



CAREER TRACK **FINTECH**



JAGSoM

JAGDISH SHETH SCHOOL OF MANAGEMENT



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INTRODUCTION

Financial Technology (FinTech) has its origins in the 2008 global financial crisis where the financial markets collapsed, traditional banks and financial institutions came under heavy regulation and many white-collar finance jobs were lost. The same talent created startups using disruptive technologies that made banking far more economical to the masses – basically, the digitalization of all processes like commercial (SMB) lending, P2P lending, raising capital (Investment Funds, Robo-Advisories, even ICOs-Crypto or IDOs - DeFi), crowdfunding, payments, insurtech, and regtech, to redefine and eliminate the inefficiencies that have prevailed in the past. In China, the technology company driven entry into financial services is called TechFins and originates from BAT (Baidu, Ant Group, and Tencent). In the USA, it originates from GAFA (Google, Apple, Facebook/Whatsapp, and Amazon), while the Indian FinTech market is microfinance led using Aadhaar Pay technology for authentication and UPI-based micropayments. FinTech is now one of the most prolific sectors and has high venture investor interest among the growth sectors in India.

Globally, payments have been one of the largest segments with players like Stripe and Square dominating online and offline payments while the GAFA companies introduced Apple Pay, Google Pay, Amazon and Whatsapp (FB) Pay along with Alipay and WeChat Pay among the TechFins. Since the need for credit in terms of credit cards and personal loans was offered primarily to high net worth (high credit score) consumers, the need for deferred credit without a formal credit card came in the form of the Buy Now Pay Later (BNPL) segment. Payment players like Klarna who were in Point of Sale (POS) lending with 90 million customers started offering 3 schemes in BNPL and its market value grew sixfold to US\$ 30 Billion. Square POS acquired the #2 BNPL company Afterpay in Australia with 16 million customers at a valuation of US\$29 Billion, which has started a slew of consolidations in FinTech. Payments is the hotspot of FinTech innovation in India with diverse business models called Payment Gateways / Aggregators (primarily online or remote payments) or just merchant acquiring and router services (proximity or offline payments), with the top FinTechs in India like Paytm, RazorPay, and Cred being payment FinTechs. The ever-evolving landscape and growth in this segment of Financial Services throw up employment opportunities for Business (MBA/BBA) students apart from developers with an engineering background.

Jagdish Sheth School of Management (JAGSoM) introduced the Financial Technologies (“FinTech”) Career Track along with our FinTech elective in the year 2020. In the first year, our partner school was ESCP Business School, London and in 2021, it was Darden School of Business, University of Virginia, Charlottesville, USA. The objective of the FinTech Career Track is for JAGSoM Finance students to fit into identified Fintech roles in the industry, to get a deeper understanding of prevalent FinTech business models globally through an immersion program with the Partner School, to receive mentoring by faculty from both JAGSoM and the Partner School as well as working on a live industry (Capstone) project with Indian FinTech companies. In 2021, the focus was on Alternate Lending (Lending Fintechs). In 2022, it is proposed to be on Payments and BNPL.

ROLES, COMPETENCIES, CRITICAL SKILLS, AND INTERVENTIONS

There are specific roles that we are positioning the students for in FinTech. The necessary competencies and interventions are highlighted in the tables in the next pages.

Business Analyst - FinTech: This is a professional role which is responsible for obtaining the business requirements from industry clients and liaising with the client's business team to capture specific business and functional requirements (BRD) and translate those to the language of the developer within the FinTech firm to add as features. While the key relationship management may be with the Product Manager, a reasonable understanding of the business process and the alternate technology solutions is part of the responsibility of this role.

Product Manager/Associate Product Manager - FinTech: This is the starting role leading on a path to Head of Product (Product Owner who is responsible for the overall product roadmap) by prioritising features, timelines and pricing, leading the solutioning meetings where the trade-offs are captured, understand the solutioning options and understanding the client's business mandate clearly.

Business Development - FinTech: This is the trusted advisor role and represents the voice of the client within the Fintech firm. The professional should be having a deep understanding of the industry and FinTech business models to carve out business partnering and Go-to-Market opportunities by collaborating with technology and pre-sales teams to create a business case.

Role	Competency	Critical Skills	Interventions - Courses
Business Analyst - FinTech	<ol style="list-style-type: none"> 1. Liaise with Client Business Team 2. Understand clients' business mandate 3. Understand solution options 4. Provide detailed requirements to own team of developers 5. Support solution development, validation and e2e implementation 6. Analyze Business Process and refine as per business/test requirements 	<ul style="list-style-type: none"> • Good understanding of Fintech Business Models • Good understanding of IT Applications & Solutioning • Understanding Business Requirements & Scoping • Having ownership of Deliverable • Sound Understanding of Business Processes 	<ul style="list-style-type: none"> ○ Machine Learning with Python ○ Advance FinTech Application of Blockchain in Finance ○ Financial Risk Analytics ○ Fintech ○ Immersion CT FinTech RFP - Capstone Projects

Role	Competency	Critical Skills	Interventions - Courses
Product Manager / Associate PM - FinTech	<ol style="list-style-type: none"> 1. Own relationship with Client Business Team 2. Understand clients' business mandate 3. Provide solutioning options 4. Prepare Product Roadmap 5. Provide detailed requirements to own team of developers 6. Lead Solutioning Meetings 7. Partner with Model Development and Engineering 	<ul style="list-style-type: none"> • Being a Trusted Advisor • Sound understanding of Fintech Business Models • Sound understanding of IT Applications & Solutioning • Ability to prioritize features, timing, and pricing • Understanding tradeoffs, testing & development intricacies • Having ownership of Deliverable 	<ul style="list-style-type: none"> ✓ Machine Learning with Python ✓ Advance FinTech ✓ Application of Blockchain in Finance ✓ Financial Risk Analytics ✓ Fintech Immersion ✓ CT FinTech RFP - Capstone Projects

Role	Competency	Critical Skills	Interventions - Courses
Business Development - Fintech	<ol style="list-style-type: none"> 1. Client Relationship Management 2. Understand the industry and target market 3. Collaborate with Pre-Sales & Tech Teams 4. Identify new prospects in the target market/territory/industry 5. Understand own company selling proposition vs competitors 6. Position the value proposition effectively 	<ul style="list-style-type: none"> • Sales - Trusted Advisor, being the SPOC for own client's challenges • Industry Analysis • Understand underlying technology, team player • Sensing and prioritizing BD opportunities • Understanding of Product & market positioning • Sound presentation and verbal-written communication skills 	<ul style="list-style-type: none"> ✓ Machine Learning with Python ✓ Advance FinTech Application of Blockchain in Finance ✓ Financial Risk Analytics ✓ Fintech Immersion CT FinTech RFP - Capstone Projects

CAREER TRACK COURSES

The Career Track in FinTech will have the following courses as follows, along with a Capstone Project (RFP):

1. Machine Learning with Python
2. Advance FinTech
3. Applications of Blockchain in Finance
4. Financial Risk Analytics
5. FinTech Immersion (Partner University: Darden School of Business)
6. Capstone Project (RFP)

Prerequisite courses

The following elective courses are prerequisites for the Career Track in FinTech:

- Financial Technologies (Elective), apart from the Finance Core Courses.

COURSE CONTENT

COURSE 1: MACHINE LEARNING WITH PYTHON

Session	Topic	Details
1-3	Python	<ol style="list-style-type: none">1. Fundamentals of Python2. Data Structures in Python: Lists, Dictionaries, Tuples, Sets3. Data Ingestion (data frames) and File Management
4-6	More about Python	<ol style="list-style-type: none">1. Google Colab Environment2. NumPy Arrays, Matrix Operations3. Pandas, Scikit-learn in Python4. Data Visualization using Matplotlib
7-10	Regression and Regularisation	<ol style="list-style-type: none">1. Introduction to Supervised Learning2. Introduction to Unsupervised Learning3. Regularisation4. Linear Regression, Lasso, Ridge, Elastic Net5. R^2, Adjusted R^2 and RMSE Measures6. Over-fitting and Under-fitting7. Bias-Variance Trade-off
11	Data Pre-processing	<ol style="list-style-type: none">1. Data Cleaning and Data Transformation Techniques
12-13	Classification	<ol style="list-style-type: none">1. Logistic Regression2. Confusion Matrix<ul style="list-style-type: none">• Accuracy• Sensitivity• Specificity• Precision• Recall• F1 Score3. ROC Curve
14-15	Tree-based algorithms	<ol style="list-style-type: none">1. Decision Tree, Random Forest, XG Boost
16-18	Usage of ML	<ol style="list-style-type: none">1. Application of Machine Learning in Finance

COURSE 2: ADVANCE FINTECH

Session	Topic	Details
Fabric of Fintech - Role of Emerging Technologies (8 hours)		
1-2	Role of Cloud and API in Embedded Finance	<ol style="list-style-type: none"> 1. Advancement in Cloud Computing and Introduction to Webservices <ul style="list-style-type: none"> • Serverless Computing • Anything as a service • Realtime Data Analysis • Concept Containerization 2. Account Aggregators 3. Open Credit Enablement Network (OCEN) 4. Open Network for Digital Commerce (ONDC) 5. Open Banking and Embedded Finance led Business models 6. Concept of Regulatory Sandbox 7. Data Privacy and Security
2-3	Role of Distributed Ledger Technologies (DLT) in Decentralized Finance (DeFi)	<ol style="list-style-type: none"> 1. Tokenomics 2. Initial Coin Offering (ICO) and Security Token Offering (STO) 3. Non-Fungible Tokens (NFT) 4. Types of Stable Coin and their role 5. Various DeFi Products 6. Yield Farming and Liquidity Pools
4-5	AutoML and Explainable AI in Finance	<ol style="list-style-type: none"> 1. Traditional ML vs AutoML 2. Using BigML.com for AutoML application 3. IBM Openscale AI for debiasing the data and create explainable models
5-6	Internet of Things (IoT) and Edge Computing in Finance	<ol style="list-style-type: none"> 1. Various Sensors and their role 2. Various type of IoT network 3. Edge Computing 4. Digital Twin
Fabric of Fintech - business Models across Fintech Subdomains (12 Hours)		
7-10	PayTech Models	<ol style="list-style-type: none"> 1. Offline Payment: UPI Lite, UPI 123Pay 2. New age Cross-border Payments 3. Innovation in B2B & Trade Finance 4. BNPL & UPI led cards 5. Fraud Detection
10-13	LendingTech Models	<ol style="list-style-type: none"> 1. Retail & SME Lending 2. P2P Lending 3. Revenue Based Financing (RBF) 4. Alternative Credit Scoring (ACS) and Use of Location Intelligence & Behaviour analytics
14-15	InsurTech	<ol style="list-style-type: none"> 1. Embedded Insurance 2. Insurance in a Box 3. Bite sized and Gamified Insurance 4. Usage based and IoT assisted Insurance

		5. IRDA Sandbox
15-16	WealthTech	<ol style="list-style-type: none"> 1. Various Alternative Investments <ul style="list-style-type: none"> • Fractional Real estate • Lease Financing led investment (e.g. Grip Invest) • Investment Buckets and Pre-IPO investment • Self Service Platforms • Crypto Assets • P2P investment 2. Micro-investment 3. Group/Social Investment 4. Robo-advisory models 5. Algo trading and High Frequency Trading

COURSE 3: APPLICATION OF BLOCKCHAIN IN FINANCE

Session	Topic	Details
1	Introduction	<ol style="list-style-type: none"> 1. What is blockchain technology and why might it be a catalyst for change in the financial sector? <ul style="list-style-type: none"> • Understand Blockchain Technology • Understand the ecosystem around blockchain • Understand blockchain applications
2	Money, Ledgers, and Bitcoin	<ol style="list-style-type: none"> 1. What do the roles and characteristics of money mean historically and in today's digital economy? 2. What is fiat currency, what are its ledgers, and how does it fit within the history of money? 3. How does Bitcoin fit within the history of money, the emergence of the Internet, and failed attempts of cryptographic payment systems?
3	Blockchain Basics and Cryptography	<ol style="list-style-type: none"> 1. What are the design features – cryptography, append-only time-stamped blocks, distributed consensus algorithms, and networking – of Bitcoin, the first use case for blockchain technology? 2. What are cryptographic hash functions, asymmetric cryptography, and digital signatures? How are they utilized to help make blockchain technology verifiable and immutable? 3. What is the double-spending problem and how it is addressed by blockchain technology?
4	Blockchain Basics and Consensus	<ol style="list-style-type: none"> 1. What is the Byzantine Generals' problem? How does proof work and mining in Bitcoin address it? More generally how does blockchain technology address it? 2. What other consensus protocols are there? What are some of the trade-offs of alternative consensus algorithms – proof-of-work, proof-of-stake, etc.? 3. How do economic incentives work within blockchain technology to maintain decentralized ledgers and avoid double-spending? What are the incentives of consensus protocols and mining?
5	Blockchain Basics and Transactions, UTXO, and Script Code	<ol style="list-style-type: none"> 1. How does Bitcoin record transactions? What is unspent transaction output (UTXO)? 2. What is script code embedded in each Bitcoin transaction and how flexible a programming language is it? 3. As many designs features pre-date Bitcoin, what was the novel innovation of Santoshi Nakamoto?

6	Smart Contracts and DApps	<ol style="list-style-type: none"> 1. What are smart contracts? How do they compare to traditional contracts? What are tokens? 2. What are smart contract platforms such as Ethereum? What generally distinguishes them from Bitcoin? 3. What are decentralized applications (DApps)? 4. What has been the usage and why haven't any DApps yet received wide consumer adoption?
7	Technical Challenges	<ol style="list-style-type: none"> 1. How critical are the technical and commercial challenges – scalability, efficiency, privacy, security, interoperability – of current blockchain technology? 2. What are the possible trade-offs of decentralization, scalability, and security? 3. What are the trade-offs of consensus software updates, governance, and so-called 'hard forks'? 4. What might current work – Layer 2 applications, zero-knowledge proofs, alternative consensus algorithms – do to address current commercial challenges?
8	Public Policy	<ol style="list-style-type: none"> 1. How do key public policy frameworks – guarding against illicit activities, ensuring financial stability, and protecting investors – relate to blockchain technology and crypto finance? 2. Under tax, bank secrecy, securities, and commodities laws, what is the relevance if crypto tokens are deemed property? Currencies? Something of value? An investment contracts. A commodity? 3. How might the 'Duck Test' guide think of blockchain technology and crypto finance?
9	Permissioned Systems	<ol style="list-style-type: none"> 1. What is permissioned or private distributed ledger technology? How does it differ from permissionless or open blockchain applications? 2. What are the key blockchain-inspired features of Corda and Hyperledger Fabric? What is Digital Asset Holdings? 3. What are the business trade-offs of utilizing a permissioned vs. a permissionless application? What are the trade-offs for consumers?
10	Financial System Challenges and Opportunities	<ol style="list-style-type: none"> 1. What are the trade-offs of centralized institutions and markets in the financial sector? 2. Which challenges of the financial sector – periodic crises, concentrated risks, economic rents, legacy systems, processing risks, financial inclusion – might present opportunities for blockchain applications? 3. How does blockchain technology fit within other trends – particularly with regard to technology - facing the financial sector in 2022?

11	Blockchain Economics	<ol style="list-style-type: none"> 1. How do decentralized blockchain applications affect the cost of verification and the cost of networking? How do blockchain applications affect market power? 2. What might the economics and organization of the Internet - with its protocol layers and applications - tell us about the future of blockchain technology? 3. What lessons should be drawn from crypto skeptics - Krugman, Stiglitz, Roubini, Gates, Buffett, Dimon, & others - about the economic potential for blockchain technology? What is an answer to the oft-stated query: 'what problem do cryptocurrencies solve?'
12	Assessing Use Cases	<ol style="list-style-type: none"> 1. What potential benefits - in terms of reducing costs of trust - are there when adopting blockchain technology applications? How might potential use cases be assessed for the trade-offs of decentralized vs. centralized applications? 2. What are the potential strategic benefits from blockchain applications? What are the attributes of potential use cases and sectors that might best capture value from such applications? How important are the benefits of censorship resistance to this analysis? 3. How can you separate rigorous analysis from mere assertion and hype in the blockchain ecosystem?
13	Payments	<ol style="list-style-type: none"> 1. What are the major trends - mobile apps, digital wallets, open banking, and enhanced methods of bank transfers & authentication in payment systems today? 2. What lessons can be drawn from non-blockchain payment innovations, such as Alipay, WeChat Pay, M-Pesa, India's IMPS, and mobile payment apps? 3. What are the challenges and opportunities in the current cross-border payment system architecture?
14	Central Banks and Commercial Banking	<ol style="list-style-type: none"> 1. What strategic considerations should go into Central Banks thinking of expanding access to digital reserves through central bank digital currency (CBDC)? 2. How might design considerations - retail vs wholesale access; token or account based; interest bearing and level of service - weigh in such decisions? 3. What are the challenges CBDCs might pose to commercial banking models, monetary policy implementation, payment systems resilience and financial stability?

15	Secondary Markets and Crypto Exchanges	<ol style="list-style-type: none"> 1. How have crypto exchanges become a critical gateway for the vast majority of crypto secondary market trading? 2. How does the business model of crypto exchanges compare to traditional securities and derivatives exchanges? How do centralized crypto exchanges compare to decentralized crypto exchanges? 3. What do all the hacks, reports of manipulation, and failures tell us about the current state of security and investor protection of crypto exchanges?
16	Primary Markets. ICOs and Venture Capital	<ol style="list-style-type: none"> 1. What is the new crowdfunding mechanism of blockchain technology - initial coin offerings (ICOs)? 2. What attributes help distinguish successful ICOs? Why have so many ICOs failed? 3. What has the wave of ICOs meant for the venture capital field?
17	Post Trade Clearing Settlement and Processing	<ol style="list-style-type: none"> 1. What are the opportunities of blockchain technology to lower costs and counterparty risks in the clearing, settlement, and processing of financial transactions? 2. Why have the applications proposed to date almost exclusively been focused on permissioned or private distributed ledger technology? 3. What lessons might be drawn from the ongoing projects - ASX for equities, ISDA for swaps, others?
18	Conclusion	<ol style="list-style-type: none"> 1. Money and Ledgers 2. Satoshi Nakamoto's Innovation 3. Economics of Blockchain Technology 4. Financial Sector Opportunities 5. Crypto Finance 6. Public Policy Frameworks

COURSE 4: FINANCIAL RISK ANALYTICS

Session	Topic	Details
1-2	Introduction	Introduction to Financial Risk Analytics Usage of Python and Excel to do risk analysis
3-4	Credit Risk Modelling	Using Logistic Regression Using Decision Trees
5-8	Market Risk Modelling	Using Non-Linear programming
9-10	Fraud Detection	Using Logistic Regression with SMOTE and cost-based hyper tuning
11-13	Options Pricing	Using Simulation
14-16	Bankruptcy Modelling	Using Linear Discriminant Analysis

COURSE 5: FINTECH IMMERSION – PARTNER UNIVERSITY

(DARDEN SCHOOL OF BUSINESS)

Session	Topic	Details
1	Strategy in the Digital Age	GoogleCar (614022-PDF-ENG) How does digital transformation impact the basis of competition? What will competition look like in autonomous vehicles?
2	InsurTech	Cuvva: Disrupting the Market for Car Insurance (IN1430-PDF-ENG) What is the value chain in the insurance markets? Does Cuvva disrupt this value chain? Insurance 2030— The impact of AI on the future of insurance, Future of insurance: Unleashing growth through new business building Digital Disruption in Insurance: Cutting through the noise, McKinsey and Co.
3	Digital Banking	Elixir: A Fintech Banking Solution for Millennials (W18578-PDF-ENG) New Digital Banks – Business Model and understanding their marketing and distribution strategies FinTech, BigTech, and the Future of Banking, The banking industry and digital innovation: in search of new business models and channels, AI-bank of the future: Can banks meet the AI challenge? Reimagining customer engagement for the AI bank of the future
4	Payments	Digital Business Transformation in Silicon Savannah: How M-PESA Changed Safaricom (Kenya) (IMD868-PDF-ENG) Understanding the M-PESA Business Model and how digital money characteristics influence the development of new products and services Payments Innovation and the Use of Cash New Innovations in Payments
5	Payments	Square: Disruption in the US Mobile Payment Market (KEL792-PDF-ENG) Understanding Square’s business model and how it fits into a typical payment transaction process (CC) The Payments Industry Landscape: What Does It Look Like Today? Cooperation for Innovation in Payment Systems: The Case of Mobile Payments. Mobile Payments: Moving Towards a Wallet in the Cloud?

6	P2P Lending	Lending Club (E597-PDF-ENG) Understanding Lending Club as a marketplace fintech A temporary phenomenon? Marketplace lending - An analysis of the UK market Fintech credit markets around the world: size, drivers and policy issues
7	P2P Lending	China Rapid Finance: The Collapse of China's P2P Lending Industry (321124-PDF-ENG) Why has the MPL industry run into trouble in the emerging markets, but is still fully functional in the developed countries? The Microfinance Revolution: An Overview, What today's shake-out in China's peer-to-peer lending market means for fintech
8	Microfinance	M Power Micro Finance: Early Battle for Survival (W15632-PDF-ENG) How does microfinance work? What factors contributed to the microfinance crisis in India in 2010? Andhra Pradesh 2010: Global Implications of the Crisis in Indian Microfinance, Making Microfinance More Effective,
9	Reward-based Crowdfunding	Crowdfunding: A Tale of Two Campaigns (BAB282-PDF-ENG) Understanding key factors for a successful crowdfunding campaign? Democratizing Innovation and Capital Access: The Role of Crowdfunding Some Simple Economics of Crowdfunding
10	Securities Crowdfunding	OurCrowd: Growing a Crowdfunding Platform in a VC World (KEL922-PDF-ENG) Understanding equity-crowdfunding Challenges in growing crowdfunding platforms like OurCrowd Are Syndicates the Killer App of Equity Crowdfunding? Has the US Equity Crowdfunding Market Lived up to Expectations? Does General Solicitation Improve Access to Capital for Small Businesses? Evidence from the JOBS Act.
11	Robo Advising	The Wealthfront Generation (216085-PDF-ENG) Roboadvisory and disruption in the asset management industry Robo-advising Note
12	Retail Investment	Race to Robinhood Markets IPO, UVA-DRAFT How did Robinhood change retail investment? What is Robinhood's business model? Robinhood's Role in the 'Gamification' of Investing Robinhood's Debut Is Clouded by SEC Scrutiny of Payment for Order Flow

13	Cryptocurrency	Cryptocurrencies: Investment, Money, or Gamble? (A) (W91C19-PDF-ENG) What is a cryptocurrency? Is bitcoin an asset, a commodity, or a currency? Distributed Ledger Technology (DLT) and Blockchain
14	ICO	AirFox (A): Embracing the Blockchain and an ICO 818097-PDF-ENG Difference between ICO and IPO The Hidden Costs of Initial Coin Offerings The Summer of ICOs: VC Implications, What did Silicon Valley's crypto bubble create? Initial Coin Offerings: Financing Growth with Cryptocurrency Token Sales
15	Platform Building	Ant Financial (A) - HBS FinTech in China - economic and societal considerations Why Some Platforms Thrive and Others Don't (BR, 97(1): 118-125, 2019) Spotting Institutional Voids in Emerging Markets (HBS -106-014)

FACULTY



DR. ELENA LOUTSKINA

Professor of Business Administration, Peter M. Grant II Bicentennial Foundation Chair in Business Administration, Darden School of Business, University of Virginia.

Education:

- Ph.D., Boston College

Loutskina's research focuses on financial intermediation. Her research interest includes securitization, commercial banks, strategic management, consumer finance, mortgage markets, small business lending and regulation of financial intermediaries.



DR. TING XU

Assistant Professor of Business Administration, Darden School of Business, University of Virginia.

Education:

- Ph.D., University of British Columbia
- M.Sc., Hong Kong University of Science and Technology

Ting Xu is an assistant professor of finance at the University of Virginia, Darden School of Business. His research focuses on entrepreneurial finance, FinTech and family firms. His work has explored angel financing and crowdfunding.



PROF. TUSHAR JARUHAR

Adjunct Professor, Finance Area Jagdish Sheth School of Management

Education:

- MBA, Northwestern University, Kellogg School of Management, USA
- M. Sc., University of Pennsylvania, USA

Prof Tushar is an Actuary from the Society of Actuaries, USA. He is also affiliated with the Institute & Faculty of Actuaries, UK. He is a certified Six Sigma trainer. Tushar holds a Bachelor's in Electrical & Electronics

Engineering from the Manipal Institute of Technology, Mangalore University. He has a Dual Master's in Electrical Engineering & Telecommunications and Networking Engineering from the University of Pennsylvania. Further, he has a Master's in Business Administration from the Kellogg School of Management, Northwestern University where he was the recipient of Kellogg's Four Pillar Award for Intellectual Depth.

His experience spans strategy, operations, finance, marketing, risk management, engineering, nanotechnology, actuarial, analytics, artificial intelligence, machine learning and deep learning.



DR. TUHIN CHATTOPADHYAY

Visiting Professor, Finance Area
Jagdish Sheth School of Management

Education:

- Ph. D., Uttar Pradesh Technical University, India
- MBA, West Bengal University of Technology, India
- M. Sc., stands for Sikkim Manipal University, India

Dr. Tuhin Chattopadhyay, Founder & CEO of Tuhin AI Advisory, is a celebrated Industry 4.0 thought leader among both the academic and corporate fraternity. Recipient of numerous prestigious awards, Tuhin is hailed as India's Top 10 Data Scientists by Analytics India Magazine.

Tuhin spent the first ten years of his career in academia and research, teaching business statistics, analytics, and technology at several reputed B-Schools of India. As a corporate practitioner, Tuhin has a proven record of accomplishment as a transformational leader in organizations like The Nielsen Company. Currently, he runs his own consultancy for providing a full suite of Artificial Intelligence, Blockchain, Business Analytics, Business & Social Research, CTO/ CDO/ CAO/ CISO as a Service, Cloud Computing, Cybersecurity, Data Engineering, Digital Transformation (Mobile & Web App Development), Intelligent Automation, Management Consultancy

(Intelligence Amplification) services to the clients.

Tuhin is a prolific researcher. He has authored research-based books and has more than thirty research publications in refereed journals and conference proceedings. As a corporate trainer, he regularly conducts training programs and workshops on business analytics in India and abroad. Tuhin is a renowned speaker on analytics and delivers invited talks and keynote speeches at international conferences like Next Big Tech Asia 17 in 2017 at Kuala Lumpur and Sports Analytics Africa in 2018 at Johannesburg. He is also invited to judge international data science competitions held across Europe and USA.

Tuhin is Senior Member of IEEE, life member of Indian Statistical Institute (ISI) and member of Institute for Operations Research and the Management Sciences' (INFORMS). Interested readers may go through his recent interview to DZone, article on AI-powered NLP and blog on the application of derivatives in analytics. He is the Editor-in-Chief of International Journal of Business Analytics and Intelligence and is the editorial board member of several leading journals.



DR. AKHILESH PRASAD

Assistant Professor, Finance Area
Jagdish Sheth School of Management

Education:

- DBA, SP Jain School of Global Management
- Global MBA, EDHEC Business School, France
- B. Tech (H), IIT Kharagpur, India
- Certification in Quantitative Finance (CQF), Fitch Learning, London
- FRM (Part 1 & 2), GARP, USA
- CFA (Level 1 & 2), CFA Institute, USA

Prof. Akhilesh has worked in software industry in open-source technology for more than 12 years before moving into Finance. His research is primarily focused on Quantitative Finance, Financial Mathematics, Statistics, and Machine Learning



PROF VIKRAM PANDYA

Director of FinTech
SP Jain School of Global Management,
Mumbai

Education:

- CA, Institute of Chartered Accountants of India - ICAI
- CFA, CFA Institute, USA
- M. Com, Sydenham College of Commerce and Economics, India

Prof. Vikram is Director of FinTech at SP Jain School of Global Management where he has designed Asia's first interactive FinTech program featuring Blockchain, API Banking, AI/ML and IoT labs. He has authored several white papers and articles on FinTech domain. He has an extensive experience in banking, financial services, Fintech, consultancy, and training domain. He is founder and Director of Association for Emerging Technologies which is a not-for-profit ecosystem initiative. He is associated as a mentor with various FinTech startups and Fintech focused funds across the globe. He is Fintech ambassador for Maharashtra Govt.'s Uday Fintech platform, and he is helping Fintech committee for Government of Rajasthan and Government of Karnataka. He is founding member of Startup Committee at ICAI. He is heading research at Fintech VC Fund Varanium NexGen. He has been a successful banker for more than a decade where he has made key contributions in Financial & Investor Strategy, Business Intelligence, Balance-sheet Management and Business Development & Technology Solutions. He has been a visiting faculty at various prestigious global institutes.



DARDEN
Center for Global Initiatives



AACSB Accredited, Formerly IFM Business School

JAGSoM/SS/Fintech/2020-22/Aug21/0001

C · E · R · T · I · F · I · C · A · T · E

of successful completion by

Vrinda Rateria

of

**JAGSoM-Darden International Partner Program
Digital Transformation in the Finance Sector**

12 July - 6 August 2021

Elena Loutskina
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Administration

RFP - STUDENT PROJECT DETAILS

This is the culmination of the Career Track in **FinTech**. In this module, students will execute a Capstone project.

Students will be grouped into groups of 5-6 members. Each group will work on a different project.

A few **samples** project titles which were handled in previous years are given below:

S. No.	Project Name	Description	Sponsoring Company	Team Size
1	Building fee-based revenue streams (e.g. Insurance Distribution)	Feasibility of building an Insurance Distribution business and other recommendations for enhancing fee-based services	LoanTap	3
2	SWOT Analysis of competitors' Credit Scoring practices	Evaluation of positioning of competitors and where LoanTap can improve its offerings to be at the leading edge	LoanTap	4
3	Customer Persona and Targeting for Electric Vehicle Loans (new business segment)	Average Customer Persona (4) from interviewing typical customers, their journey maps and touchpoints of communication and media/messaging	LoanTap	4
4	Feature Selection for Credit Scoring Model	Using customer dataset to understand key features that predict delinquency of clients and not using the CIBIL score	MyShubhLife	4
5	Scope for Digital Lending	Examining the scope for digital lending of a Small Finance Bank	Ujjivan Bank	3

FINANCE AREA COURSES - CATALOGUE

S. No.	Course Type	Course Name	Course Objectives
1	Foundation	Introduction to Accounting & Principles of Banking	Introduction to Accounting and Principles of Banking course deals with the field of accounting with a broader managerial perspective. The first part of the course deals with concepts and conventions i.e. principles of Financial Accounting that in turn focuses on summarizing, analyzing and reporting of financial transactions pertaining to any business. Students are also introduced to corporate finance, forms of Business organizations and the time value of money.
2	Core	Financial Accounting and Financial Statement Analysis	The course covers the Basics of accounting and preparation of financial statements, how to read and interpret corporate financial statements, key Indian Accounting Standards, how to analyse financial statements and make projections and the concept and need for green accounting.
3	Core	Management Accounting	The course covers management accounting vis-à-vis financial accounting, traditional costing systems, preparation of cost sheets, cost-volume-profit analysis and relevant cost analysis for decision making. It also covers the preparation and use of budget for business planning and control, Strategic cost management tools like lifecycle costing, activity-based costing, and target costing and Cost management in the digital age.
4	Core	Corporate Finance	Students are inducted into the various finance functions and how this maps vis-à-vis business goals and shareholder value creation. Techniques of valuation like Discounted cash flow techniques and their various applications, including applications for capital investment decisions and valuation of bonds/stocks, cost of capital estimation, capital structure planning and dividend decision are taught. Raising funds in the domestic and international markets and the basics of mergers, acquisitions, and corporate restructuring are covered.

5	Core	Business Economics	The course will start with the familiarization of applied microeconomics, the macroenvironment of business, and will cover aspects of the global business environment and the new economy business model. In a program of this kind, the focus will be on the application of economic theory to business.
6	Elective	Principles and Practices of Banking	Familiarizing the students with the landscape of the Indian financial and banking system. Understanding the KYC norms and the nuances of the opening of deposit accounts especially the minor accounts, firm accounts, joint-stock companies, HUF, Society etc., deposit accounts opening formalities. Understanding the nuances of various sections (Negotiable Instruments Act, 1881) relating to banking instruments collection & payments. Different P-segment loan products offering by banks for different segments of the market. Familiarizing the students with the principles of lending. Various methods of working capital assessments, Term loan appraisal, and non-fund-based products like LCs & BGs.
7	Elective	Corporate & Retail Banking	The course covers the breadth of corporate and retail banking services offered by banks – fund-based and non-fund based. The process of credit appraisal and credit monitoring is covered in depth. There is coverage of Project Appraisals and also non-fund based export finance and buyer's & supplier's credit facilities offered by banks. The loan covenants, risk profiling and credit risk management are covered. On Retail Banking, the types of products, credit appraisal and other services are covered as well.
8	Elective	Securities Analysis and Portfolio Management	Familiarizing the students with modern portfolio analysis in the context of the Capital markets. This includes understanding the difference between Investment and Speculation, Fundamental vs Technical Analysis, Efficient Market hypothesis, Technical Analysis like Dow and Elliott Wave theory, and price movement indicators. This course also covers Stock Valuation using different methods like DCF, multiples etc. and under different conditions like inflation. Similar performance for Bond Yields (and

			pricing), modern portfolio theory and portfolio performance evaluation of mutual funds.
9	Elective	Derivatives	<p>This course covers the breadth of derivatives starting from basics – types of derivatives, where traded (OTC vs Exchange), regulations related to these instruments, forwards versus futures – commodity futures, index and currency futures and introduction to hedging. Similarly, type of options – stock, currency and their payoffs and trading strategies.</p> <p>Use of Option Pricing models like Binomial, Black-Scholes, volatility, price sensitivities (Greeks of Options), interest rate and currency swaps, forward rate agreements and credit derivatives. Understanding Value at Risk models.</p>
10	Elective	Finance Trading Lab	<p>The objective of the course is to provide hands-on exposure to online trading systems for technical analysis and back-testing. Also, to understand the application of trading techniques, designing trading strategies, generating entry/exit points and use of the Bloomberg terminal. Derivatives trading strategies are also covered in reasonable depth.</p>
11	Elective	Financial Risk Management	<p>The course covers the basics of Risk Management viz. interest rate/market risk, credit risk, basic hedging, typology of risk exposures as well as operational risk, liquidity risk, Economic Capital and RAROC, Asset-Liability Management (ALM) and its impact on the pricing of loans. It also tries to detail how traders and MNCs manage their financial/market risks, hedge currency risk through forwards, futures, options and Swaps.</p>
12	Elective	Investment Banking and M&A	<p>The course outlines the necessary knowledge areas of Investment Banking starting with Core and Allied Areas (Mutual Funds, Alternate Investment Funds). Domestic Issue management from the types of issues, the role of an investment bank and SEBI Regulations are covered in depth including assignments to pitch as an Investment Banker.</p> <p>Types of equity and debt instruments in India and overseas markets are covered as also Private Placements and Underwriting. ADR / GDR as well as FCCBs and External Commercial</p>

			<p>Borrowings are covered with adequate sessions to ensure the student understands all aspects of what an Investment or Merchant Bank does today.</p> <p>M&A is a time-tested strategy for businesses to grow. This course allows the students to understand and appreciate the reasons behind the corporate's need to acquire or merge. The course dwells on issues related to the valuation and financing of businesses and also introduces the students to divestitures.</p>
13	Elective	Private Equity and Business Valuation	<p>The course covers approaches to valuation, dilution and anti-dilution and the importance of a business plan. It covers the lifecycle of a venture-funded company, regulatory aspects around a Private Equity Fund, documentation requirements of a PE Fund, day-to-day operations and the entire life cycle of a Private Equity Fund.</p> <p>Valuation includes cashflow based (DCF), relative valuation (multiples) and market transaction method to provide a complete toolkit required by a student entering the world of Private Equity and AIFs.</p>
14	Elective	Wealth Management	<p>The course proposes to provide students with an insight into perspectives, principles, and practices of the personal financial planning industry, examine the present status and developments that are taking place in the personal financial planning industry and to inculcate among the students the application of personal financial planning process in an understandable, step-by-step format.</p>
15	Elective	Corporate Taxation	<p>The course starts with the basics of taxation and covers corporate tax (direct) as well as Goods & Service Tax (indirect), computation of taxable income and cover aspects of corporate tax planning.</p>
16	Elective	MSME Financing	<p>The course covers a deeper understanding and appreciation of the issues and challenges of MSMEs and the various supporting initiatives and the enablers of the Government. It also included familiarizing students with the various products and services available for MSMEs from Banks & Financial Institutions, the Bank's credit appraisal of MSMEs including Working capital, Export financing, Bill-discounting, Term</p>

			Loan financing and other facilities. The course also covers credit management aspects for MSMEs and ensuring various covenant compliances, understanding the nuances of the revival and rehabilitation schemes for stressed MSMEs.
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SAMPLE FINTECH WHITE PAPER - OUTCOME OF RFP

The 'Request for Problem' (RFP) project is an integral component of the 'Career Track' Program.

Each year, JAGSoM invites industry partners to refer business problems that they are currently facing which student consulting teams help to solve, each led by a full-time faculty member (or an interdisciplinary team of faculty members).

The outcome of the 'Request For Problem' (RFP) projects were converted to White Papers which was then published as an Edited Volume - 'LEARNING BY SOLVING: SELECT WHITE PAPERS'.

One of the White Papers produced by the students of the PGDM 2020-22 Batch has been included in this brochure (on the next page). The White Paper is titled '**Understanding The 2 Wheeler Electric Vehicle Loan Customer**'. The students were guided by Prof. Soumya Choudhury, Associate Professor, Jagdish Sheth School of Management (JAGSoM) and by Prof. Raghavan Srinivasan, Consumer Centricity Consultant, and Ex-CEO of Kantar.

UNDERSTANDING THE 2-WHEELER ELECTRIC VEHICLE LOAN CUSTOMER

Aniket Chandra
Anshuman Pattnaik
Shruti Barnwal
Vrinda Rateria

ABSTRACT/BUSINESS CASE:

In the new world, post the COVID-19 pandemic, being environmentally conscious and having one's transportation has become a necessity. Rising prices of fuel and the creation of charging infrastructure for Electric Vehicles have become one of the critical drivers for the purchase of environment-friendly vehicles for individuals residing in metros and Tier 1 cities. India is a two-wheeler (2W) market. The affordability and range of options for such 2W-Electric Vehicles (2W-EV) make it the de-facto choice for many, including Millennials and GenY, seeking their first mode of transport.

LoanTap is one of the leading Fintechs in Alternative Lending with a five-year track record and an AUM exceeding Rs 350 Cr. They target prime customers with unconventional unsecured products like EMI loans, Travel loans, Wedding loans, and Revolving Lines of Credit for salaried customers. They are also building an SME loan portfolio with institutional partners like Big Basket. LoanTap is a new entrant to the 2W-EV loans and sought JagSoM's assistance in understanding this segment better, understanding the profile of loan takers and how to target them with digital marketing tools, and to effectively target them, build awareness and drive conversions.

BACKGROUND

ABOUT THE COMPANY

LoanTap is an RBI registered NBFC apart from being a tech-enabled Alternative Lending FinTech. LoanTap offers alternative loans to the youth and millennials to achieve liquidity at the right time to have the life they desire.

LoanTap's founders have many years of experience in the financial services industry and have hired an experienced leadership team to create one of the Top 10 Lending FinTechs in the country.

PROBLEM STATEMENT / KEY OBJECTIVES & SCOPE

PROBLEM STATEMENT

To target the right customer segments with product features that address their needs for 2W-Electric Vehicles (EV). LoanTap had existing partnerships with regular 2W dealerships (IC Engine-2W), and the financing cases were brought to LoanTap by the dealers. Hence, their understanding of 2W customers was primarily ones forwarded by dealers.

To understand Salaried and self-employed prospects' specific financing needs and loan features, LoanTap would like to approach the customer directly and get them to avail of the "pre-approved" loan before going to a dealership in the ideal case. In a more realistic scenario, the customer should select the 2W-EV model and think of LoanTap as the preferred lender, given their understanding of the product.

KEY OBJECTIVE

LoanTap approached JagSoM to do a survey where the findings would help them pinpoint the personas of potential customers. The customer journey map (CJM) was also created for each persona to create a targeting plan using digital marketing tools. The brief to JagSoM was to research and identify at least three distinct personas who were most likely prospects for LoanTap's 2W-EV loan product with a high chance of a conversion.

The CJM would provide insights into the customer buying pattern and help identify media consumption where such an action could be influenced and barriers to purchase for the identified persona.

SCOPE

This project aims to understand these customer personas through a primary survey conducted at 12 2W-EV dealerships across three different tier cities in India: Tier -1 (Bangalore and Kolkata) and Tier -2 (Mau). The Project team visited the dealerships on an ongoing basis for over two weeks and met with their Sales Team as well as walk-in customers. The standard profiles of such customers were used to define the four personas.

The JagSoM Marketing team created a continuum by understanding the touchpoints of these personas and building a targeting plan based on the MarTech tools available at the disposal of LoanTap's Digital team.

STUDY DESIGN AND METHODOLOGY

The study comprised a primary survey as aforementioned across the twelve 2W-EV dealerships across two phases as under:

PRIMARY SURVEY: PHASE-1

The preliminary primary survey (Phase-1) was conducted to shortlist the dealerships with diverse customer demographics. Subsequently, their relative market share was used to give the relative weightage to the average customer persona to arrive at the "Top 4" standard personas for 2W-EV loans and who would, likely, avail of loans from NBFCs or Fintechs like LoanTap. The dealerships were shortlisted across Bangalore, Kolkata, and Mau as the project team was based there during the pandemic lockdown and could not travel to any other location like Pune. This survey consisted of finding details of the 2W-EV models, pricing and specifications, and available loan options. The financing options for the 2W-electric vehicles, consumer behaviour, and perception were observed directly and by asking the dealers. The details were captured through note-taking and by administering a questionnaire. The different two-wheeler Electric vehicles taken into consideration for the survey were Hero Electric, Okinawa, Bajaj Chetak EV, PureEV, Ather Energy, and Ampere.

The daily usage requirements of such consumers were also studied, viz. daily commute linked to their daily activities as part of the data-gathering exercise. The significant types of consumer profiles who seek financing or pay in cash and different vehicle loan eligibility criteria by Commercial Banks like Axis & Bajaj Finance and niche NBFCs like Aon (along with the applicable interest rates) were documented in the primary survey. The direct approach to the customer by such financing competitors was observed. The benefit of a physical presence through an agent (Axis, Bajaj Finance) versus the Online / Mobile App of other Lending FinTechs assessed to gauge conversions.

One of the underlying assumptions is that the consumer first selects the model (2W-EV) and then goes for the financing. LoanTap targets the bikes in the range of Rs 50,000 – Rs 1 Lakh and not the highest end 2W-EVs in the field of Rs 1.3 lakh upwards.

PRIMARY SURVEY: PHASE-2

With advice from a consumer behaviour expert, the average persona computation resulted in further dealership meetings and phone conversations with survey respondents to better understand their psychographics.

The Customer Journey Map is made for each shortlisted "average" persona right from the decision to evaluate personal transport (2W-EV) to driving out of the showroom with the vehicle.

METHODOLOGY

The average customer personas were determined by a methodology ratified by Prof R Srinivasan, Consumer Behaviour expert and ex-CEO Kantar. The most common persona (for a Rs 50K 2W-EV loan with likely need for NBFC financing) in a particular dealership was profiled in detail for each dealership visited across the three cities and multiplied by the market share dealership in terms of 2W-EVs sold. Interviews confirmed these details at the dealership over two weeks. The questionnaire inquired about their approach to the decision of purchasing a 2-wheeler EV and the process of evaluating and selecting the product.

The questionnaire also sought their view on financing options by NBFCs.

A customer journey map (CJM) was made for each selected persona, from evaluating the purchase of a personal transport vehicle (2W) to the actual delivery of the vehicle post financing.

An initial qualitative survey was conducted at a few dealerships to understand the product range and services provided at the showroom to build the survey questionnaire. The information about the customer requirements and availability of lending options was also understood. Dealership sales staff and the dealership's owner provided information on the type of consumers who buy the product in Cash versus seeking financing. The purpose of purchasing the different types of EVs according to the speed limits of the vehicle was also analyzed.

In the primary survey, direct interviews were done at the dealer showroom. The finance-seeking and non-finance-seeking 2W EV customers were interviewed to get their responses.

The Average personas of 2W-EV buyers who were potential NBFC / LoanTap customers were profiled in demographics and other parameters. Fourteen interview inferences were used to make the primary persona of the customers of both those who are taking loans and those who are buying in cash.

After getting the details, around 90% of the funding was done by the traditional bank lenders like Axis Bank or large NBFCs like Bajaj Finance with low-interest rates of ~10% versus niche NBFCs and Fintechs whose rates of lending were higher by 200 – 500 basis points.

FINDING AND REFERENCES

We sought to create a random sample by looking at dealerships that covered different parts of the metros catering to different demographics and then shortlisted them for inclusion in our survey. Various details on the percentage of customers, which types availed financing, and interviewing the customers onsite provided insights into the study and built the average persona. Banks offer the lowest interest rate but are selective on the type of customers they finance (typically salaried or with steady business income), and there is a lot of paperwork. These traditional lenders seek customers with high credit (known as CIBIL scores in India) scores.

After getting the market share, we inferred that the market share of Loan tap type of lenders is only 10% of the addressable market. They provide finance and target the specific consumer segment who are not getting funding from traditional lenders. But is there a way to broaden this base by offering pre-approved loans, top-ups for accessories, and minimum paperwork while ensuring a robust collections mechanism from such borrowers?

The other insight was that people look at the monthly EMI amount and not the finance rate to check affordability and are not so sensitive if the tenure is 3-4 months longer, say 42

months instead of 36. The upfront processing fee (apart from the down payment of typically 20%) was another irritant that could be kept to the bare minimum to build customer affinity.

The average persona profile buyers use 2W-EV for their daily commute, 25-35 KM. Many of them use the EVs for everyday tasks like dropping and picking up children from school, office commute and shopping in a nearby supermarket. They were conscious of the savings effected by EV versus using diesel IC Engine 2W. Generally, those customers who prefer cash payments are the premium customers who are likely business owners or with strong financial backing or bank balances.

We found that the EV Brands like Ather and Bajaj Chetak are in the premium segment, which is not the target of LoanTap financing. However, the 2W EV brands like Hero Electric, Okinawa, and PureEV are in the economy segment and the focus of LoanTap.

Buyers' knowledge of subsidies (Rs 6K – 30K per bike) was also limited – some of them only came to know of it if the dealer chose to disclose it to them.

PERSONA 1

Demographics: Self Employed PG owner

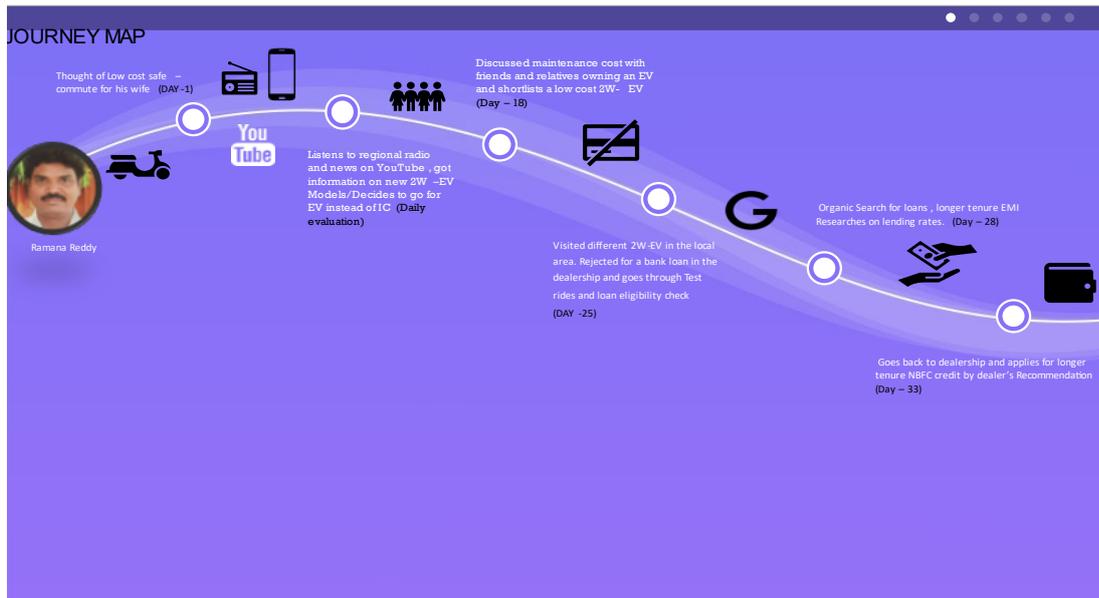
- Age of buyer:40
- Salary range: > 50,000 per month
- Gender: Male
- Education: BA
- Daily commute:15 Kms (avg)
- Marital status: Married

His Journey in Buying a Financed EV

The self-employed PG owner is a father of two kids, a five and an eight-year-old. This person owns an IC engine scooter, his wife's daily commute to the three different PGs situated at a distance of 2-3 Kms from each other and dropping off children to school and back due to unavailability of school transport was a significant challenge that triggered the need of a low maintenance safe 2-wheeler electric vehicle. This persona consumes daily information from newspapers/radio and Facebook and got to know about the new segment of 2W-EVs and some of their locations in Bangalore city from radio ads he listens to twice in his daily schedule. Apart from radio and newspaper ads, he further researched the Hero electric EV and took feedback from a few EV customers, one of them staying in his PG; the research process of deciding and finalizing the EV product took 1-2 months to arrive at a decision. After the research process, this was pre-determined that he wouldn't go for the EV on total cash to avoid the overburden of money being the only earning member of the family. Test rides of the vehicle convince process the decision further decision. He was introduced to different lenders and interest rates by the dealer itself. This

happened at the last stage when the consumer finalized the decision to buy the EV. He was disqualified for a bank loan by the credit check in the dealership. The dealer influenced his decision to go for an NBFC credit after getting disqualified by a bank's credit check. The NBFC's digital process was hassle-free with less document work, and he went through a good customer experience even when the interest rate was higher than the bank.

Journey Map



PERSONA 2

Demographics:

Age of Buyer - 35

Salary Range - <1 lakh

Gender - Male

Education - M.Sc.

Commute Distance - 20-30KM

Marital status - Married

Psychographics:

A 35-year-old married working professional has a salary of less than 1 lakh INR (Indian rupee) per month. He is an M.Sc. graduate based in Gujarat and working in Bangalore for the last five years. His daily commute is in the range of 20-30 KM. Mainly the daily commute is for Office transportation. He used to prefer Bounce or Ola for his daily travel. He already has a sports bike YAMAHA R15 which consumes heavy fuel. He wants to switch

to a low-cost commute for the daily commute. He is a price-conscious consumer. He researches the product and whether the product is worth money or not. Repaid the loan he took in 2018 for the IC engine bike in the specified tenure. He doesn't know much about the interest rates of NBFCs and subsidies. He wants a hassle-free purchase and will decide to take a loan after getting the information on the different lenders, including the NBFCs.

He decided to buy the EV after getting the information from his child's friend's father. He used to travel on Bounce scooters (rental scooters) for the office. It took around three months to buy from deciding to buy a 2-wheeler EV. He researched the other available products and the lending facilities available for purchase.

Journey Map



PERSONA 3

Demographics:

Age of Buyer - 35

Salary Range - 65K - 70K

Gender - Female

Education - BBA

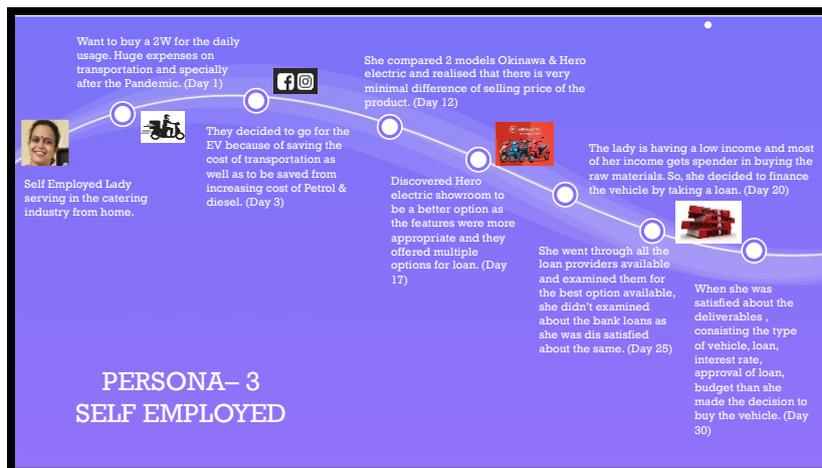
Commute Distance - 40-45Km

Marital status - Married

Psychographics:

The self-employed lady has two kids and wants to make her passion for cooking a business. She started her small business one year back in cooking and serving meals in hampers. She started with very minimal investment and slowly grew her business. She wanted a 2-Wheeler for commuting to the market for the raw materials of deliverables and delivering the finished goods to the customers. She usually uses social media like Instagram and Facebook to be updated about the world. She came to know about the EV from her business friend who used it for their personal use and was also aware of it. Their competitors started using EVs for delivery and began serving customers at low delivery costs. She searched and inquired about it with friends, relatives, and stores as well as she visited a few of the recommended stores and checked them out personally about the comfort, features, perks, prices, and financing options. She took a piece of advice from her home loan provider, which she took four years back and could connect good relations with because of multiple references. She got an option of Aeon or Loan tap option. After researching the loan providers, she decided on the type of loan and interest rate, vehicle, documentation, and other minor formalities. The loan was approved quickly, and she received her car within 28 days of starting her research.

Journey Map



PERSONA 4

Demographics:

Age of Buyer - 27

Salary Range - > 40K

Gender - Female

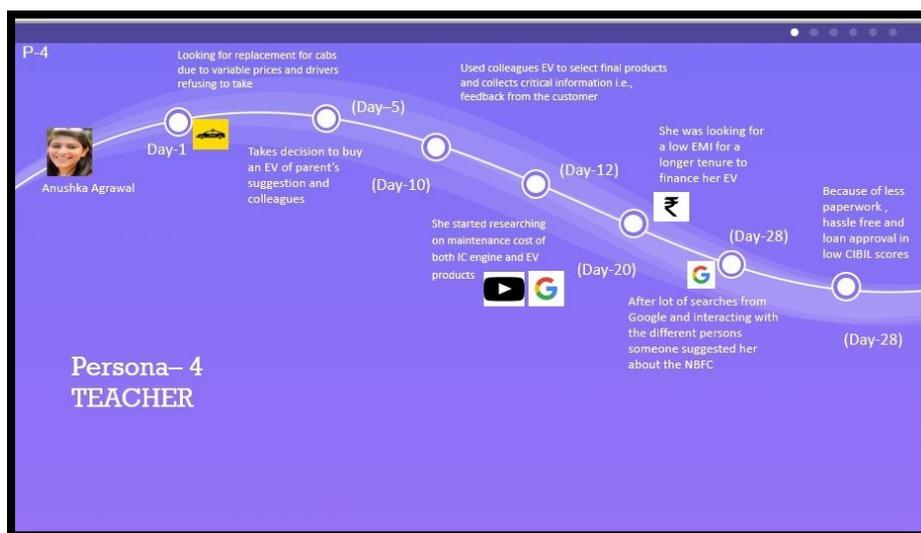
Education - MA (English)

Commute Distance - 30 Km

Psychographics:

She is a very hardworking person. She wants to attain financial freedom and to monetize her talent on an ed-tech platform. Every day she travels to school by public transport, and she spends a lot of money on daily expenses. So, she thought of buying a vehicle instead of spending too much on travelling. She was confused about buying the EV; she consulted her parents and colleagues and recommendation from those who already are EV Customers. She was aware of various loan products. She started researching on maintenance costs of both IC engine and EV products by visiting the nearest dealership. Dealers helped her with the different loan offers and interest rates. She was Looking for a low EMI for a longer tenure to finance her EV. She wanted any trusted lender with an easy and convenient process flow. After many searches on Google and interacting with different people, someone suggested to her to approach the NBFC for a loan. She came to the NBFC for the vehicle loan because of less paperwork, hassle-free, and loan approval with a low CIBIL score. The total time taken for the loan approval was ten days. And she bought the vehicle within one month. Post booking, the waiting period was high.

Journey Map



KEY CHALLENGES

- Customers of 2-Wheeler Electric Vehicles were, in general, not willing to be interviewed by strangers during these pandemic times to minimize proximity and contact and also were suspicious about the data collection and the purpose for which it would be used. They were unwilling to share their mobile contact details where they could be contacted for any follow-on questions or clarifications.

- b) Since 50% of customers were typically buying 2-Wheeler Electric Vehicles with cash and around 40% were going to traditional lenders, finetuning and down-selecting average persona for 10% balance customers who could be an addressable market of LoanTap and then reaching out to them (including language limitations) was a tad difficult.

RECOMMENDATIONS

The exercise shows that buyers' average ranges from 25 to around 40. The Salary ranges from Rs 40K to just below Rs 1 lakh per month.

We recommend:

- a) A tiered interest rate (and EMI spread over different tenures) is customized for various customers based on their risk profiles or other segmentation bases.
- b) Such prospective customers will appreciate Pre-approved loans before a customer approaches a dealer or showroom. They can hasten the purchase decision, leading to a faster buildup of the loan books.
- c) While LoanTap can initially project itself as the universal provider of loans for people with low CIBIL scores and self-employed, they should seek a timeframe to move up towards the regular loan seeker and compete head-on with the large NBFCs and banks, even if the net interest margin is low.

QUESTIONNAIRE:

From dealer data received by each of us, we started populating the excel with six rows and as many columns as dealers.

Qualitative Survey (with dealers)

Row 1 - Age of Buyer

Row 2 - Salary Range

Row 3 - Male/Female

Row 4 - Education - more educated (salaried), less (self-employed)

Row 5 - Commute distance (short daily, weekend)

Row 6 - % of loans from Loantap type firms versus Axis/Bajaj

For each dealer, we tried to map the market share for the specific range of Electric vehicles we are targeting.

Main Questionnaire (to Consumers fitting average persona or otherwise)

We spoke to 2 Wheeler Loan seekers (personas) from each dealership about:

1. What is their path to evaluating 2W Elec purchase
2. Attitude to life & beliefs
3. Attitude to money and how price-sensitive
4. Why take a loan?
5. What were their pain points?
6. Do they prefer less hassle even if they pay Rs 100 more per EMI?
7. Repayment experience (any loan, by type of provider - Bank vs. NBFC vs. Fintech)
8. General attitudes and beliefs about life and work and daily commute? Hassle-free preference? What is their attitude towards money - prefer low EMIs or low-interest rates? Like to bargain?
9. Reason for choosing EV - low cost / environment conscious / low maintenance / etc.
10. When did they start looking for EVs?
11. How do they select the right EV - brand, price, aware of subsid?
12. How do they decide on taking a loan, and what is essential (less paperwork, low rate of interest, etc.?)
13. What has been your past repayment experience on loans? Prefer a bank or NBFC for a loan?

How will they exchange the IC engine bike for the new EV bike? Looking for an exchange scheme so proper a brand that has both IC and EV for the best deal (e.g., Hero Active IC and Hero EV)?

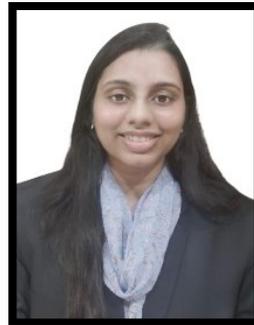
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This Whitepaper is based on a capstone project undertaken by Aniket Chandra, Anshuman Pattnaik, Shruti Barnwal, and Vrinda Rateria as a requirement for the fulfillment of the Career Track Program in FinTech offered at Jagdish Sheth School of Management Management in partnership with Darden School of Business, University of Virginia. The authors wish to thank their corporate mentor, Mr. Ajit Yadwadkar, VP & Head-HR, LoanTap, Professor Soumya Choudhury, Chairperson – Finance Area, and Prof. Raghavan Srinivasan, Consumer Centricity Consultant, Ex-CEO of Kantar, for their constant support and guidance.

ABOUT JAGSoM

Jagdish Sheth School of Management (JAGSoM) is amongst the first 6 business schools in India to be awarded the AACSB accreditation. JAGSoM PGDM (Marketing Major) and PGDM (Finance Major) were ranked in the 51+ band and the 101+ band respectively in the QS Business Masters Rankings 2021.

Programs at JAGSoM include

1. PGDM: 2 Year residential Post Graduate Diploma in Management with the option to major in Marketing, Finance, HRM, Analytics & Digital Business.
 - a) PGDM (Marketing Major) - For those who wish to pursue a career in Marketing (with option of career tracks in MarTech or Sales & Service).
 - b) PGDM (Finance Major) - For those who wish to pursue a career in Finance (with option of career tracks in FinTech, Capital Markets or Banking).
 - c) PGDM (Analytics & Digital Business Major) - For those who wish to pursue a career in Business Analytics.
 - d) PGDM (HRM Major) - For those who wish to pursue a career in Human Resources Management (with option of career track in HRTech).
 - e) PGDM (with option of International Immersion) - For those who wish to pursue studies abroad at our international partner institutions.
2. PGDM Executive: For professionals with work experience with option to attend on-campus sessions during weekends or learn from home (LFH) online.
3. MBA: 'The Right Brain MBA' for new age professional roles that require creativity, innovation, design thinking and imagination at our picturesque campus at Karjat, near Mumbai.
4. BBA: A unique residential program with a curriculum that facilitates the process of self-discovery in the initial years and then preparing for a career in business with the benefit of co-learning with MBA participants and mentoring by faculty and industry practitioners.

Actively engaged in research and consulting, JAGSoM hosts several Centers of Excellence such as AIM-Parasuraman Centre of Service Excellence and Vithala Rao Centre for Business Analytics. JAGSoM is led by an eminent board with globally acclaimed scholar Padma Bhushan Prof. Jagdish Sheth as the Chairman.

JAGSoM has four distinct anchors that support its overall educational philosophy:

- Grooming T shaped professionals with a unique curriculum aligned to the needs of industry 4.0
- The program is delivered by domain specialist faculty, with professional experience in the industry.
- Global connects through partnerships with globally acclaimed business schools preparing for career tracks in new-age areas.
- Industry-connect programs to groom "Beyond Tomorrow" professionals.

For more information, visit <https://www.jagsom.com/>

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