining power of students
- Inexpensive products are frequently purchased

SUPPLIER POWER: LOW

- Products offered by retailers are differentiated based on several characteristics – not only reliant upon product characteristics but also consumer segment characteristics
- Significant shortage of teachers and quality engagement learning
- Job market readiness

COMPETITIVE RIVALRY: HIGH

- High competition leading to imitation of products or services, these imitation makes products similar
- Low switching cost due to plethora of options

THREAT OF SUBSTITUTES: LOW

- Traditional players such as University education, corporate trainings, and apprenticeship
- Videos from online streaming apps
- Brick-and-mortar centers
- eBooks

THREAT OF NEW ENTRANTS: MEDIUM

- New firms diversifying from different markets into the chief industry
- High capital requirements and resource cushioning for operations to take off
- Existing players operating at high economies of scale

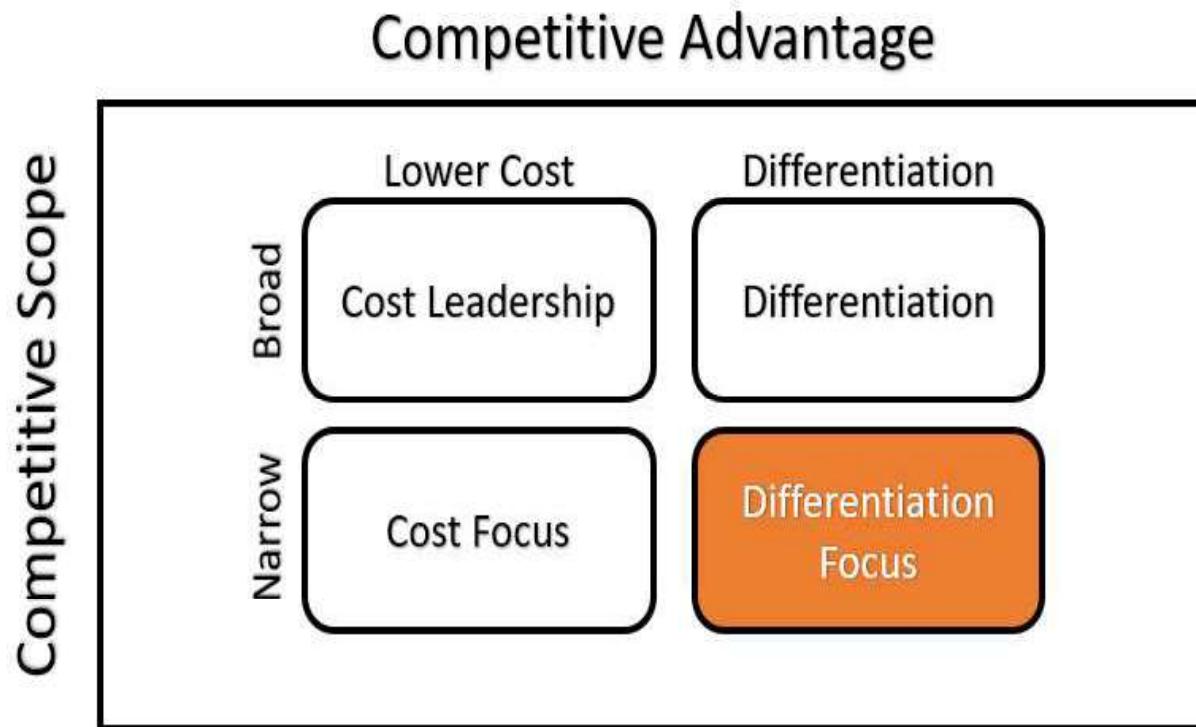
The EdTech market is booming, and with a lot of VC funds flowing in, many companies have set up shop, so competitive rivalry is high. High competitive rivalry coupled with high buyer's power means low supplier power. This is a win for consumers as they get a high-quality education at low prices.

Porter's 5 forces conclusion

Porter's 5 forces indicate that the EdTech industry has flipped the traditional education model. The consumer can decide the education or courses they want to learn, pick and choose a lecturer and learn at a place and time of their choosing, all of this without compromising the quality of education.

Generic Strategy

Figure 6: Coding Ninjas Generic Strategy Plot



Coding Ninjas has deployed a Differentiation Focus strategy. The company provides online coding courses focused on maximizing the target group's learning, understanding, and hands-on skills. Coding Ninjas is a trailblazer in its niche. The company tries to add value through its free and paid services ecosystem. Coding Ninjas creates curated pre-recorded videos in-house by industry experts to ensure quality content development, allowing for control over the entire business process — from planning and design to sales and service. This way, Coding Ninjas maintains curated quality content on the final product, reducing costs and rework in the production process.

Points of Parity & Differences

Points of Parity

1. Pre-recorded videos

With advancements in technology, the company creates lessons in advance that are visually engaging and effectively deliver the message with consistency. Students can learn at their choice of place, time, and pace creating a personalized learning experience. Hence, students learn when they are most active and foster self-learning among students.

2. Practice-Modules

'Practice makes a person perfect', and this is precisely how most ed-tech firms are helping students gain application knowledge of taught theory. Many firms create questions and categorize them as easy, medium, or hard. Students can answer easy questions before moving on to the next level or filter questions from topics or difficulty. There are also test modules with a multitude of questions that students need to complete in a fixed time. There are also dashboards where students can find insights into the questions being answered.

3. Gamification

Grades also form the basis for gamification. Firms leverage game mechanics and point systems to encourage students to be competitive and work harder to achieve goals. Badges, awards, or gift hampers are handed out to complete tasks or achieve a milestone.

Points of Difference

1. 1:1 live doubt resolution

Coding Ninjas provided instant one-to-one doubt resolution on their platform where a student can make an audio call or video call and share screens with Teach Assistants (TA), who help students with their doubts. The facility is available 24/7, and coding ninjas made this possible by creating a network of dedicated teaching assistants specifically for this task. The company resolves more than 100+ doubts every hour.

2. Guided-Paths

Software development has a wide choice of career profiles such as Front-end development, back-end development, full-stack, mobile development, Artificial Intelligence & Machine Learning. Each field requires a specific set of skills to master. Guided paths are a complete, curated preparation guide for coding interviews in tech and product-based companies. Students can choose a track and start preparing for a profile of their liking.

3. Interview Prep

Mock Interviews to help students get prepared for an actual interview. Industry experts from top product companies like Amazon, Facebook, Google, and working in the US will take mock interviews of students and provide detailed feedback. The focus will be on both technical and interpersonal skills. The industry mentor also provides feedback on student resumes and insights to crack interviews in top

companies. Coding Ninjas, just as with TAs has created a network of 500+ industry mentors.

Competitor Offering Comparison in southern India

Table 1: MOOC offering comparison in South India

Comparison List					
Subject/Item	Coding Ninjas	Coding Blocks	Code Chef	GeeksforGeeks	Smart Interviews
Learning Model	MOOC	Blended Learning	MOOC	MOOC	Blended Learning
Student Queries	Live 1:1	At physical location	forum	forum	At physical location
Integrated development environment	Yes	Yes	Yes	Yes	No
Online Community	Yes	Yes	Yes	Yes	No
Placement Cell	Yes	No	Yes	Yes	No
Price	₹₹₹₹	₹₹₹	₹₹₹	₹₹	₹₹

The following table has been created to showcase the services, offerings and competitive advantages of various online coding education companies in the southern region of India.

Learning Model: This is how a company delivers lectures to its end consumers. MOOC refers to companies that deliver their content only through digital mediums. Blended Learning is firms that offer their courses both online and offline. Coding Ninjas is ultimately a digital platform, and any student can opt for online coding courses.

Student Queries: Resolving student queries is a part of the product mix. Students are bound to have questions or doubts at some stage of their learning. Companies have their way of handling student queries. Coding Blocks and Smart Interviews have a more traditional approach where students need to visit the physical location to get their doubts resolved. Code Chef and GeeksforGeeks have forums where students can search for relevant answers to their questions or write a new post with their doubts. Coding Ninjas is unique as it brings an element of offline learning online. At Coding Ninjas, a student can have a 1:1 discussion with a teaching assistant to clarify doubts. TAs are available 24/7, and most queries are solved within the first minute.

Integrated Development Environment: Abbreviated as IDE, it is an inbuilt software for building applications that combine specific programming tools into a single graphical user interface (GUI). Students can practice coding-related problems and create projects online without downloading any software. Except for Smart Interviews, all other competitors have this offering.

Online Community: It fosters the community to get involved on a common platform. Students can discuss problems projects or have a casual conversation. Except for 'Smart Interviews', all other platforms offer students an online community to connect.

Placement Cell: This is a dedicated team to help students connect their skills with the companies looking for freshers with specific skills sets.

Price: Coding Ninjas has a complete ecosystem of all qualities, as mentioned earlier. The company also offers 1:1 live doubt resolution where company TA's guide students through the problem. The TAs are available 24/7, 365 days a year. So, the complete

learning and doubt resolution is online. Hence, Coding Ninjas charges a premium, making it the most expensive among its competitors.

To conclude, Coding Ninjas offers an immersive 360 degrees learning experience to students from imparting lectures, practice problems, 1:1 doubt resolution, social community to placement assistance. Coding Ninjas has a strategic competitive advantage over other companies in the same Industry.

As is strategy canvas

The 'As is strategy canvas' is created by W.Chan Kim and Renée Mauborgne. Together they first mentioned the canvas in a book they authored where they talk about companies' success factor significantly increased if they pursue new markets with an untapped demand and massive potential with little to no competition. It is essentially finding a market space for a product where there is little or no competition, and hence there is no pressure to compete on prices. This allows the companies to add value to the unique product and reap benefits by earning high margins by either keeping the costs low, earning high on each product sold, or both. The main objective of the Blue Ocean Strategy is to make the competition irrelevant. A comparison of the blue ocean to the red ocean is mentioned in the table below:

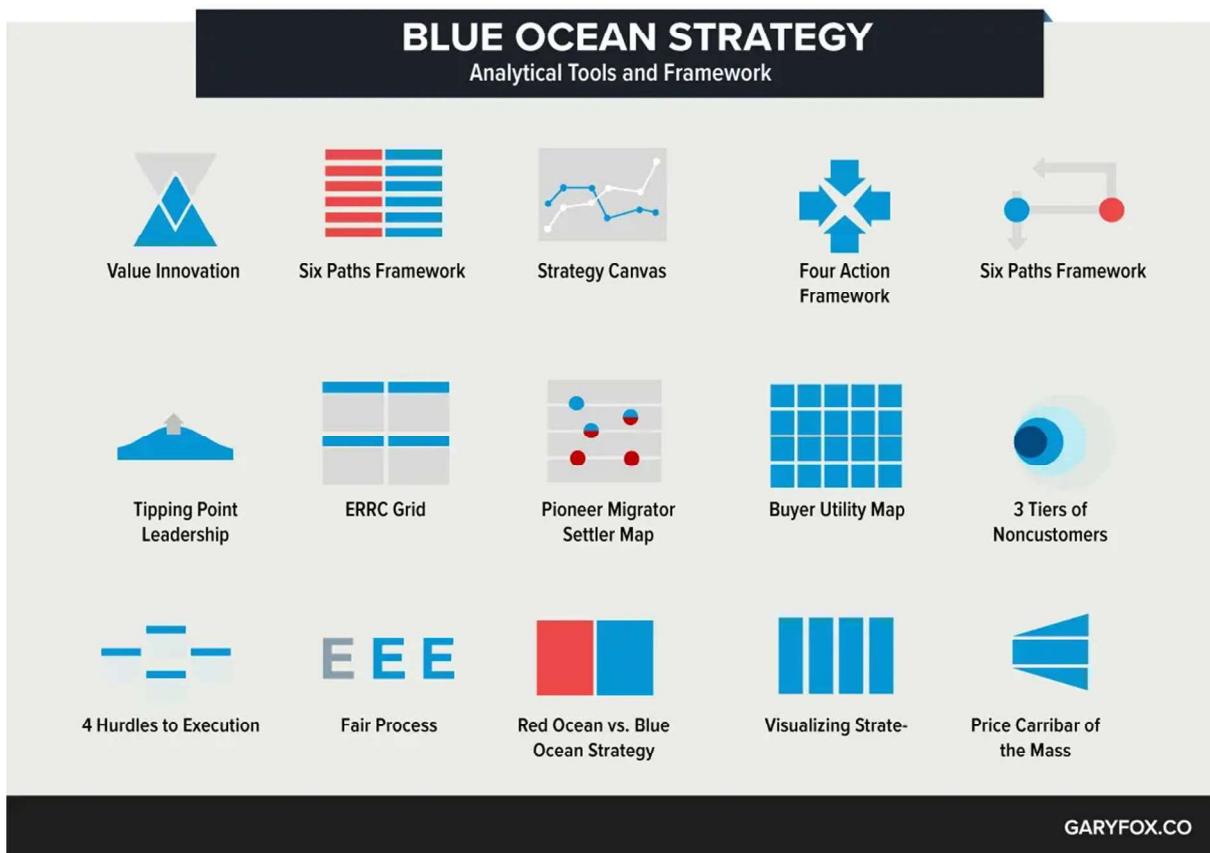
Figure 7: Red Ocean V/S Blue Ocean strategy



Source: <https://www.garyfox.co/wp-content/uploads/2020/07/blue-ocean-strategy-vs-red-ocean.png>

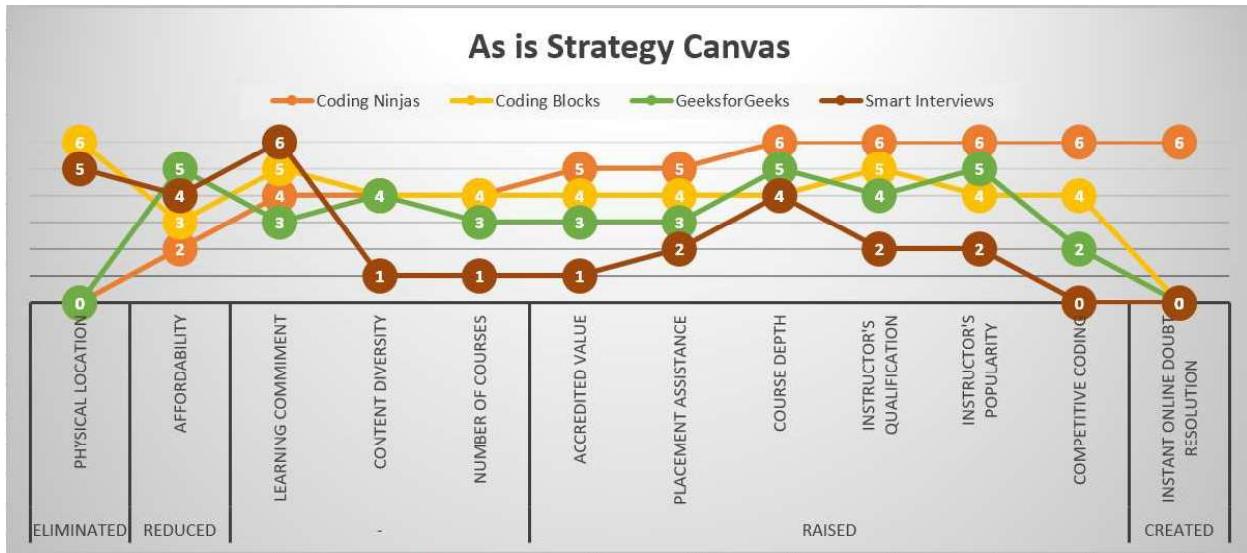
To tap into new demand, the authors developed various analytical tools and frameworks to visualize internal processes of the company regarding the strategic goals, possible improvements to internal processes, how rivals are competing in the market, what are the rivals focusing on to compete in the market and how the rivals perform in aspects of the market.

Figure 8: Blue Ocean tools and framework



Source: <https://www.garyfox.co/blue-ocean-strategy/>

Figure 9: As is strategy canvas



As seen in Figure 9 above, the X-axis consists of the factors that companies in the coding EdTech space are investing in or competing for, whereas the Y-axis has a scale from 0 to 6 that expresses the EdTech company's focus on the factors listed on the X-axis.

As visualized in the chart, there are three competitors in the south for the EdTech space focusing on providing technical programming-related courses, which are either held by certified academy instructors, students from recognised institutions, or industry experts. Smart interviews, based out of Hyderabad, focus on limited topics and have a strict class schedule. The classes are delivered in a blended mode with online and offline modes. The primary aim is to instil basic concepts that help students crack interviews.

GeeksforGeeks is a popular platform that offers courses at an affordable price and with each course covering a wide range of concepts and hands-on problems. The focus is on beginners and the implementation of learned concepts.

On the other hand, Coding Blocks offers a blended learning model, meaning they have a good mix of recorded courses, live online courses, and on-site courses that cater to

varying student needs. The platform offers in-depth courses and advanced programming skills to bridge campus and industry gaps. Though covering topics in-depth, the overall number of courses is relatively low.

Coding Ninjas needed to position themselves differently among existing competitors to crack the market and create a niche successfully. Coding Ninjas has realized the untapped market demand where online programming courses can be visually pleasing and engaging. Post that, hand-on practice problems and projects enabled the end consumers to apply the concepts learned, reducing the college and corporate skill gap and being job-ready. Moreover, instead of university professors, courses are created with experts and industry leaders in their respective fields, such as Arun Sharma.

How Coding Ninjas uniquely positions itself:

1. **Eliminate "Physical Location":** Unlike competitors, who have both physical locations and online courses, Coding Ninjas courses are exclusively online. The company offers both pre-recorded, and Live courses through its website as well as Projects, assignments, mock interviews, mock tests are all online. Brick and mortar doubt resolution experience has also been replicated online with teaching assistants, and hence the company can operate entirely online without compromising and physical store experience.

2. **Reduce "Affordability":** Coding Ninjas follows a freemium model, and many website features are free to access. Paid courses start at ₹5000/- for the primary, and EMI options

are available on all courses. In comparison, GeeksforGeeks offers courses at a starting price of about ₹1000/- covering only basic concepts.

3. Raise the quality of the instructors: Professors in a university might be very knowledgeable about a subject due to years of research. However, the information they share can sometimes be too theoretical and inapplicable in life. On the other hand, Coding Ninjas gives you the most realistic picture of a career field by having real people who have outstanding track records in that field share their own experience, and the courses offered are also up to date.

4. Create "Instant Online Doubt Resolution": Coding Ninjas offers a unique learning experience other platforms cannot — 24x7 1:1 instant doubt resolution. The courses that Coding Ninjas offers are technical, and students may have doubts at any time. To help students instantly, the company has created a network of almost 1500 teaching assistants. Teaching Assistants are like mentors who help students with doubt resolution. This system is robust and cannot be created in a physical location. Moreover, existing EdTech competitors will have much catching up to enter or replicate this system.

Coding Ninjas has created its own space by creating a unique customer experience that other MOOC platforms cannot replicate. As a result, the number of subscribers numbers been growing exponentially, i.e., 3x in the last years. When the lockdown was implemented, Coding Ninjas demand witnessed unprecedented growth, even with the restrictions lifted.

3 TOWS Matrix

Figure 10: TOWS Analysis

	External Opportunities (O)	External Threats (T)
Internal Strengths (S)	<ul style="list-style-type: none"> 1. New tools & Technological advancements 2. B2B partnerships with colleges and Tech. companies 3. Increasing demand for tech skills in job market 4. Personalized curriculum 	<ul style="list-style-type: none"> 1. Distribution downtime 2. New entrants 3. Government regulations 4. Privacy and Security concerns
Internal Weaknesses (W)	<ul style="list-style-type: none"> 1. Curated courses by industry experts 2. Codestudio 3. 1:1 live doubt resolution 4. Social Community 	<ul style="list-style-type: none"> - Leverage big data, AI & ML to create personalized courses for students - Provide advanced monitoring and proctoring solutions for examinations and assignments. - Partner with tech giants such that they recognize certifications from Coding Ninjas. <p style="text-align: center;">Maxi-Maxi Strategy</p>
	<ul style="list-style-type: none"> 1. Course only available in 2 languages 2. Less Prestige and Accreditation 3. Limited range of courses 4. Relies on self-motivation of students 	<ul style="list-style-type: none"> - Create videos in multiple language formats for wider reach - Partner with colleges to create specialized curriculum. - Blended classrooms for the best of on-campus education in the online scenario for a more interactive and motivational learning. - Develop new and rewarding gamification experiences. <p style="text-align: center;">Min-Maxi Strategy</p>

Maxi – Maxi Strategy (SO): -

To use strengths to take advantage of opportunities, Coding Ninjas can leverage its extensive student database and study patterns. The company can implement AI&ML to

create personalized learning for students and other tools that will help students to track their progress. The company can, in turn, leverage this to partner with companies looking for students with specific skill sets and abilities.

Maxi – Mini Strategy (SO): -

To use strengths to avoid threats in the current market situation, Coding Ninjas can learn from some OTT platforms that allow users to download content for a limited time for offline use. This will be especially useful when the internet shutdowns or with low data speeds in localities. This will create a seamless study experience despite technological and political boundaries. Maintaining strong process controls for privacy and data security is paramount as data leaks can potentially damage the company's reputation.

Mini – Maxi Strategy (WO): -

The company should increase its reach by creating content in multiple languages. Though coding is learned in English, most students do not have English as their first or second language; hence they prefer to learn in their mother tongue for better understanding. Creating content in multiple languages will thus help in effective learning and increasing reach. Partnering with colleges to close the skill gap is another opportunity to increase the value of the Coding Ninjas certifications.

Mini – Mini Strategy (WT): -

Many students cannot access quality education despite EdTech offering courses at a fourth the price of traditional brick and mortar companies. Literacy is a doorway out of

poverty, and quality education is still an aspirational buy for many. Offering Scholarships to economically backward students and partnering with government-approved bodies to deliver education pan India will help the company get in the good books with the government, thereby avoiding a threat.

Academic Review

1. *Emerging trend set by a start-up on Indian online education system: A case of Byju's* (Devarapalli, 2020)

This research tries to elaborate on the success story of Byju's corporate profile and the marketing strategies that made it stand out from the competition. The paper also presents a comparative study of Byju's and its rivals in the market. Some essential parameters that drive the growth of EdTech in India and some factors on which the target group makes buying decisions.

2. *Cultivating a Love of Learning in K-12* (Cultivating a Love of Learning in K-12, 2018)

Increasing access to low-cost quality education is critical to eliminating poverty and aiding shared prosperity. In developing countries, private education institutions play a critical role in delivering education, skills, and economic and relevant training to the needs of the labor markets. This case study highlights the content development approach at Byju's and its benefits. It highlights how developing short videos on each topic increased the portability of these modules across different courses the company offered through its learning platform. There is also more

profound attention to selected business model aspects, such as the market size and sales approach.

3. *Marketing Analysis of India's No.1 Edtech Platform: BYJU'S* (Gupta, 2021)

The case study focuses primarily on the marketing strategies of the company. Byju's, through an online company, faced fierce competition online and was lagging behind competitors such as Vedantu and Toppr. The company did see some success in generating leads via FB but failed to convert due to pricing. The tipping point was when the company launched the feet on-street approach to reach buyers directly. The Feet on-street approach was unusual for an online company, typically relying on online platforms to drive, but it generated the most success with up to 50% conversions and a huge subscription base.

4. *Feet-on-street is the new marketing lesson from Byju's* (Vignesh, 2018)

The news article in a trusted business-focused daily newspaper focuses on the feet on-street (FOS) initiatives by some EdTech companies such as Byju's, Toppr, and Vedantu. The marketing model and the sales funnel from lead generation from sources to conversions by the FOS team are briefly explained. The author also explains that EdTech companies are expanding small towns and towns where the market is untapped.

5. CupShup launches BTL activation across 3000 corporates for EdTech major upGrad (exchange4media, 2020)

The news article in a trusted business-focused website talks briefly about a BTL promotional campaign the CupShup carried on behalf of the upgrade. CupShup distributed more than three lakhs cups in 10 cities, including Bengaluru, Delhi, and Mumbai, earlier this year. The paper cups were distributed with unique and creative taglines in major commercial districts, encouraging company employees to take up these courses to 'rise' in their careers. Also, the company plans to tie up with corporates to reach TG and explain the benefits of upskilling.

6. STUDENTS AS CONSUMERS: USER RESPONSES TO MONEY-BACK GUARANTEES IN HIGHER EDUCATION ON REDDIT (Frey, 2018)

The paper discusses a proven growth of student consumerism in higher education. The author's primary objective was to explore students' reactions to money-back guarantees by Udacity to those students who fail to achieve a employment post their graduation. The analysis showed that money-back guarantees are not as lucrative as upfront discounts. The author also discusses price, quality, time, and job preparation factors. Price is an essential factor for opting for a course; students consider long-term values of educational decisions, and values paid for courses are looked at as investments. Quality is how the employer perceives the degree and quality of work they can expect from a candidate. As such, students seek quality degrees to stand out from the rest in the job market. Time is considered a

deterrent to cost; most users preferred the compacted nature of MOOCs such as Udacity and suggested that users prefer courses that can be completed speedily as long as the quality of learning is not diminished. Lastly, students place the burden of thoroughly preparing students for the job market on the colleges, creating unrealistic job expectations that set students to fail at the job market. However, this trend is changing, and learners are taking charge to equip themselves fully.

7. BTL ACTIVITY- MARKETING STRATEGY OF UPGRAD EDUCATION PRIVATE LIMITED (Aggarwal, 2020)

The author of this paper was also an intern at upGrad. She clearly outlines a BTL activity campaign that upGrad carried out. The author explains that the online world, though crucial, is crammed with multiple companies trying to reach the target audience in the limited online platforms. The paper presents that BTL activations enable companies to capture target group insights, build relationships with customers and help companies stand out from their competitors. The paper further explains the benefits of BTL activities and stresses that experiential BTL campaigns enable the company to engage with the target group and connect emotionally.

Conceptual Framework: Dependent – Independent Variables

Table 2: Dependent and Independent Variables

S.No	Independent	Dependent
1	Product	Willingness to Enrol
1.1	— Depth and Clarity on concepts covered	
1.2	— Curriculum	
1.3	— Course Duration	
2	Price	
3	Promotion	
3.1	— Personal Selling	
3.2	— Promotional offers	
4	Place	
4.1	— Online	
5	People	
5.1	— Lecturers	
5.2	— Teaching Assistants (doubt resolution)	
5.3	— Teaching Assistants (doubt resolution speed)	
6	Process	
6.1	— Self paced pre-recorded lectures	
6.2	— Gamification	
6.3	— Practice exercises & Projects	
7	Physical Evidence	
7.1	— Mobile Penetration	
7.2	— User Interface	

Chapter 3: Research Methodology

Research Objectives

Since Coding Ninjas did not carry out the offline BTL promotional activities for over two years due to the COVID-19 lockdown, this study is conducted to determine the effectiveness of on-campus BTL promotional strategies to attract the target group, increase enrolments, and assess benefits in such a promotion. The following are the research objectives to analyze the impression that an offline BTL promotional activity has on college students:

To analyze the current brand awareness of Coding Ninjas among college-going engineering students in the states of Telangana and Karnataka.

To investigate the students' transformation from traditional learning to technology-based modern learning.

To analyze factors that the on-campus BTL promotion strategy can have on a company's sales.

The limitations of the study are listed below:

- The study is based on secondary data, and the data is analyzed and evaluated for the last year only.
- The study is also based on the primary data, but the respondents chosen are limited to the attendees.

Hypothesis

1. Access to mobile data plays an important factor in students' opt for online coding courses.
2. Personal selling impacts a students' willingness to enrol in an online coding course.
3. Students' higher familiarity with the courses offered by Coding Ninjas is directly related to the students' willingness to enrol in Coding Ninjas coding courses.
4. A higher NPS score is an essential factor for students to opt for the Coding Ninjas course.

Research Design

This paper is a descriptive study on the BTL activity in five colleges in Telangana and Karnataka and uses quantitative methodology of research to analyze data collected through questionnaires that was be sent through google forms.

First, To analyze the current level of brand awareness among the target group, the research will analyze the questionnaire responses and an in-depth social media analysis to present quantitatively the report on below mentioned points:

- 1.1. Is the unaided brand recognition greater than aided brand recognition?
- 1.2. What is the number of social media followers of Coding Ninjas, and how does it compare to competitors?
- 1.3. How does the search popularity of Coding Ninjas compare to its competitors on google trends?

Second, *To investigate the students' transformation from traditional learning to technology-based modern learning*, the research has collected data and applied statistical and computational tools to perform quantitative analysis based on the dependent variables identified in Table 2. Using the outcome post the application of said tools, the paper will make inferences on the following:

- 1.4. Students learning requirements from online coding courses
- 1.5. How students are primarily accessing online education

Last, *To analyze factors that the on-campus BTL promotion strategy can have on a company's sales*, the researcher will assess based on the

- 1.6. Total number of new leads generated on the Coding Ninjas platform in the durations of the BTL campaign.
- 1.7. Total paid subscriptions within a week of the campaign and college wise P&L and breakeven analysis

Data Collection Process

Data Collection in research can be defined as collecting and systematically measuring information to answer research questions, test hypotheses, and evaluate outcomes. For collecting data for this study, the researcher conducted on-campus events in Engineering Colleges in Telangana and Karnataka, primarily targeting computer science students. The questionnaire has been distributed to all students who attended the on-campus event in the five colleges in the select states to find out how the on-campus BTL campaign

influences students' behaviour towards Coding Ninjas courses. Students have been given a week to fill out the questionnaire and return the same to the researchers. One hundred students responded to the questionnaire, of which 98 responses have been selected for the research paper. Others were omitted as data-filled were incomplete.

Also, secondary data was queried from the Coding Ninjas database to analyze the campaign's effectiveness by measuring the number of new leads generated, paid enrolments, and college-wise P&L of the campaign with break-even analysis by evaluating revenue generated over the costs incurred.

Listed below are the colleges where the BTL campaign was carried out:

Table 3: On-Campus BTL promotion college list

College	City	State
Lords Institute of Engineering & Technology	Hyderabad	Telangana
Shreyas Institute of Engineering & Technology	Hyderabad	Telangana
CMR Institute of Technology	Bangalore	Karnataka
Dayananda Sagar College of Engineering	Bangalore	Karnataka
JSS Science & Technology University	Mysuru	Karnataka

Figure 11: Gender wise response

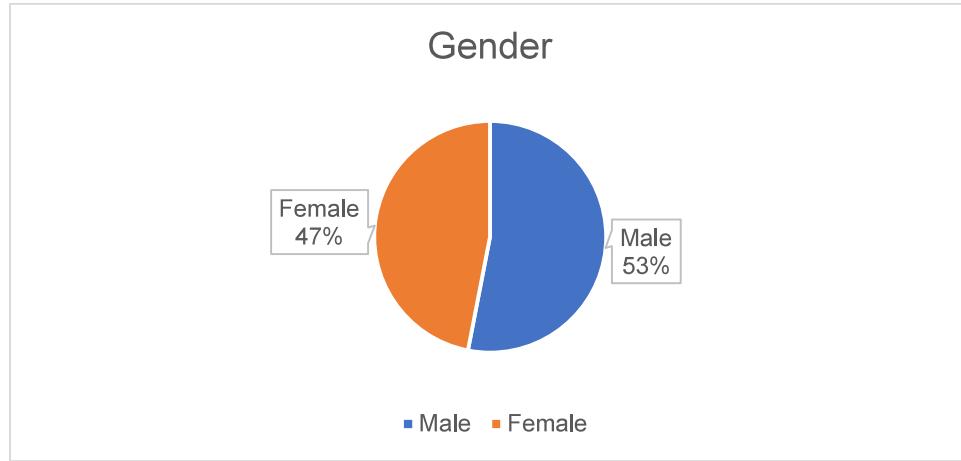


Figure 11 shows the percentage of male and female student respondents. An equal number of male and female respondents will present a fair and balanced view of the college-going engineering students.

Figure 12: Respondents geographic location

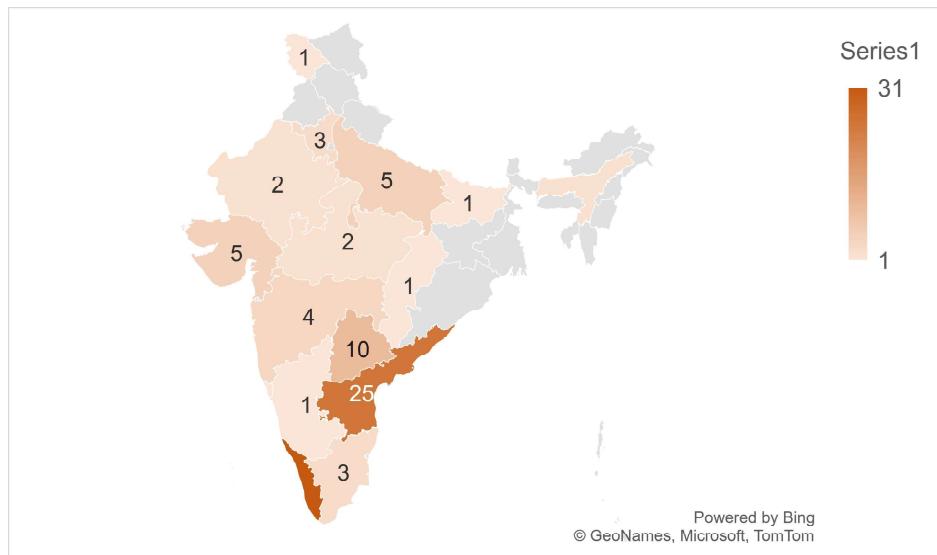


Figure 12 depicts the states from where the students hail from. The number of respondents has also been clearly outlined.

Sampling Approach

Cluster Sampling: The on-campus BTL promotional activity was carried out across five select colleges in Telangana and Karnataka, India. The survey questionnaire was shared with every student who attended the on-campus BTL event.

Statistical Tests

The following statistical tests have been used to perform analysis of each research objective and answer research questions:

1. **Factor Analysis:** to simplify the responses from the brand awareness questionnaire and simplify data by reducing the variables

2. Cluster Analysis: To carry out the grouping of responses based on consumer needs
3. Crosstabulation: To report the enrolments, sales, and insights ensuring the BTL activity
4. Break-Even Analysis: To evaluate the college wise P&L of the BTL campaign.
5. t-Test: To test the mentioned hypothesis

Chapter 4: Data Findings & Analysis

The respondent's data was collected and collated for analysis based on statistical models. Statistical models help to provide an inference or a conclusion from a small population. Bar Diagrams, Pie Charts, Tables, and Line Graphs illustrated the data collected. After effectively representing data, the researcher could analyze the data through Inferential Analysis and Descriptive Analysis. Coding Ninjas is an online platform to learn to code for Engineering students and provides all the tools necessary for students to learn and apply coding skills on the web without special software. The researcher analyzed how students responded to the BTL campaign and learned the needs of the students when enrolling in an online coding course. The responses from the questionnaire given to the engineering students were thoroughly analyzed based on Descriptive and inference research methods. The study's analysis helped draw certain inferences on the Coding Ninjas platform.

This paper is a descriptive study on the BTL activity in five colleges in Telangana and Karnataka and uses quantitative methodology of research to analyze data collected through questionnaires that was be sent through google forms.

First, To analyze the current level of brand awareness among the target group

1.1 Unaided brand recognition v/s Aided brand recognition

In the survey students were asked specific questions on brand awareness. Students were first given a blank space to fill in the one brand when they think of online coding course, to analyze the unaided brand recognition among students. The next question was an aided brand recognition question, where five companies offering online coding courses were listed and students could select all the brands they recognized.

Figure 13: Unaided Brand Recognition

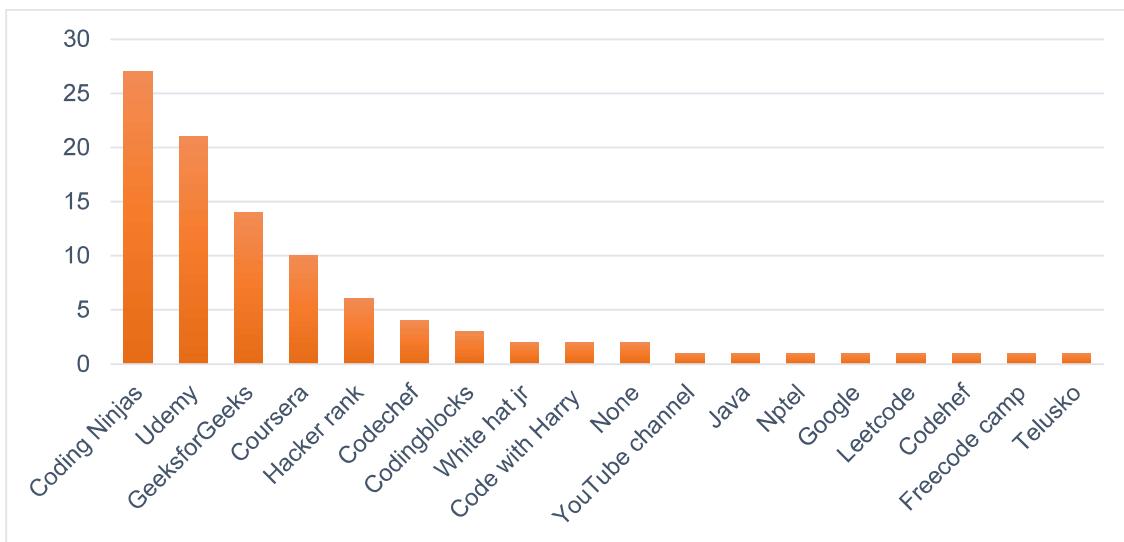
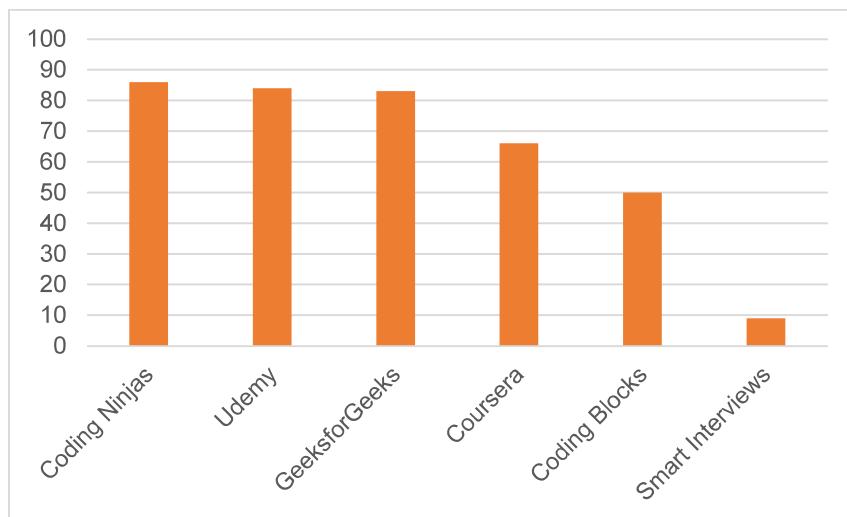


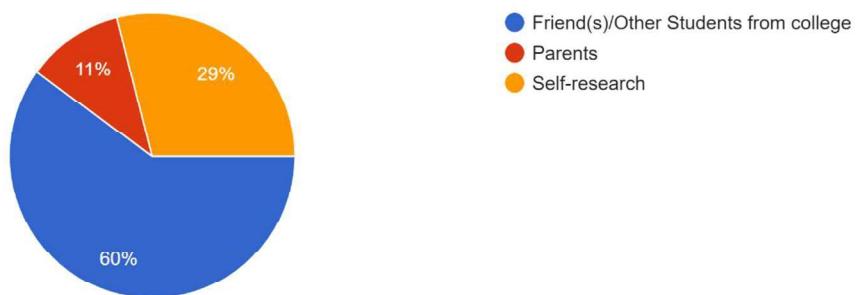
Figure 14: Aided Brand Recognition



As shown in Figure 13 and Figure 14, Coding Ninjas ranked #1 in both aided and unaided brand recognition. Higher recognition than its rivals makes it easier to connect with students and conduct events in collaboration with colleges or student bodies. Important

to note that most of the brand recognition is contributed by students themselves. Students who believe in the Coding Ninjas brand become campus ambassadors for Coding Ninjas and promote the company's offerings to friends, juniors, and other students, as shown in Figure 15 graph below:

Figure 15: Enroling Influence



1.2 Social Media Analysis

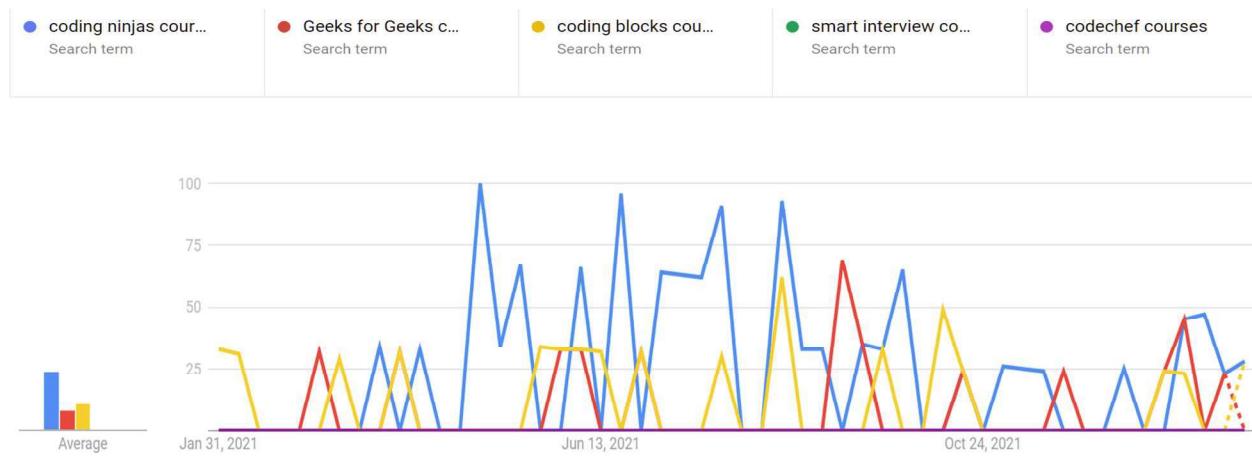
Table 4: Social Media Followers

Brand	Instagram Followers ('000)	YouTube Subscribers ('000)
GeeksforGeeks	215	470
Coding Ninjas	132	212
Code Chef	71.4	90.2
Coding Blocks	59	113
Smart Interviews	1.6	2.43

Students' two primary social platforms where they interact with online coding learning platforms are Instagram and YouTube. Higher subscriber and follower count indicate a higher brand value of the company in the two social spaces. Coding Ninjas has a total of almost 350 thousand followers on both the platforms combined as shown in Table 4.

1.3 Online coding courses search trends

Figure 16: Google search trends



Google is the most popular search engine, and the google search trend graph above depicts search trends over the past 12 months. The search trends indicate that Coding Ninjas courses (blue line), on average, are searched twice as more when compared to its closest competitor.

To investigate the students' transformation from traditional learning to technology-based modern-learning

1.4 Students learning requirements from online coding courses

There were thirteen variables considered with the aim to achieve the research objectives as listed in Table 2. To best analyze and find patterns in the responses, the variables being tested were put through factor analysis to reduce the numerous variables to fewer dimensions, the results of which can be viewed below:

Table 5: Factor Analysis

Rotated Component Matrix^a

Component

	Concepts	Product	Experience
Curriculum	0.604		
Concepts clarity	0.732		
Fees		0.870	
Discounts		0.744	
Ease Online Access		0.592	
Lecturer	0.649		
Doubt resolution	0.590		
Doubt resolution Speed	0.712		
Self-paced learning	0.588		
Practice exercises & Projects			0.661
User Interface			0.827
Gamification/Achievements			0.645
Review/Feedback from friends			0.626
Extraction Method:	Principal Component Analysis.		
Rotation Method:	Varimax with Kaiser Normalization. ^a		
a. Rotation converged in 8 iterations.			

Table 6: KMO & Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.933
Bartlett's Test of Sphericity	Approx. Chi-Square	1246.828
	df	91
	Sig.	<.001

The rotated factors are mentioned in Table 5 are reduced to three significant dimensions

— ‘Concept,’ ‘Experience,’ and ‘Product.’

Concept: This dimension indicates that respondents seek a structured online coding course with concepts clearly explained by a top lecturer and good speedy doubt clarification whenever the student is unclear about any concepts.

Experience: Responses bunched under this dimension indicate that students want to learn by practice and compare their performance with others. The essential needs are the user interface, assignments, projects, progress tracking, gamification, and leader boards.

Product: Competitive pricing, discounts, and ease of online access are the variables bunched under this dimension.

The KMO & Bartlett's Test as shown in Table 6, indicates that the KMO value is more than 0.6 (0.933), and the significance value is <.001, meaning that reducing 13 variables to 3 significant dimensions is acceptable statistically. Cluster analysis was then conducted on the generated three dimensions to determine consumers' needs patterns. The following are the results:

Figure 17: Cluster Analysis Graph

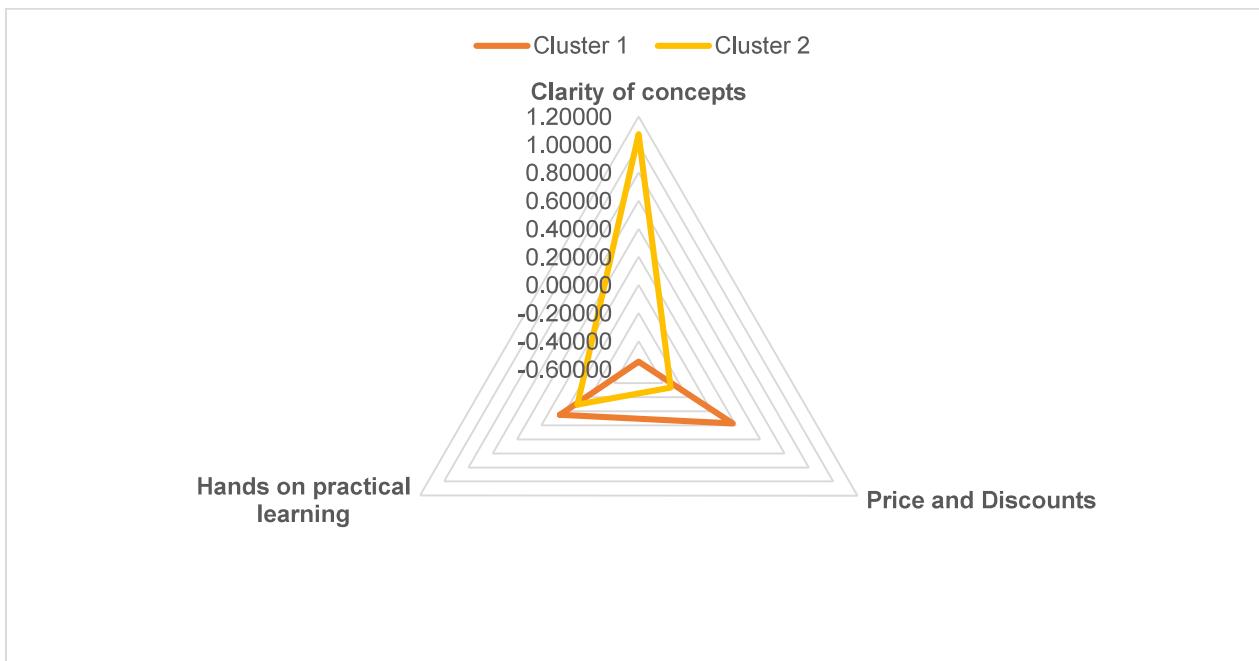


Table 7: Final Cluster Count

Respondents in each Cluster		
Cluster	1	65.000
Cluster	2	33.000
Valid		98.000
Missing		0.000

As shown in

Figure 17 and Table 7, the cluster analysis yielded two distinct clusters from the reduced three dimensions. Both clusters are similar in that both sets of respondents have an affinity towards practical hands-on learning. Apart from hands-on learning, respondents in Cluster 2 are greatly looking for clarity in concepts, whereas respondents in Cluster 1 are looking for economical tools to practice problems, assessments, and code online. As seen from Table 7, sixty-five respondents are grouped in Cluster 1, and thirty-three is grouped in Cluster 2.

The performed Factor and Cluster analysis on the given thirteen variables thus indicates that there are majorly two categories of students:

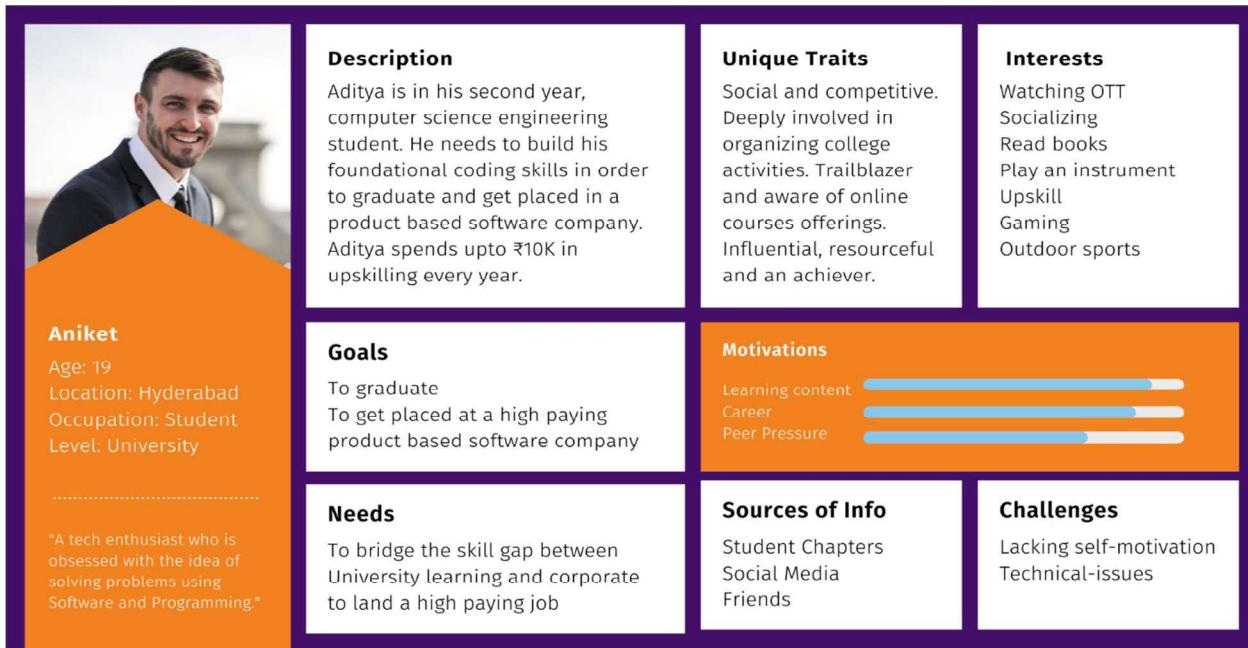
Figure 18: Buyer persona - Cluster 1

	<p>Description</p> <p>Aditya is in his second year, computer science engineering student. He needs to build his foundational coding skills in order to graduate and get placed in a product based software company. Aditya spends upto ₹10K in upskilling every year.</p>	<p>Unique Traits</p> <p>Social and participates in extracurricular activities. Sparsely knowledgeable about online courses and seeks advice from social circle before opting to go for one.</p>	<p>Interests</p> <p>Arts & Crafts Watching OTT Socializing Online gaming Outdoor sports Content Creation Dancing Photography</p>
<p>Aditya Age: 19 Location: Hyderabad Occupation: Student Level: University</p> <p>.....</p> <p>"A tech enthusiast who is obsessed with the idea of solving problems using Software and Programming."</p>	<p>Goals</p> <p>To graduate To get placed at a high paying product based software company</p>	<p>Motivations</p> <p>Career Pricing Peer Pressure</p> 	<p>Needs</p> <p>To bridge the skill gap between University learning and corporate to land a high paying job</p>
	<p>Needs</p> <p>To bridge the skill gap between University learning and corporate to land a high paying job</p>	<p>Sources of Info</p> <p>Student Chapters Social Media Friends</p>	<p>Challenges</p> <p>Lacking self-motivation Limited Budget</p>

Students from 'Cluster 1', comprising the majority, are looking to online coding learning portals to practice known concepts by solving questions and taking assessments, thereby tracking their competency in various categories and concepts related to coding and comparing their standings among other students using the same platform.

The unique traits of such a category of students indicate that they are social and participate in extracurricular activities. Also, when it comes to Coding Ninjas, students belonging to 'Cluster 1' have come across the brand through different touchpoints but have a below-average idea about the company's offerings. Students from this cluster rely on input from friends and family to make decisions.

Figure 19: Buyer Persona – Cluster 2



The second category of students, ‘Cluster 2,’ are keener on learning the concepts from top-notch instructors and a well-structured curriculum and practice as they learn. Students from ‘Cluster 2’ are relatively price-insensitive and keen to have a quality learning journey. Students belonging to this category are also active in organizing college events and informed about the Coding Ninjas brand and its offering.

1.5 How students are primarily accessing online education

The mobile data revolution in India has seen transform. India now offers the cheapest Mobile data per GB. During the pandemic, most students were in their hometowns and

logging on to the internet to connect to online classes. The same period saw students interested in online coding courses for effective learning techniques and access to top-quality lecturers. Students could now access the highest quality education at a fraction of the cost to top institutions. The researcher would like to check if mobile data played any role in contributing to the popularity and rise of online classes.

Table 8: How students connect to internet

Mobile Data, Broadband	78	80%
Mobile Data, Public WiFi	15	15%
Mobile Data, Library	4	4%
Broadband, Public WiFi	1	1%
Total	98	100%

Figure 20: Means to connect to the internet

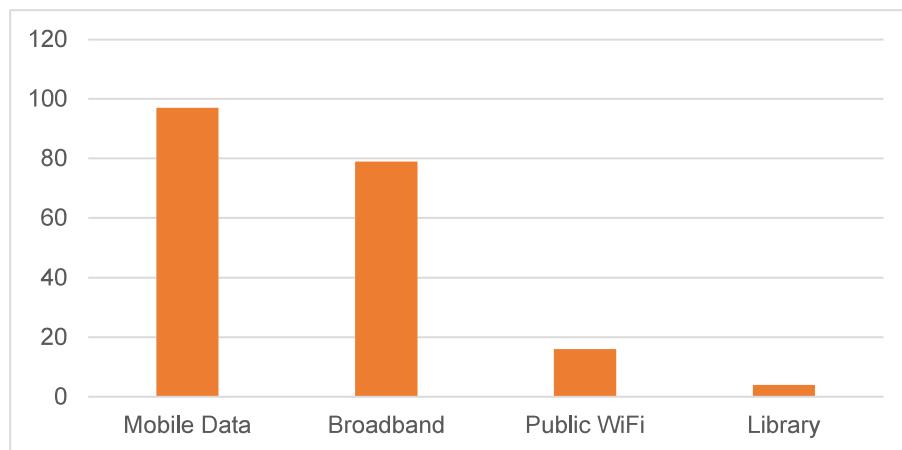
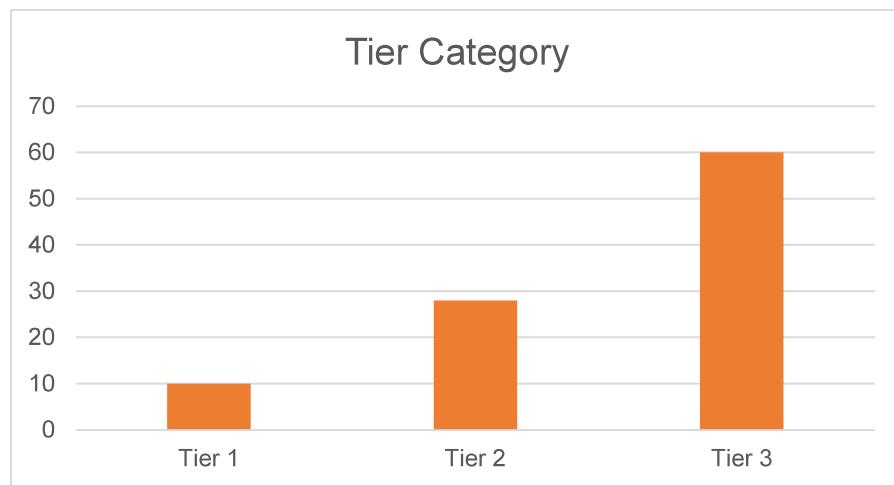


Figure 21: Tier category



From Table 8 and

Figure 20, it is evident that 80% of the students connect to the internet for online learning via mobile data. Also as shown in Figure 21, almost all the students from Tier 3 access online learning through mobile data. Mobile data is only accessed via smartphones and is an essential channel to communicate with engineering students.

Indian cities tier category - (Department of Expenditure, 2015)

1.6 & 1.7 To analyze factors that the on-campus BTL promotion strategy can have on a company's sales

For this analysis, the most important factors are the **costs incurred**, the **number of paid enrollments**, **revenue generated** within a week from conducting the campaign, **leads generated**, and the overall **bottom-line impact**. On-campus promotional activities have associated costs, and to analyze the cost-to-benefit of conducting the BTL campaign, a college wise breakeven point analysis is done as shown in Table 9, Table 10, and Table 11.

Table 9: BTL Campaign Colleges

College	Date	New Leads	Enrolments	Amount
Lords Institute of Engineering & Technology	27-10-2021	185		0
Sreyas Institute of Engineering & Technology	03-11-2021	179		0
CMR Institute of Technology	26-12-2021	36	1	22559
Dayananda Sagar College of Engineering	10-12-2021	160	4	40819
JSS Science & Technology University	01-12-2021	150	1	10500
Total		710	6	73878

Table 10: College wise BEP Calculation

College	Date	Cost	BEP	Revenue	P&L
Lords Institute of Engineering & Technology	27-10-2021	17000	42500	0	Negative
Sreyas Institute of Engineering & Technology	03-11-2021	7500	18750	0	Negative
CMR Institute of Technology	26-12-2021	6000	15000	22559	Positive
Dayananda Sagar College of Engineering	10-12-2021	7500	18750	40819	Positive
JSS Science & Technology University	01-12-2021	9000	22500	10500	Negative
Total		47000	117500	73878	Negative

Table 11: Overall BEP Calculation

Total Costs	₹ 47,000.00
Total Revenue	₹ 73,878.00
CM	40%
BEP	₹ 1,17,500.00
Difference	₹ -43,622.00

Costs included every expense item such as promotional material, speaker hourly wage, logistics costs, rewards to students, travel costs, and other added overhead expenses. The costs incurred in each college were different and mentioned in Table 10. The contribution margin for each paid course on Coding Ninjas is 40% and used the same bases to calculate the breakeven point in Table 10.

Within a week of conducting the BTL campaign in each of the listed colleges in Table 3, the breakeven analysis, as shown in Table 10, was positive in two out of the five colleges. As shown in Table 9, the campaigns have seen a total of 6 paid enrolments on the Coding Ninjas platform with total revenue of ₹73,878/- and 710 leads generated.

The overall P&L is clearly shown in Table 11. Within a week from the on-campus BTL campaign, the total revenue was more than the costs incurred but almost ₹43,000/- short of the breakeven point.

Inferential Statistics

- 1. Access to mobile data plays an important factor in students' opt for online coding courses.**

Table 12: Hypothesis test 1

	Connect	Willing to Enrol	T-test
Mean	2.336734694	1.459183673	α 0.05
Variance	0.555543867	0.250894172	H0 There is no relation between dependent and independent variable
Observations	98	98	H1 There is relation between dependent and independent variable
Pearson Correlation	0.161455315		
Hypothesized Mean Difference	0		
df	97		
t Stat	10.48963848		
P(T<=t) one-tail	5.89435E-18		
t Critical one-tail	1.66071461		
P(T<=t) two-tail	1.17887E-17		
t Critical two-tail	1.984723186		

A T-test was carried out between how students prefer to connect to the internet as the independent variable and willingness to enrol as the dependent variable, as shown above in Table 12. The t-test reveals that the p-values are below the significance level, hence the alternate hypothesis that there is a strong relation between Personal selling and willingness to enrol, i.e. the independent and dependent variable.

2. Personal selling impacts a students' willingness to enrol in an online coding course.

Table 13: Hypothesis Test 2

	Influence (Personal Selling)	Enrol	T-test
Mean	1.683673469	1.459183673	α 0.05
Variance	0.795813171	0.250894172	There is no relation between dependent and independent variable
Observations	98	98	H_0
Pearson Correlation	0.236130602		There is relation between dependent and independent variable
Hypothesized Mean Difference	0		H_1
df	97		
t Stat	2.43102223		
P(T<=t) one-tail	0.008446385		
t Critical one-tail	1.66071461		
P(T<=t) two-tail	0.01689277		
t Critical two-tail	1.984723186		

The Figure 15 Pie graph indicates that personal selling and reference strongly influence a student's decision to enrol in an online coding course. Personal selling plays a central role in getting students enroled in a course. A T-test was carried out with Personal selling as the independent variable and willingness to enrol as the dependent variable, as seen above. The t-test reveals that the p-values are below the significance level, hence the alternate hypothesis that there is a strong relation between Personal selling and willingness to enrol, i.e. the independent and dependent variable. The paper will further delve into the aspects of personal selling.

3. Students' higher familiarity with the courses offered by Coding Ninjas is directly related to the students' willingness to enrol in Coding Ninjas coding courses.

Given the two distinct clusters, it is seen from

Figure 17: Cluster Analysis Graph that students grouped in cluster 2 are interested in learning the concepts and applying the same through hands-on projects. Moreover, students in cluster 2 are not very price-sensitive compared to students in cluster 1, and thus, given the premium nature of Coding Ninjas courses, premium courses at a premium

price, cluster 2 students are an ideal target essential to study and gain insights about them.

Table 14: Cluster wise familiarity with Coding Ninjas offerings

			1	2	3	4	5	Total
Clusters	1	Count	13	10	16	17	9	65
		% within CL_1	20.00%	15.40%	24.60%	26.20%	13.80%	100.00%
	2	Count	5	3	9	14	2	33
		% within CL_2	15.20%	9.10%	27.30%	42.40%	6.10%	100.00%
Total		Count	18	13	25	31	11	98
		% within Cluster	18.40%	13.30%	25.50%	31.60%	11.20%	100.00%

The table above clearly indicates that almost the students who are willing to enrol in Coding Ninjas courses are students who also have a **higher knowledge of the offerings** by the company. Almost 50% of the students have marked their awareness about the offerings at '4' and above. The on-campus BTL campaign directly connects with potential students interested in the course. To verify this, conducted a two-sample paired t-test between 'familiarity of Coding Ninjas offerings' and 'willingness to enrol,' and the results are as below:

Table 15: Hypothesis Test 3

	Familiarity	Willingness to enrol
Mean	3.040816327	1.459183673
Variance	1.647801389	0.250894172

			T-test
			α
Observations	98	98	0.05
Pearson Correlation	-		There is no relation between dependent and independent variable
Hypothesized Mean Difference	0.334087486		H0
df	0		There is relation between dependent and independent variable
t Stat	97		H1
P(T<=t) one-tail	10.26118277		
t Critical one-tail	1.83113E-17		
P(T<=t) two-tail	1.66071461		
t Critical two-tail	3.66225E-17		
	1.984723186		

Shown in Table 15 above, p-value is less than the significance of 0.05, which confirms an association between the dependent and independent variables. Hence, Students' higher familiarity with the courses offered by Coding Ninjas is directly related to the students' willingness to enrol in Coding Ninjas coding courses.

4. Higher NPS score is an important factor for students to opt for Coding Ninjas course.

The bottom line is to deliver above customer expectations. College students are highly connected through friends and student chapters.

Table 16: NPS vs Willing to enrol

NPS	Willingness to enrol	
	Yes	No
1	1	5
2	0	5
3	0	2

4	2	1
5	4	7
6	5	6
7	12	6
8	15	5
9	11	2
10	3	6

Table 17: Hypothesis Test 4

	NPS	Willingness to enrol	T-test
Mean	6.612244898	1.459183673	α 0.05
Variance	6.116137177	0.250894172	H0 There is no relation between dependent and independent variable
Observations	98	98	H1 There is relation between dependent and independent variable
Pearson Correlation	-0.345800856		
Hypothesized Mean Difference	0		
df	97		
t Stat	18.98002953		
P(T<=t) one-tail	9.96258E-35	→	
t Critical one-tail	1.66071461		
P(T<=t) two-tail	1.99252E-34		
t Critical two-tail	1.984723186		

As shown in Table 16 and confirmed by the t-test in

Table 17, students who rated satisfaction at 7 and above are twice as likely to enrol for an online coding course. So, the product needs to be consistently evolving and adopting to changing job market and student needs of skilling for a successful career.

CHAPTER 5: Conclusion &

Recommendations

Conclusion

Coding Ninjas is known for its quality lecturers delivering a structured self-paced learning experience and enabling the students to practice these concepts by its in-built IDE. The platform provides modern techniques like web-based learning, visual-based instruction, hands-on projects, and assessments to provide a 360-degree learning experience.

From this study, students' needs to learn to code online are identified and observed two distinct student requirements. It is also observed that mobile data penetration has enabled numerous college-going students to access online learning, especially during lockdowns. The mobile penetration has also helped EdTech companies gain users as students look for more engaging and effective ways to learn at home.

Most of the respondents are familiar with the Coding Ninjas brand. Nevertheless, the study also finds that these students may not necessarily be aware of the services offered by the brand. Students learn about the brand and services primarily through contacts in college, friends, seniors, and social media.

BTL campaign clearly has benefits, and each campaign can potentially cover its cost within a week and can further generate business over time. However, having a good network of campus ambassadors to help organize the campaign and spread the word about the event is key to the campaign's success at optimized costs.

Coding Ninjas is striving hard to transform how students learn to code. It will surely reach a mass audience if the online coding course becomes more accessible and affordable.

All-inclusive Strategies

Short Term Strategies

1. *Promotion through on-campus BTL campaigns*

Students respond well to experiential campaigns that are interactive and relatable. Coding Ninjas needs to utilize the re-opening of college campuses to build relationships and engage its target audience.

Action plan: Coding Ninjas to identify top 100 colleges in southern India by analyzing the number of seats and average fees; higher is better. Conduct events in at least six unique colleges every month and cover all 100 colleges within 12 months.

The Coding Ninjas team will execute the on-campus event with the help of the campus ambassadors' network established at the colleges. The maximum cost associated with conducting such an event is as below:

Table 18: Estimated campaign cost per college

Estimated Costs	
Speaker	₹ 4,000
Marketing Material	₹ 4,000
Campus Ambassadors Compensation	₹ 1,500
Logistics	₹ 1,000
Overheads	₹ 1,000
Total Cost	₹ 11,500
Contribution Margin	40%
Break-even point (BEP)	₹ 28,750

Expected Outcome: Strategically conducting on-campus B.T.L. promotional activities will help actively involve college students to participate in events and increase company branding and generate new leads, thereby increasing userbase and familiarity with Coding Ninjas offerings. Higher familiarity will lead to a higher willingness to enrol. Friends influence students to a high degree. Friends inside colleges form bonds or groups based on shared interests, and thus, news about various activities and events spreads like wildfire through word of mouth and references.

The maximum cost indicated indicates that the B.E.P. will be ₹28,750/. Recoup this cost within a week requires converting two students to enrol in a mid-tier Coding Ninjas course. There is scope to optimize the cost and increase the likelihood of breaking even in the campaign's duration. As observed in the campaign conducted in five colleges, on average, sixty percent of the cost was recovered in the campaign's duration, and 142 leads were generated per college. Also, the campaign generated a positive return in two out of five colleges. The breakeven was possible because the event was driven by enthusiastic campus ambassadors who could confidently put across the brand message when students reached out to them post the event. Hence, as explained, conducting such campaigns generates leads and brings the brand closer to its students. Non-converted leads to be put through a nurture campaign and convert registered users to paid users.

2. Harness the outreach of social media

Social media, especially Instagram and WhatsApp Messenger, with its vast influencer network, can reach a broad audience due to its large footprint and popularity among students. Social media meme pages, language specific pages and coding related pages are some of the most followed pages by college students. Also, given the fluctuating Covid cases, colleges tend to close gates for a month and switch to complete online modules. Social media and students thus play a vital role by allowing students to remain connected. Moreover, students have very high exposure to social media and swayed by social media influencers.

Action plan: Coding Ninjas must leverage the social media platform to promote the brand by building a network of social media influencers and conduct social media events and giveaways to connect with the audience.

Expected outcome: The large footprint of social media and social media influencers with increased consumption of social media by millennials is a lead generation gold mine, assuming that the cost of acquisition (CAC) per student will be same or lower as compared to the on-going digital marketing strategies. Coding Ninjas conducts coding related events and promotional campaigns regularly. The outreach of these activities will grow multiple folds by building the right social media influencer network. The events done will increase the students registered on the Coding Ninjas platform that allows the company to nurture and target the leads to paid enrolments. Bottom line - leads from existing and untapped geographies pan India, more brand awareness, and higher enrolments.

3. Incorporate student interests and hobbies

Figure 22: Interests

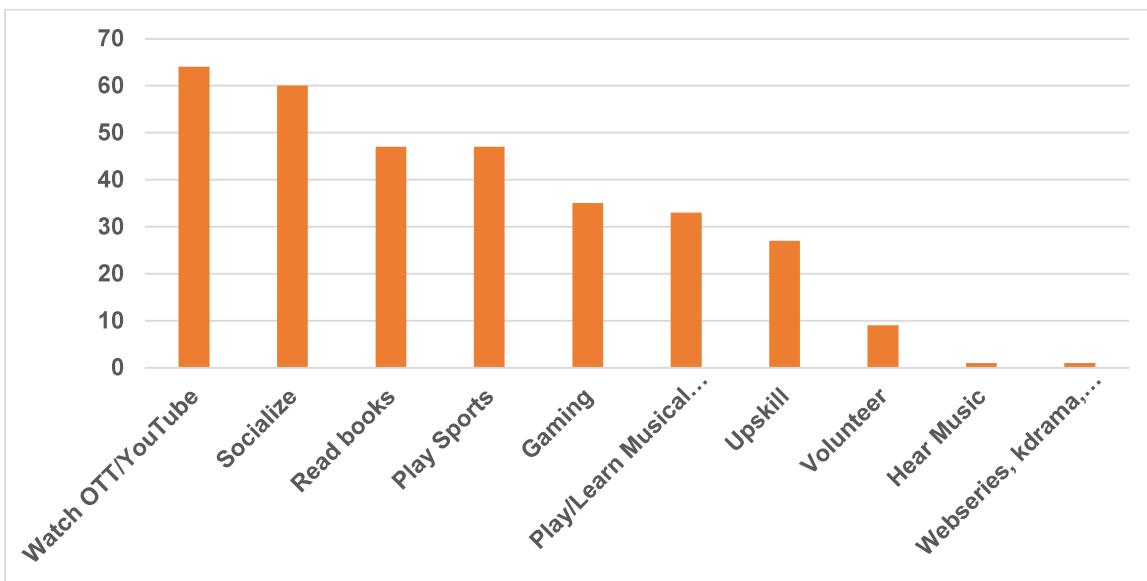
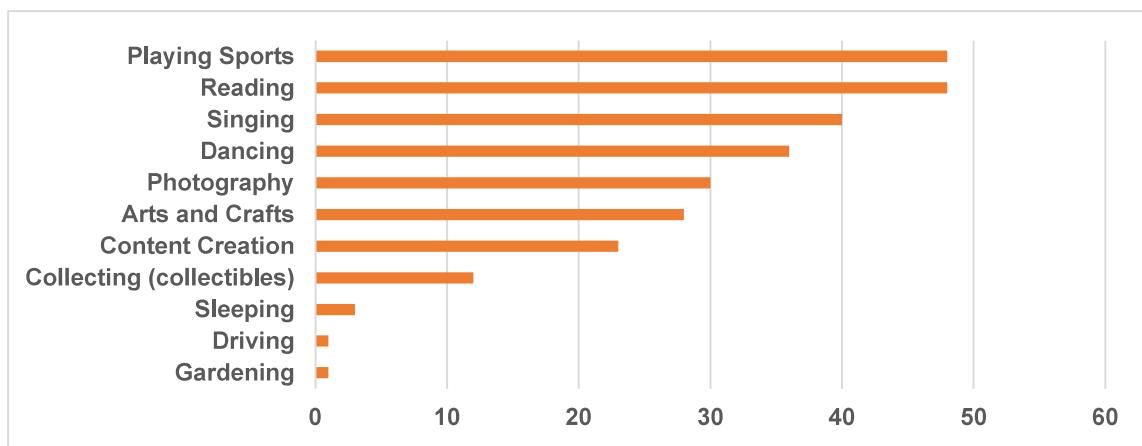


Figure 23: Hobbies



As seen from

Figure 22 and

Figure 23, the top 4 interests of students include streaming online videos, socializing, reading books, and playing sports. Not all is study and students spend their free time chasing their interests and hobbies.

Action Plan (A): To incorporate students' interests, such as reading books, Coding Ninjas should plan to launch a handbook that may be on the topics How to crack product-based companies, top 100 questions for cracking interviews, how to ace coding interviews, or similar themed books. A tangible book will tap into students reading desire and combine it with coding ninjas offering, adding a layer to the service. The book thus created can be an add-on for students enrolling for a course or attending and acing an event hosted by coding ninjas. Handing out a few lucky students such handbooks during the BTL campaign is also one way to get students excited about the courses.

Action Plan (B): Create workshops around sports and game development themes or conduct coding events.

Expected outcome: Printing a book costs about ₹15/- and adding a book that eases students' lives by primarily focusing on clearing the crucial interview round adds immense value to the existing service and thus serves as a unique selling point (USP). Coding Ninjas services are all online, and the book will put a tangible product in the hands of the users, thus increasing brand recognition through unique events. If the company conducts a on-campus BTL campaign and decide to distribute the books to computer science

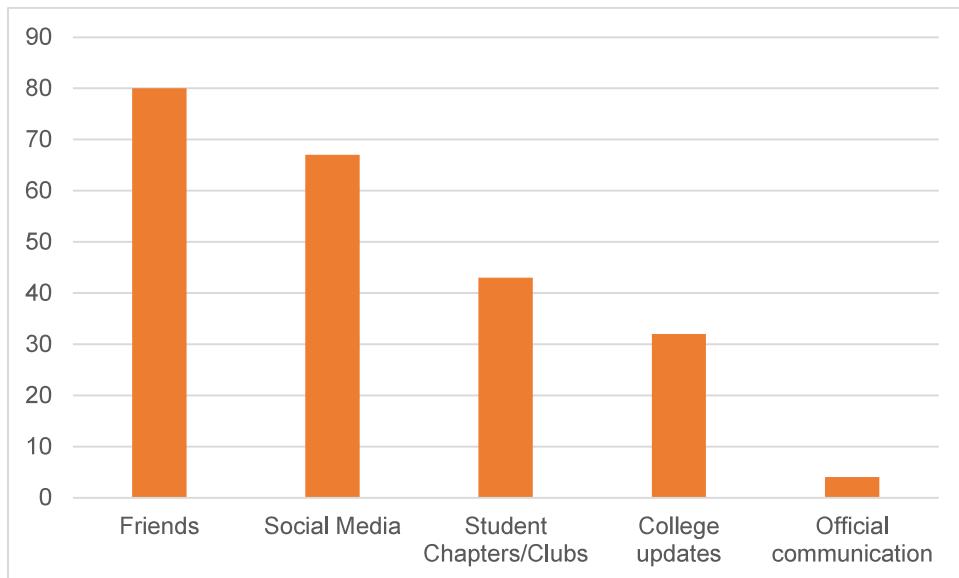
faculty and coding clubs then it would cost the company only ₹300/- for distributing books to 20 faculty members of committee members of student chapters to use in their classes or events. The investment is small and likely to generate interests from students.

Long-Term Strategies

4. Activating influential students within colleges

Friends influence students to a high degree. Friends inside colleges form bonds or groups based on shared interests, and thus, news about various activities and events spreads like wildfire through word of mouth and references.

Figure 24: Source of information



Student chapters is another significant source of college news for students as shown in Figure 24. Student chapters are run by college students, especially in their IIIrd and IVth year. Freshers and sophomores seek advice and guidance from seniors when making critical academic and career related decisions.

Table 19: Familiarity vs Willingness to enrol

Familiarity	Willingness to enrol	
	Yes	No
1	4	14
2	5	8
3	12	13
4	28	3
5	4	7

As shown in Table 19 and verified hypothesis in Table 15, the higher familiarity of Coding Ninjas courses leads to the willingness to enrol. With this relationship established, Coding Ninjas must have an effective campus ambassador program and periodically host events with student chapters within each college.

Action Plan: Establish a campus ambassador program and a network of coding clubs within colleges established by Coding Ninjas, especially in the identified top 100 colleges in the southern region of India. Incentivize and monetize students and clubs to refer friends/students to enrol in and Coding Ninjas courses. Clubs will be established to create a member base within college by engaging with college-going students and leveraging the user base to promote Coding Ninjas brand.

Expected outcome: Higher enrolments, campus ambassadors, and club members are respected within the college due to a position of influence. Pull crowds by conducting events either on campus or online as the campus ambassadors can assert their influence and spread the word about the brand. Coding Ninjas conducts online coding events regularly, so campus ambassadors will have an event to promote every month.

The campus ambassador program is purely on a referral basis; the company has little to no costs to bear until the campus ambassador refers a student to enrol in a paid course. Such a program will depend on hiring exemplary campus ambassadors to train and motivate them with creative reward plans.

Clubs may require support from the company to support their needs to conduct events. The operational cost can be capped depending on the college. The company can commit ₹8,000/- per club per quarter, and given the commitment, the company can break even if the club converts just one student to a paid course per month, average fee of ₹6,700/-. Furthermore, as discussed earlier, an on-campus BTL activity has a higher success rate when students from within the college are actively involved.

5. Develop a mobile app

Students primarily connect through mobile data, and as seen above in Figure 20. Furthermore, the report (Chanchani, For the first time, India has more rural net users than urban, 2020) also indicates mobile internet penetration in many Indian towns and its impact on the EdTech industry.

Action Plan: Create a mobile app where students can interact with the brand's mobile app to track their performance dashboards and rank against their competition. Moreover, via gamification, students can win badges that they can access via the mobile app and show off to their fellows in class. The company will need to carefully assess the benefit of investing the person-hours in developing a mobile app. The benefit is that Coding Ninjas will have a new avenue to track student usage and create tailor-made promotions through push notifications.

Expected Outcome: Coding Ninjas can create tailor made push notifications regarding events and promotional offers and track user behaviour. Promotional push notifications will convert students to enrol for courses and tracking user behaviour will allow the company to enhance or create product accordingly.

Exclusive cluster-based strategies

Cluster 1

Students belonging to this cluster are looking to practice coding and working on projects rather than looking for a high-quality lecture.

Action Plan: As interaction is a contributing factor in the quality of online learning (Dhanielly P. R. de Lima, 2019) , the company must focus on building their online discussion forum for promoting discussions on problem questions or interview experiences. The discussions in such dedicated forums are in-depth. The forum is also an important collaborative tool and a problem can have many unique solutions from both instructors and students. As such coding questions posted on the forum will generate engaging discussions from users on clarifications and on refined techniques to solve the problem.

Expected outcome: The user generated content will thus appear on google searches when new users will look for answers to solutions. This will drive traffic to the forums and increase lead generation as conversations in forums are recorded and logged for everyone to see and learn. The forum could also have a digital banner promoting Coding Ninjas services related to the post or discussion to such users, such as mock interview, interview prep, competitive programming, and other skill-based courses. These courses are relatively cheaper with shorter duration and offer hands-on approach to problems that help students succeed in their career, at their academic life or help solve any generic coding related problems they face. Hence, increased brand awareness, lead generation, satisfied users, and willingness to enrol. Most importantly, it adds zero operational costs and moderators can be appointed from active community members.

Cluster 2

As shown in

Figure 17: Cluster Analysis Graph, students in Cluster 2 seek high quality content along with hands-on practical application of learning. Coding Ninjas helps students acquire updated skills that bridges the gap between campus and corporate and enable students to get placed with top IT companies through placement assistance services offered by the company. Students placed at top companies attract attention from their juniors curious to learn about the placed student's journey in landing the top job.

Action Plan: There is a lack of quality coders in the job market (citation). Coding Ninjas should tie-down a couple top product-based IT-companies to hire students, who have completed Coding Ninjas course and certified for the same, directly from the merit list.

Expected Outcome: This will increase credibility of Coding Ninjas as a top platform to learn coding and land top jobs at IT companies. Hence, Coding Ninjas students who are placed at top companies will be approached by juniors will be able to guide juniors successfully and act as a micro-influencer for Coding Ninjas, the platform that helped him land the top job. Thus, lead directly to students opting to enrol in coding courses.

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Appendix

Online Survey Questionnaire

Survey

Hello Friends, I am conducting a quick survey on EdTech platforms for coding. This is a part of a College project that I'm currently undertaking. I humbly request you to provide your feedback. This survey should only take you max 5 mins to complete.

Kindly note, this survey DOES NOT track any personal details
(Demographics)

*Required

1. What is your current age? (in Years) *

- a. Under 15
 - b. 15-17
 - c. 18-20
 - d. 21-23
 - e. Over 23
2. Which gender do you identify with? *
- a. Male
 - b. Female
3. What Program are you enrolled in? *
- a. Undergraduate (B.Tech/BE/BCA/B.Sc/etc)
 - b. Post Graduate (M.tech/M.Sc/etc)
4. Which year are you currently studying in? *
- a. First Year
 - b. Second Year
 - c. Third Year
 - d. Fourth Year
 - e. Fifth Year (Integrated)

Geographic

5. Which state/union territory are you from? *
6. Name the City/Town/Village where you are from *
7. How do you primarily connect to the internet for ONLINE LEARNING? (Select only top 2) *
- a. Mobile Data
 - b. Broadband
 - c. Public WiFi
 - d. Library

Psycographic

8. How do you like to spend your free time? *
- a. Read books

- b. Play/Learn Musical Instrument
 - c. Gaming
 - d. Play Sports
 - e. Socialize (Family, Friends, Relatives)
 - f. Upskill
 - g. Watch OTT/YouTube
 - h. Volunteer
 - i. Other:
9. List a few of your hobbies and interests *
- a. Reading
 - b. Arts and Crafts
 - c. Collecting (collectibles)
 - d. Dancing
 - e. Singing
 - f. Content Creation
 - g. Photography
 - h. Playing Sports
 - i. Other:
10. What motivates you most to learn coding online? *
- a. In-depth learning
 - b. Hands-on exercises/projects
 - c. Career
 - d. Peer pressure
 - e. Recognition
 - f. Other:
11. What bothers you most about online learning? *
- a. Limited time
 - b. Limited budget
 - c. Lack self-motivation
 - d. Technical issues
 - e. Other:
12. How do you keep yourself updated College news/activities/events? (List Sources) *
- a. Student Chapters/Clubs
 - b. Social Media

- c. Friends
- d. College updates
- e. Other:

13. How much do you spend in a year upskilling yourself? *

- a. None
- b. upto ₹5,000
- c. ₹5,000 - ₹10,000
- d. ₹10,001 - ₹30,000
- e. ₹30,001 - ₹60,000
- f. more than 60,000/-

Unaided BR

14. When you think of learning coding online, what brand comes to your mind?

(NAME ONE) *

Aided BR

15. Which of the following brands have you heard of? (Select all that apply) *

- a. Smart Interviews
- b. Coding Ninjas
- c. GeeksforGeeks
- d. Coding Blocks
- e. Udemy
- f. Coursera

16. In the past 3 months, where have you seen or heard about Coding Ninjas?

(Please select all that apply) *

- a. Friends
- b. Social Media
- c. Mobile Ads
- d. Online Video
- e. Web search
- f. TV Advertisement
- g. Mailed Advertisement
- h. Posters
- i. Billboards
- j. Coding Ninjas Website

- k. I don't remember hearing or seeing advertisement about Coding Ninjas
- l. Other:

17. How familiar are you with Coding Ninjas offerings? *

1) Not Familiar at all 2) Not So Familiar 3) Somewhat Familiar 4) Very Familiar 5) Extremely Familiar

- a. Not familiar at all
- b. 1
- c. 2
- d. 3
- e. 4
- f. 5

18. How likely are you to recommend Coding Ninjas to another student? *

- a. Not at all
- b. 1
- c. 2
- d. 3
- e. 4
- f. 5
- g. 6
- h. 7
- i. 8
- j. 9
- k. 10

CVP

19. How important the following factors when considering to enrol in an online

course? *

1 (Lowest)

2

3

4

5 (Highest)

- a. Curriculum
- b. Concepts clarity
- c. Fees
- d. Discounts

- e. Ease Online Access
- f. Lecturer
- g. Doubt resolution
- h. Doubt resolution Speed
- i. Self paced learning
- j. Practice exercises & Projects
- k. User Interface
- l. Gamification/Achievements
- m. Course duration
- n. Review/Feedback from friends
- o. Curriculum
- p. Concepts clarity
- q. Fees
- r. Discounts
- s. Ease Online Access
- t. Lecturer
- u. Doubt resolution
- v. Doubt resolution Speed
- w. Self paced learning
- x. Practice exercises & Projects
- y. User Interface
- z. Gamification/Achievements
- aa. Course duration
- bb. Review/Feedback from friends

20. Who INFLUNCES your decision to opt for an online coding course THE MOST? *

- a. Friend(s)/Other Students from college
- b. Parents
- c. Self-research
- d. Other:

WTE

21. Are you planning to Enrol in an Edtech platform to learn coding? *

- a. Yes
- b. No