Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2021

Course: Pre-Owned Vehicle Marketing **Semester: V**
Program: BBA (AM) **Time: 03 hrs.**
Course Code: MKTG3006P **Marks: 100**

SECTION A
(30 marks)

1. There are SIX MCQs in this section. All are compulsory.
2. Instruction: Choose the correct answer.

Q.No	Question	Marks	CO
1	Market Segmentation for Pre-Owned Vehicle is useful for a. Targeting existing client b. Identifying prospects c. Knowing customers' tastes d. All of the above	5	CO-1
2	Make the correct order of the following marketing functions for pre-owned car companies: I) Market planning II) Gathering and analyzing marketing information III) Standardization and grading IV) Product customization a. I, II, IV, III b. I, IV, II, III c. II, I, IV, III d. IV, I, II, III	5	CO-2
3	In some cases, the used car you are buying may have a lien on it. A lien means a. The bank or lender is in possession of the title b. The car has been paid for in cash c. The car was bought in a different state than it's registered d. The car has alignment & maintenance issues	5	CO-3

4	It is important to comparison shop when purchasing a car. What does comparison shop mean? a. Always buy from a local dealership b. Take several photos to use for comparison c. Compare the true market value of every vehicle d. Compare the price & quality from different vendors	5	CO-3
5	A disadvantage of buying a new car is it loses value faster than a used car. This is called a. Capital gain b. Inflation c. Depreciation d. Amortization	5	CO-2
6	A certified used vehicle is one that... a. Has been inspected by the manufacturer and often includes an extended warranty b. Can be bought at a lower price than a comparable model c. Has a price that cannot be negotiated d. All of the above	5	CO-1

SECTION B
(70 Marks)

In this section, there is <u>ONE</u> Case Study. It is compulsory.

Q.No	Discuss the given Case Study by giving the answers to all the questions (a-e)		**CO**
7.	**(a)** By giving a brief introduction of the case, describe the occurrences taking place in it. Also, recognize the key personnel who are facing the challenges in the operation of the organization.	10 marks	CO-3
	(b) Define the business problems being-faced by the key officials in the case. Also, discuss the short-term and long-term problems.	15 marks	CO-3
	(c) Illustrate the reasons of the problem. Also, explain, in detail, the identified problems as well as apply relevant theories and models, if applicable, from the text and/or readings.	15 marks	CO-4
	(d) Calculate the identified decision criteria against which you evaluate alternative solutions. In addition, compare the possible alternative solutions along with the appropriate pros and cons of each alternative.	15 marks	CO-4
	(e) Apply the solution and implementation for the problems and causes identified in the case. Also, discuss why this recommended plan of action is the best and why it would work. Remember the "who", "what", "when", and "how" in your recommended plan of action.	15 marks	CO-4

CASE STUDY

ONLINE PLATFORM FOR PRE-OWNED AUTOMOBILES

In April 2020, Sandeep Aggarwal, the chief executive officer of Droom Technology Private Limited (Droom), a used-automobile marketplace and auto-services platform based in India, was feeling highly optimistic. Droom had used technology to create a distribution network to harness tens of thousands of used-car inventories. It removed information asymmetry and increased trust and transparency for those transacting on the platform.

The start-up had reached US$1.19 billion in gross merchandising value (GMV) and US$32 million in net revenue (see Exhibit 1). In 2019, the platform's total traffic included 397 million visits and 8.8 million app downloads. In the same year, Droom had 253,077 customers and processed 610,649 orders (see Exhibit 2).

Aspiring to increase its growth, Droom aimed for net revenue of US$110 million in 2021. Aggarwal planned to hook customers in a virtuous cycle of experiencing, buying, using, and selling their cars. Droom expanded to other countries in Southeast Asia, hoping that this would pave the way for a listing on the Nasdaq stock exchange. Aggarwal knew that start-ups might be listed on stock exchanges based on customer adoption and future potential, but that the business would ultimately have to be financially sustainable, and he was looking for a business strategy that would make the business profitable.

To achieve this ambitious goal, Droom had to do something no other company in the used-automobile industry dared to do: take the business entirely online. While other players operated a hybrid online and offline model, Droom had made a conscious choice to become a purely online player. Aggarwal was convinced that while the path might be more difficult, it was the only way to disrupt and scale the business. Droom had made a strategic choice that Aggarwal hoped would pay off in the future. The question before Droom now was: How could the company evolve the platform to become a purely online business?

THE EVOLUTION OF DROOM

Aggarwal founded Droom, which began as an online marketplace for cars, in Delhi in 2014. He had worked in Seattle and Silicon Valley in the United States for more than twelve years before setting up Droom, and he brought his experience in the global Internet and e-commerce industry to the start-up. Three months after its founding, Droom added used cars and two-wheelers to the platform; however, it continued only in Delhi. One year later, the start-up expanded to 100 cities in India, and six months after that, the company began to offer services such as insurance, roadside assistance, warranties, and inspections. In 2018, Droom had vehicles across forty-eight categories, including planes, bicycles, golf carts, and yachts. As it grew rapidly, the start-up began to build an entire ecosystem around vehicles.

Initially, Droom monetized its website by posting vehicles sold by auto dealers: the Droom team contacted dealers for available vehicles on sale and placed the information on its website. Later,

as Droom grew, it zeroed in on three business models: (1) classifieds (where sellers advertised to buyers); (2) discovery (the creation of technology products that helped in the decision-making process); and (3) a transaction-based platform (which connected buyers and sellers for the sole purpose of completing transactions). It operated with four marketplace models: (1) a business-to-consumer (B2C) model, where dealers sold to individual customers; (2) a consumer-to-consumer (C2C) model, where one customer sold to another customer; (3) a consumer-to-dealers (C2B) model, where consumers sold their vehicles to dealers; and (4) a business-to- business (B2B) model, where dealers dealt with other dealers or original equipment manufacturers (OEMs) dealt with dealers. Approximately 88 per cent of the company's business came from B2C transactions; 10 per cent came from C2B; and the balance, 2 per cent, came from B2B. Droom's advantage, according to Aggarwal, was that "the used-car dealers in India were mom and pop stores. They were fragmented and did not have the technology. Droom had what was needed for a platform in India."

Individuals and auto dealers could buy, sell, or resell vehicles by becoming members on the Droom platform. Built-in technology and data science tools were the backbone that helped Droom grow rapidly to achieve a 70 per cent market share by 2019.

When Aggarwal launched the platform, it was unique: there was no other platform with similar offerings. Buying a car in India was one of the three biggest events in many people's lives, along with buying a home and getting married. Since consumers' involvement in car purchases was very high, Aggarwal launched several services to help make the decision-making about this purchase less ad-hoc and more rational. In March 2016, Droom launched the first of the services it called ECO, the complete inspection of the vehicle being sold, which helped buyers understand what they would be getting for the money they paid. According to Aggarwal, "Unlike Europe or Japan, India was a low-trust market, where people inherently trusted each other less. Further, due to information asymmetry in the used-car market, buyers had to invest a lot of time in searching."

Five months after launching ECO, Droom launched OBV (orange book value) in the same year. This was a pricing engine that indicated the value of a car after considering numerous parameters such as the year of manufacturing, the model, the colour, the type of transmission, and so on.

Generally, when people bought cars in India, they needed both insurance and loans, and thus, the following year saw Droom launch credit services, making it India's first and only marketplace for loans for used vehicles. As a follow on, Droom launched a service called History, which provided the history of the vehicle, including details such as the actual mileage driven on the car, the number of owners of the vehicle, whether the vehicle was under hypothecation,[1] and so on.

October of 2016 saw the launch of Droom Discovery, a feature that helped buyers with research on new vehicles to enable them to make purchase decisions. Discovery provided information on new cars, bikes, and scooters in India such as the mileage on a vehicle, specifications, on-road prices, images, reviews, and so on. Aggarwal explained: "Earlier, we had only one revenue source, and now we have six revenue sources. But 80 to 85 per cent of the total revenue still comes from the sale of two-wheelers and cars."

[1] Hypothecation was a pledge of security that occurred when an asset was pledged as collateral to secure a loan.

Individuals or auto dealers could sign up with the Droom platform, and transacting on the platform was simple. A customer could browse listings on Droom, place an advance after selecting a vehicle, and pay the balance offline to the dealer. After that, the customer could pick up their vehicle from the dealer, where it was stocked. For every transaction, Droom charged the seller a selling service fee that was typically 3 per cent of the value of the vehicle. Droom deducted this fee from the seller's payout after the transaction was completed on the platform. Droom did not charge the customer anything additional.

Customers could also use any of the six services Droom offered—ECO, OBV, History, Discovery, Credit, and Insurance—independent of either buying or selling a vehicle on the platform.

Droom's Automobile Inspection Tool: ECO

The ECO feature was unique, as it offered either the seller or the buyer a way to ensure a comprehensive inspection of a used vehicle. The feature provided a 360-degree doorstep auto inspection that enabled buyers or sellers to check the condition of a car through over 1,000 checkpoints. The buyer, for instance, could check whether the car's odometer had been tampered with to show a lower mileage. The ECO platform was built on Droom's proprietary auto inspection methodology and offered both basic and premium services. Pricing for the service started at ₹282.[2] The inspection was done by any one of the more than 12,000 qualified and certified technicians spread across over 900 cities in India. ECO's stand-alone inspection app, which was also integrated into the Droom platform, was associated with CarNation Auto, a multi-brand automotive sales and service company headquartered in Noida, India. The ECO feature aided in the transparency and authenticity of automobile checks.

Droom's Valuation Guide: OBV (Orange Book Value)

Five months later, in August of 2016, Droom launched OBV, which helped the customer know the fair market value of a vehicle. OBV was a benchmarking pricing engine for used vehicles that was provided free by the platform. According to Aggarwal, "Droom developed OBV keeping a long-term vision in mind of making it a trusted valuation guide for automobiles." Based on Droom's proprietary technology, OBV gave the fair market price of a vehicle within ten seconds; it configured the price based using basic information like the trim or option/feature level, make, year, model, and kilometres driven.

Further, a seller on any platform or channel could refer to OBV pricing while selling an automobile, and a buyer could also use it to find reference prices. A downloadable pricing report, with an overview of the prices of similar vehicles listed and sold in the last sixty days, ninety days, and lifetime, was available. For instance, if a 2015 VDI model of a Maruti Suzuki Swift car that had been driven 50,000 kilometres were placed for sale on the Droom platform at ₹400,000 (US$5,228), the price would have been calculated based on the OBV feature. OBV gave prices based on ranges of fair, good, and excellent conditions at the time of listing the vehicle. The rates for vehicles were different in different cities, and these were taken into consideration while quoting the final price. (The prices fluctuated, as costs such as road taxes and registration were different in each state.) At times, the colour of the vehicle also influenced its price. With the uncertainty of data and the asymmetry of information the buyer had to deal with during transactions with car dealers, OBV offered buyers reference prices of vehicles.

[2] ₹ = INR = Indian rupee; US$1 = ₹75.416 on April 30, 2020.

Droom's Repository of Past Records: History

In purchase decisions, buyers also considered factors such as accident claims, insurance, change of ownership, and so on. Realizing the importance of a vehicle's past, Droom introduced the History feature— a comprehensive and consolidated vehicle history repository, from multiple authoritative sources, that helped customers make informed decisions (see Exhibit 3). History was similar to the US-based Carfax Vehicle History Report, which helped people avoid buying used US cars that had hidden problems. History provided information on a vehicle's background and included approximately fifty history records. A downloadable certificate of the vehicle's history, either basic (which was free) or premium (which had a nominal cost), was available on the platform. A detailed certificate was also e-mailed to the customer within thirty minutes. The vehicle's history was analyzed by researching data sources from various vendors like insurance companies and OEMs and from government sources such as VAHAN[3] and ZIPNet.[4]

Droom's Online Loans Process: Credit

To pay the full amount up front for a used car might be difficult for many buyers—especially dealers, who needed to buy cars in large numbers. Individuals buying cars also found it challenging to pay for the cars on their own, as many might be transitioning from two-wheelers. Most dealers and individuals approached banks for loans. This led Aggarwal to wonder, "Why not offer loans as well on the platform?"

When Droom launched Credit, it did so such that the feature could eventually be branched off as a stand- alone business unit as well as integrated with the platform. Droom had its credit score, and customers could get loans online within ten seconds (see Exhibit 4). To provide a smooth, seamless process for loans, Droom acquired a non-banking financial company. Loans from Droom were subject to 1–5 per cent processing fees, and customers paid interest at 16 per cent (which the company planned to raise to 20 per cent). These rates were set relatively low to attract more customers. Banks, on the other hand, charged 30 per cent interest for used-vehicle loans.

According to Arjun Soni, head of Droom Credit, "Credit is a strategic unit for Droom. By 2025, Credit will contribute 50 per cent of our revenues and profits. There are profits in Credit as it is a stand-alone business as well as an ancillary service."

When Droom offered a loan, it also calculated a Full Circle Trust Score, which took into account factors including inspections of the vehicles for which the loan was being taken, warranties on the vehicle parts such as batteries, and verification of the claims made by the seller. A related feature Droom introduced was Buyer Surety. On buying a vehicle from Droom, a buyer received a ₹5,000,000 (approximately US$65,000) guarantee on the vehicle, in case any errors in these verifications were later discovered. Droom also introduced a buy-back facility. According to Soni, "When we started Credit on a pilot basis, our average ticket size was ₹200,000; hence our disbursements were very low. However, over the years, our average ticket size has increased to

approximately ₹800,000 for cars and other larger vehicles. For smaller vehicles and bikes, it is around ₹50,000."

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[3] VAHAN was a complete computerized database of vehicle information available through the Regional Transport Offices and District Transport Offices in India.

[4] ZIPNet (Zonal Integrated Police Network) was introduced in 2004; its main objective was to share information on crime and criminals in real time.

Droom's Response to Information Asymmetry: Discovery

Since used-car buying was a high involvement category with information asymmetry, buyers spent a lot of time researching their purchases. Droom hence launched its Discovery feature to cater to the information needs of consumers (see Exhibit 5). Aditya Khare, the director of product development, said, "The search for a used vehicle usually takes six months before finalizing the buy. Hence, we launched Discovery, which is a content platform. If one wants to do more research on what to buy, when to buy, and what's the ideal budget to have, etc., they could go to Droom's Discovery feature."

Discovery was both embedded in Droom and independent. The feature had news, views, calculators, and other specifications to help buyers make informed decisions. Essentially, it was content-heavy and free for those who logged on to Droom.

Other Droom Features

According to Aggarwal, "Out of sight was out of mind"; hence, new products or versions were introduced every month. (Some features were running on their tenth or eleventh version!) For example, Droom had recently introduced Internet of things (IoT) functions in the ECO feature. Further, Droom introduced fleet services for corporates. Droom also gave corporate customers the choice of services like bulk buying, bulk selling, bulk Regional Transport Office services, bulk vehicle servicing, and both recurring and one-time condition checks for vehicles.

Automobile dealers were the cornerstone of the Droom platform, as they acted as conduits between buyers and sellers on the platform, mainly owing to their ability to maintain an inventory of vehicles. To promote the C2B market, Droom offered a service called the Quicksell, which was an auction feature for dealers who bought vehicles in bulk. The difference between a regular transaction and a transaction on Quicksell auction was that while a standard transaction saw only one vehicle being bought at a time, an auction involved an automobile dealer buying vehicles in bulk. Auctions were held at regular intervals on the Droom site, and vehicles for auction were certified through Droom's ECO, OBV, and History features. This helped buyers, as well as auto dealers, save time and effort. Droom also assisted in interstate Regional Transport Office transfers, when vehicles were moved from one state to another in India.

In terms of volume, more two-wheelers were sold through Droom, but from a value perspective, cars contributed more. Used luxury vehicles were another first for Droom, as no other Indian

company sold used luxury vehicles. With synergies among the features on its platform, Droom had built exclusivity in the market. According to Aggarwal, "We have no worries about competition, as our ecosystem was built around the platform and forms a very effective and formidable barrier for others to penetrate."

INTERNATIONALIZATION

The international market was attractive to Droom, as customers' buying behaviour in most markets was similar to that in the Indian market. Aggarwal also wanted the platform's features to be ubiquitous globally. Droom signed a memorandum of understanding (MOU) with Toyota Tsusho Corporation to expand its business across Southeast Asia. The MOU synergized Droom's digital assets with Toyota's physical presence, inventory, and dealer network.

Droom established footholds in nine countries, beginning with Malaysia and then expanding to countries including Indonesia, the Philippines, Thailand, and Vietnam. Once Droom was established in Southeast Asia, it planned to expand to the Middle East and Africa as well. According to Akshay Singh, vice-president of strategy, "Droom, while spreading its wings overseas, would first enter with OBV and build the network; then the other features would follow. The urge to spread abroad is because we find the used-car market in those countries similar to India."

CERTIFICATION

To integrate all the features available on the platform and to help customers trust the platform, Droom launched its critical certification business unit, which was especially important since the platform was a marketplace with no inventory.

Certification was done at four levels: first was a pricing certification, which was based on OBV; second was a history certification; third was a testing certification, which was for parts of the vehicle such as the battery and spark plugs; and fourth was the last-three-years inspection certification. This fourth certification was the most critical, as it involved a physical check-up of the car (see Exhibit 6). According to Rupendra Pratap Singh, associate vice-president of certification services, "As an online marketplace, we don't control the marketplace prices or inventory. We don't control either the seller's price or the buyer's price. However, we needed to add value. Certification gave us the right value proposition."

Despite offering huge potential, the online platform space came with its own set of challenges. The automobile market in India, including vehicles and services, was worth US$180 billion, of which only US$1 billion was online. The used-car market in India was almost entirely offline, as India was traditionally a low-trust market—and this was one of the biggest challenges in offering online services. The challenge was reflected in the high customer acquisition cost, which was US$369 in 2015 but decreased to US$215 in 2019. Aggarwal said, "Online penetration has the potential to grow from 0.6 per cent to 7.0 per cent by 2021, resulting in the business of ₹15 billion, owing to the increasing Internet penetration and preference of young millennials to operate online."

To extend the repository of services offered on the platform, Droom introduced the Dashboard feature. This was an artificial intelligence (AI)- and data-enabled solution that gave the buyer a 360-degree report on a vehicle. With a scanned picture of the licence plate of a vehicle, a buyer

could discover details of the car that covered the entire gamut of specifications, including repair estimates, pricing, and vehicle statistics, with the click of a button. Droom also created a chat service that allowed buyers and sellers to chat online.

Droom was consistently making advancements in its use of machine learning, AI, and IoT capabilities on the platform. Droom was also investing in a feature called Assist, which guided the user to areas of interest; for instance, if a user wanted to sell a car, the site would refer them to a comparative chart where cars of the same range were listed. Droom also improved the user experience and user interface of its app to simplify the user journey, and reduced the number of pages in the buyer journey. It also invested in search engine marketing and search engine optimization, resulting in users landing directly at the product and listing pages.

FINANCES

Droom's net revenue per customer increased from US$58 in 2015 to US$126 in 2019, and its total net revenues increased from US$0.47 million in 2015 to US$32.00 million in 2019 (see Exhibit 7). Its earnings before interest, taxes, depreciation, and amortization (EBITDA) margins also improved, from −917 per cent in 2015 to −61 per cent in 2019 (see Exhibit 8). The percentage of repeat customers also grew significantly, from 1 per cent in 2015 to 33 per cent in 2019 (see Exhibit 9). These figures indicated the rising popularity and stickiness of the platform. Droom earned revenues from subscriptions and commissions (3 per cent). For new vehicles, the commission was 1.00–1.25 per cent or a flat booking fee. Dealer subscriptions for use of the platform and services ranged from ₹45,000 (US$650) to ₹100,000 (US$1,442) per year. Droom charged ₹100 (US$1.42) to buyers for comprehensive reports. Approximately 15 per cent of revenues were from dealer subscriptions. The company had also started monetizing OBV. Droom Credit had three revenue streams: (1) leads to lenders of ₹50–₹250, (2) processing fees of ₹3,000, and (3) fees for the use of its credit technologies of 1.5 per cent of the value of the loans.

Droom's revenues kept increasing year on year, while its expenditure on marketing as a percentage of GMV kept decreasing (see Exhibit 10). Droom had so far raised US$125 million from various investors. (Investors were attracted to Droom based on its innovation, speed to market, scalable model, and ability to monetize.) In 2018, Droom's valuation was US$550 million.

COMPETITORS

While there was no single competitor to Droom, competition per se fell into four distinct types. The first type of competition was online classified ad platforms; for example, OLX and Quikr, which operated transaction marketplaces built on top of classifieds platforms. The second type was content platforms such as CarDekho, which monetized through advertising and capturing of leads. The third category included those competitors that offered offline transactions but also had an online presence; for example, CARS24, First Choice, OEMs, and Cash My Car. These competitors had higher cost structures but also had higher margins. The last category was pure online e-commerce platforms, where Droom had positioned itself.

CONCLUSION

The growth potential for Droom was huge. According to Aggarwal, "India's automobile industry is approximately US$225 billion. Of this, US$60 billion is in ancillary services such as warranty and insurance, while the remaining US$165 billion is split between new vehicles and used automobiles. And only US$1 billion is enabled through online transactional platforms. Four per cent of Indian households have a car, and 24 per cent have a motorcycle. For every new car sold, 1.5 used cars are sold, and for every new motorcycle, 1.8 used motorcycles are sold."

Though the online used car market had a long way to go in India, the potential was strong, as evidenced by Droom's 8.8 million app downloads (see Exhibit 11). The question for Droom now was how to capitalize on its exclusivity and market leadership position in light of OEMs' aggressive entrance into the used-car market. How could it grow the business internationally to become a global platform? Would it be able to turn profitable and build a sustainable long-term business? The main question was: How would Droom transition into a purely online business, eliminating the need for any offline activities? Droom was exploring a matchmaking model such as that of matrimonial platforms, where users could choose their matches, instead of a marketplace model, where they had only one option for transaction. Whether that would push buyers and sellers to adopt pure online play remained to be seen.

EXHIBIT 1: DROOM REVENUES (IN US$ MILLIONS)

Revenues	2015	2016	2017	2018	2019
Transactional	0.45	2.83	8.71	16.32	30.22
Subscription	0.02	0.07	0.26	0.29	0.16
Certification	0.00	0.00	0.01	0.05	0.39
Financial	0.00	0.00	0.00	0.01	0.71
Marketing	0.00	0.06	0.11	0.20	0.52
Total Net Revenues	0.47	2.96	9.15	16.90	32.00
Gross Merchandising Value	26.50	165.30	454.00	725.30	1,186.60

Source: Company documents.

EXHIBIT 2: DROOM TOTAL ORDERS AND AVERAGE SELLING PRICE

Metrics	2015	2016	2017	2018	2019
Total Orders (Numbers)	**8,414**	**50,205**	**344,276**	**415,297**	**610,649**
Big Assets	8,117	33,523	63,060	76,203	103,024
Certification Services	14	6,815	18,080	43,991	305,880
Ancillary Services	283	4,009	4,558	8,843	38,471
Financial Services	0	0	0	37	2,179
General Merchandising	0	5,858	258,519	285,357	160,153
Premium Services	0	0	59	866	942
Marketing Services	0	0	0	0	0
Average Selling Price (₹)	**189,143**	**197,494**	**79,116**	**104,781**	**116,590**
Big Assets	195,942	294,731	429,101	568,825	689,268
Certification Services	944	370	331	233	198
Ancillary Services	3,472	3,056	666	304	452
Financial Services	0	0	0	6,878	7,912
General Merchandising	0	3,439	655	546	547
Premium Services	0	0	455	391	1,934
Marketing Services	0	0	0	0	0

Note: ₹ = INR = Indian rupee; US$1 = ₹75.416 on April 30, 2020.
Source: Company documents.

EXHIBIT 3: DROOM HISTORY

Source: Company documents.

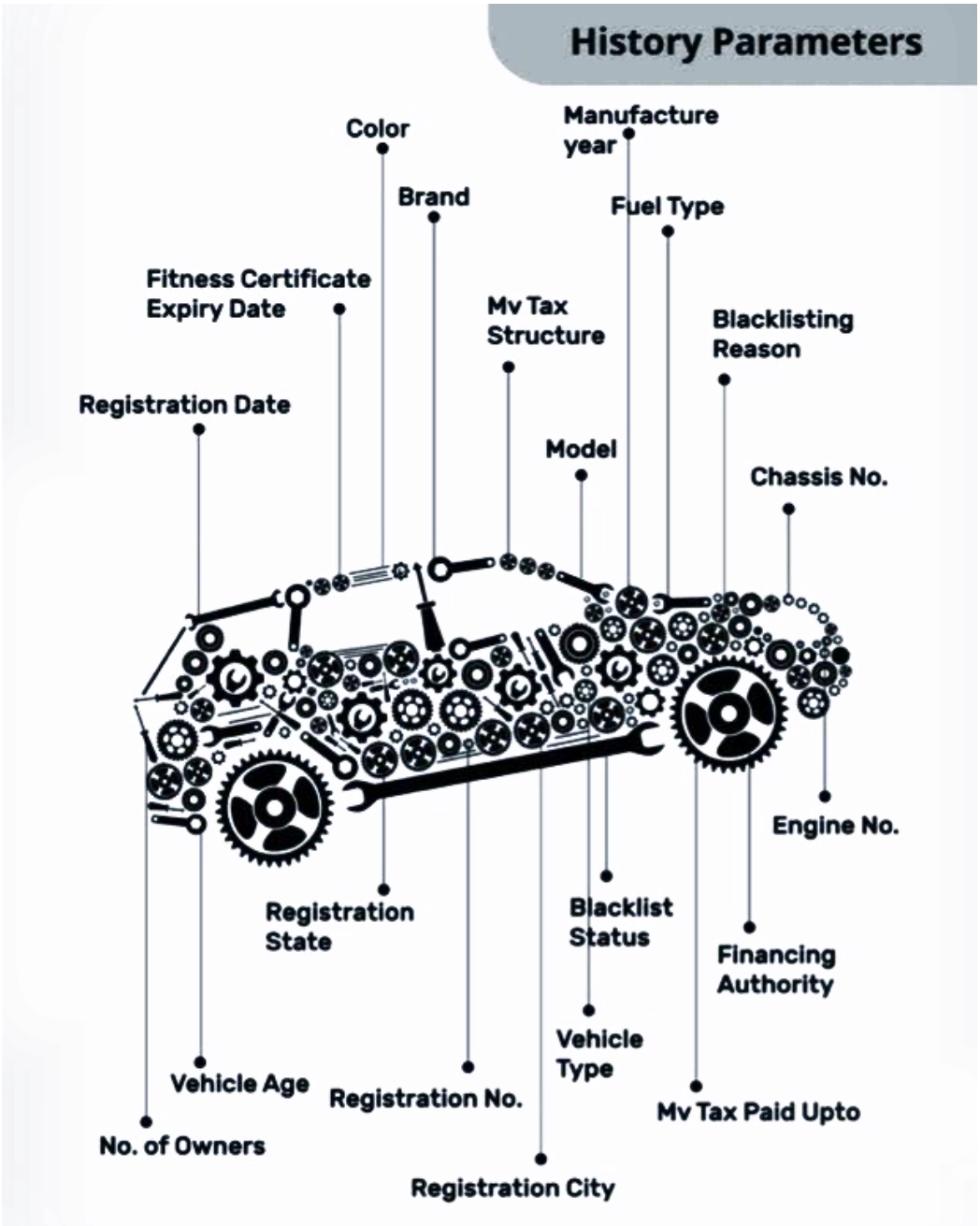
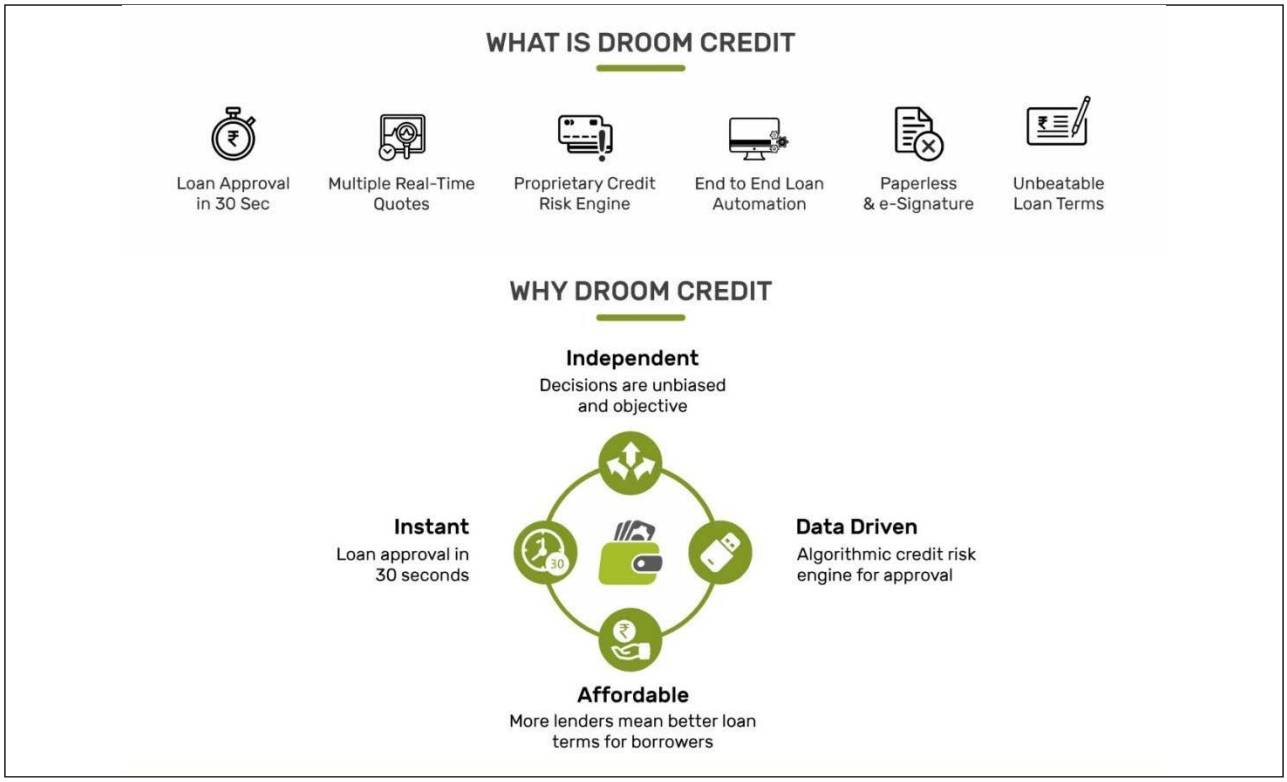


EXHIBIT 4: DROOM CREDIT



Source: Company documents.

EXHIBIT 5: DROOM DISCOVERY

Source: Company documents.

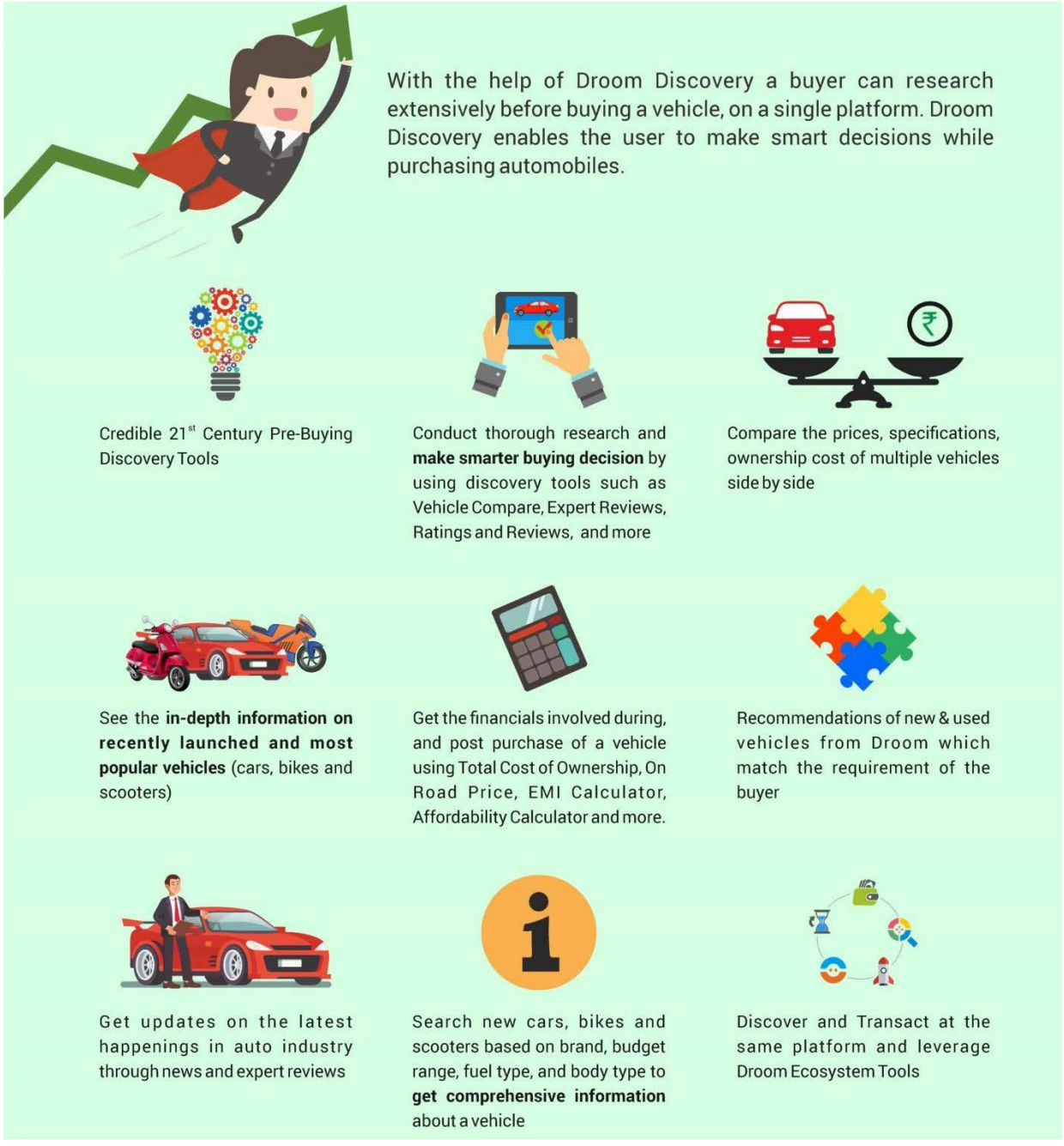


EXHIBIT 6: DROOM CERTIFICATION

Note: OEM = original equipment manufacturer.
Source: Company documents.

EXHIBIT 7: UNIT ECONOMICS IN US$

Metric	2015	2016	2017	2018	2019
Net Revenue per Order ($)	56	59	26	41	52
Net Revenue per Customer ($)	58	71	29	50	126
CAC (Customer Acquisition Cost) ($)	369	240	69	117	215

Source: Company documents.

EXHIBIT 8: PROFITABILITY INDICATORS

	2015	2016	2017	2018	2019
Gross Margin (% of Net Revenue)	87%	86%	84%	83%	89%
EBITDA Margin (% of Net Revenue)	−917%	−367%	−212%	−126%	−61%

Notes: Data for calendar year; Net Revenue = Total Revenue − Returns; EBITDA = earnings before interest, taxes, depreciation, and amortization.

Source: Company documents.

EXHIBIT 9: DROOM—BUSINESS SUSTAINABILITY

		2015	2016	2017	2018	2019
Run Rate	Total Orders	8,414	50,205	344,276	415,297	610,649
	GMV (in US$ million)	26.5	165.3	454.0	725.3	1,186.6
	Total Net Revenue (US$ million)	0.47	2.96	9.15	16.90	32.00
	Total Yield	1.78%	1.79%	2.02%	2.33%	2.70%
	Total Traffic (million)	13	56	248	380	397
Burn Rate	Net Burn (US$ million)	4.34	10.90	19.32	21.14	19.56
	Net Burn (%)	16.2%	6.6%	4.2%	2.9%	1.6%
Frequency of Users	Total Visitors (million)	13	56	248	380	397
	Sessions/User	1.32	1.27	1.35	1.25	1.14
	Pageviews/User	4.79	3.10	3.15	2.82	2.73
Customer Retention and Churn Rates	% Unique of Total	75.9%	78.7%	74.0%	80.3%	87.8%
	% Bounce Rate	42.7%	58.5%	55.6%	46.6%	38.8%
	% New Visitors	88.2%	84.7%	83.7%	90.7%	93.9%
	Total Customers	**8,148**	**41,544**	**317,475**	**335,625**	**253,077**
	Existing	110	982	35,193	117,677	82,686
	New	8,038	40,562	282,282	217,948	170,391
	% Repeat	1%	2%	11%	35%	33%
	Repeat Customers' Orders as % of Total Orders	4.5%	0.2%	3.9%	25.6%	41.5%
	Total Orders	**8,414**	**50,205**	**344,276**	**415,297**	**610,649**
	Repeat Customers' Orders as % of Total Orders	4.5%	0.2%	3.9%	25.6%	41.5%

Notes: GMV = gross merchandising value; GMV = Orders × Average Selling Price; Net Revenue = Orders × Average Selling Price × Take Rate or Selling Fee; In other words, Net Revenue = Gross Merchandising Value × Take Rate or Selling Fee; Yield = Net Revenues ÷ Gross Merchandising Value. It is not a financial yield like Return on Equity.

Source: Company documents.

EXHIBIT 10: DROOM MARKETING COSTS

Metric	2015	2016	2017	2018	2019
Marketing Spend (US$ million)	3.4	10.6	22.1	28.6	38.7
Marketing Spend as % of GMV	12.4%	6.2%	4.8%	3.8%	3.2%
Marketing Yield	14%	28%	41%	59%	83%

Notes: GMV = gross merchandising value; Marketing Yield = Net Revenues ÷ Marketing Expense. This was Droom's way of tracking the recovery of marketing spend.

Source: Company documents.

EXHIBIT 11: DROOM—WEBSITE AND APP ANALYTICS

	2015	2016	2017	2018	2019
App Downloads (millions)	1.4	4.2	7.0	8.1	8.8
Session (Total Visits, in millions)	13	56	248	380	397
Sessions/User	1.32	1.27	1.35	1.25	1.14
Page Views/User	4.79	3.10	3.15	2.82	2.73
Users (Unique Visitors, in millions)	7	33	172	283	336
Pages Viewed (millions)	32	102	533	839	921
Average Duration	00:02:31	00:01:39	00:01:44	00:01:29	00:01:40
Total Traffic (millions)	**13**	**56**	**248**	**380**	**397**
App Traffic (millions)	4	14	25	19	13
Mobile Traffic (millions)	2	25	91	208	229
Desktop Traffic (millions)	7	17	133	154	155

Source: Company documents.