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UBER COMPANY
RIDE-HAILING SERVICE

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I. Asset Overview

Uber is a transportation company with a mobile app that enables customers to request rides and drivers to collect payments for their services. The concept for Uber was born one winter night during the conference when the pair was unable to get a cab. Uber was founded on a single idea: "What if you could request a ride from your phone?". The ease and simplicity of ordering a car ultimately contributed to the app's increasing popularity. A ride could be requested with the touch of a button, and a GPS would pinpoint the location. The cost would then be charged automatically to the card associated with the user account. The San Francisco-based firm soon rose to prominence and expanded rapidly. In less than two years, in 2011, Uber began worldwide in Paris, where the concept for it first took root. The first Uber ride was ordered in 2010. Today, Uber is not only offering transport booking they also offer Uber Eats, Uber Freight, Ride options, and many more.

II. Asset Evaluation

A. Cost of development & Acquisition

Starting in 2009 and launching its first ride in 2010, the company received its first major funding, a $1.25 million round led by First Round Capital. 2011 was a crucial year for Uber's growth. Early in the year, the company raised an $11 million Series A funding round led by Benchmark, and it went on to expand to New York, Seattle, Boston, Chicago, and Washington D.C., as well as abroad in Paris. With Uber's rapid growth came many controversies. In April 2017, Uber opened up about its finances for the first time to Bloomberg and reported a global loss of $3.8 billion for 2016. Uber's IPO made history as the biggest first-day dollar loss in IPO history in the United States. At one point, Uber was valued at $120 billion by Wall Street analysts, which would have made it the largest company ever to debut on the stock market. After its IPO, it was only valued at about $69 billion—just over half of its high-hopes IPO.

Uber Technologies' total assets for the quarter ending September 30, 2022, were $31.112B, a 15.65% decline year-over-year.

B. Training Fees

Uber does not require their drivers to undergo any special driving test before driving. All they need is your driving record to be clean. Instead, If the driver wants to undergo a training course, they are asked to pay $85. Since most contract drivers do not undergo the driving test, some uber drivers disregard the safety of their passengers.

C. Implementation cost

Uber uses Kafka and its own production databases for data streaming. And data storage depends on Hive, HDFS, Elasticsearch, MapReduce, and file storage web services. The company has also developed its own LIDAR that ensures internal sharing. Uber also implemented the app in both Android and IOS.

Below is the Implementation Cost for 2021:

Operations and support	$855
Sales and marketing	$2,359
Research and development	$1,003
TOTAL COST:	**$4,217**

D. Service cost

The cost that drivers pay Uber fluctuates from a trip to trip and is known as the service fee. It represents the variances between the amount a passenger pays and the amount a driver makes during a journey, fewer tips, tolls, and some other fees, taxes, and surcharges. Let's get through with base fare which is the flat fee that is being charged in every ride that may cost only $1.30 dollars. Long pick-up fees will be charged $.17 per minute and $.80 per mile depending on if it is applicable. The minimum fare is compulsory to pay for the trip which it will cost depending on per minute which will be calculated for example a 10-minute ride will be $9.80. To further calculate the total income of the driver to identify the cost per mile is charging for $1 or $2 per mile. Booking fees also have a service cost which is also called the "safe rides fee". It is mandatory to pay for the booking for $2 or $2.50. A per-minute wait time will likely be costly. If uber awaits the passenger for a certain amount of time the fee may range from $.20 to $.50 per minute. Cancellation fees will be charged for those passengers that did not show up to the driver in which it will be charged up to $.5 dollars. If your journey ends up changing, it can also change depending on the length, duration, or route. The minimum fare per mile will typically be far higher than the fixed booking cost per mile.

The sort of fare you have booked and your location are two factors that can affect how much an Uber trip will cost per mile. This sum is frequently between one and two dollars.

E. Cost of maintenance

One of the key components in determining how much Uber drivers earn is figuring out how much it costs them to drive their vehicles. If a driver earns $18 an hour and only incurs $1.00 in expenses, that's far better than a driver who earns $18 an hour and incurs $10 in expenses. Gas expenses are about $675 per month. Change oil every four to five weeks, which costs $70 each time. The brakes are inspected every three months, which costs about $220 each time, and the tires get checked out every three months. It costs about $100 to repair each tire. One far exceeds the minimum wage and the other doesn't even reach the minimum wage.

III. Financial Value

• ANALYSIS

Uber has been running for a decade now and it is one of the most successful companies today that has $31.112B of assets. Throughout their success, they also handled the data information of their user. Let's assume that the uber company cut off the budget for the maintenance of their data center because they are going to use the money for their business expansion plan. Because of the negligence, their database server has been breached ang leaked thousands of data of the user. the exposure factor from suffering from attacks would be 45% or 0.45. The Single Loss Expectancy from negligence is.

• Single loss expectancy (SLE)

SLE = Asset value ∗ Exposure factor

SLE = $31,112,000,000 ∗ 0.45
SLE = $14,000,400,000

• Annualized Loss Expectancy (ALE)

If the vulnerability issue is ignored, it is estimated that it will be attacked at least once every two years, thus having a 50% or 0.5 Annualized Rate of Occurrence. The Annualized Loss Expectancy would be

ALE (prior) = SLE ∗ ARO
ALE (prior) = $14,000,400,000 ∗ 0.5
ALE (prior) = $7,000,200,000

If the budget for the data center was not cut off, the risk would be reduced to 10% or 0.1 per 2 years, and the ALE based on the values above will be.

ALE (post) = SLE ∗ ARO
ALE (post) = $14,000,400,000 ∗ 0.1
ALE (post) = $1,400,040,00

• Cost Benefit Analysis (CBA)

Since we already get the Annualized Loss Expectancy (ALE) values above, we can calculate the Cost Benefit Analysis (CBA). The annualized cost of the safeguard (ACS) is the annual operating cost of securing the data center or server. This includes setting up a firewall, upgrading the software and hardware, adding regular backups, regular maintenance, disaster risk plan, and hiring a more skilled employee, and training them would cost $2,000,000,000.

CBA = ALE (prior) – ALE (post) - ACS
SLE (post) = $7,000,200,000 - $1,400,040,000 - $2,000,000,000
CBA = $3,600,160,000

This means Uber company would save $3,600,160,000 with the protocol applied.

IV. Evaluation

A Single Loss Expectancy of $14,400,000 is made in the case where data has been compromised, disclosed, and vulnerability was disregarded. A loss of $7,020,000 is anticipated annually, and a loss of $1,400,00040,000 is anticipated if data is safeguarded. It is anticipated that the business might save $3,600,160,000 by implementing maintenance and good planning. The actions done benefit the Uber company since they reduce the financial loss and other losses incurred.

V. REFERENCE.

Lex in-depth: does Uber deserve its $91bn valuation? | Financial Times (ft.com)

Daniel GillaspiaDaniel Gillaspia is the Founder of UponArriving.com and creator of the credit card app, "How much does uber charge per mile? [2022]," UponArriving, 28-Apr-2022. [Online]. Available: https://www.uponarriving.com/uber-charge-per-mile/. [Accessed: 20-Dec-2022]

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