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Ride sharing behavior in Bangladesh

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Abstract
Ride Sharing offerings are becoming more famous each day. In Bangladesh, younger human beings are the usage of this provider. But the helmet great in Bangladesh is not so precise. And more often than not the cost is simply too high than public transport in Bangladesh. Government should take right steps to experience sharing offerings. Contact base ride-sharing services isn't secured in Bangladesh.

Keywords: Ride sharing, character attitude, Bangladesh, public transport

Introduction
Ride-sharing offerings has had size able and disruptive impact on public delivery in many nations in cutting-edge years. In spite of the reality that ridesharing services in keeping with-se are not new, having existed intermittently in the US inside the route of the1940s and Seventies, the appearance and confluence of latest technology has led toa fast and sustained boom of such services in many nations thinking about that late2000s.2 nowadays, the adventure-sharing services marketplace stays evolving. Structures which includes Uber, Didi Chuxing, take keep of and Lyft hold to remarkable music their business version and pricing practices in addition to cope with new guidelines. Frequently, the ones new suggestions have diverse across global locations. In some global locations, which encompass Japan, journey-sharing services were outright prohibited. In precise global places, at the side of Singapore, regulators have embraced adventure-sharing markets but have frequently improved regulatory oversight. The numerous responses determined at some point of many countries truly suggest that delivery regulators are even though struggling to make experience of the adventure-sharing market. The regulatory stressful conditions had been compounded through the nascent nature of the research literature on ridesharing. (Lee 2017)

Literature review
In growing countries like Bangladesh, one of the key symptoms for economic improvement is the improvement of transportation and communique device and ridesharing is one in each of them. As a result, the huge range of online-based definitely sincerely company industries collectively with app-primarily based ridesharing, journey tickets, online procurement, and lots of others. Are in a boom which reduces the amount of attempt desired, time, and fee of mobility from one location to 3 extraordinary.

Following the trends, firstly the Uber has commenced out operation in Bangladesh app-based definitely genuinely experience-sharing services and cherished the primary-mover advantages with big selection of popularity. In the end, Pathao efficiently has released app-based definitely offerings and being decided via unique agencies at the side of Jobike, Obhai, Obon, Amarbike, Texiwala, Gariwala, Sohoz-enjoy, Chalu, and others. Interior very quick length, they have been capable of win the recognition of good-sized humans as fee-saving, real-time response and on-call for shipping facilities. The big possibilities rise up having a big scope of acceptability and opportunities to seize and unveil a new business agency region. Because of the reality some research had been completed on experience-sharing offerings as new employer platform in case of least evolved international locations like Bangladesh, the observe is undertaken to find out the reputation of ridesharing offerings from character attitude collectively with the annoying conditions from a corporation perspective. (Islam, Huda, and Nasrin 2019) [10]

These days experience-sharing service has turn out to be very famous in superior as well as in developing nations. Consequently, educational researchers, entrepreneurs, business persons, innovators, and policymakers are showing extra hobby in the nature and affects of this enjoy-sharing carrier on economies.

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From a business organization attitude, this carrier can create more possibilities in terms of market proportion and social blessings. Furthermore, revel in-sharing agencies are also benefited by means of new dimensions of issuer use and a brand-new location of incomes a earnings (Belk, 2014) [11]. Similarly to those, users additionally get benefits from revel in-sharing carrier as a capability option to the extraordinary problems of traditional transportation sectors like congestion alleviation, advanced journey options (DeMaio, 2009) [12]. (Islam *et al*. 2019) [10]

Steady with the IDLC (2018) report, around five,00,000 commuters used adventure-hailing offerings thru cars and bikes during 2017–2018. It's far crucial to be conscious that when the introduction of those 3 agencies, particularly Uber, the form of registered motorbikes and automobiles had improved considerably. Steady with the BRTA- 2018 report, in the course of 2016–2018, the form of registered motorbikes and vehicles expanded with the aid of 35.86% and eight.1%, respectively in Bangladesh. In Dhaka on my own, this variety become forty.1% for motorbikes and 8.6% for motors. Additionally, in a modern-day have a look at, Wadud (2020) [4] investigated that bike ownership in Dhaka had elevated substantially after the advent of motorbike-based totally e-hailing app services. As a give-up end result, it's far obtrusive from the records that vehicles and motorbikes are the most nice adventure-sourcing modes in Bangladesh. Human beings with all social recognition are the usage of those era-enabled offerings in Bangladesh. Deterioration in public shipping, consistent boom of centre-elegance humans, rapid communication, and hike in bike income have made each journey-sourcing offerings well-known in Bangladesh (IDLC, 2018).

Methodology
The motive of this look at is to recognize the existing popularity and prospect of journey-sharing offerings in Bangladesh from the customers' and rider mindset. Therefore, this take a look at considers the following goals, first, to come to be aware of the prevailing state of affairs of revel in-sharing provider in Bangladesh, 2nd, to determine the benefits and demanding situations of this provider and 0.33, to discover the potentialities of experience-sharing

company in Bangladesh.

List of Activities
In-depth literature review
A. Taking expert opinion
B. Research proposal
C. Finalize the Research proposal
D. Design questionnaire survey forms
E. Pilot test questionnaires
F. Final questionnaire
G. Preliminary investigations
H. Pilot survey
I. Find out the challenges of the ride-sharing survey
J. Solving the Challenges
K. Final survey at field level.
L. Proposed model
M. Model development
N. Interpretation
O. Analysis and findings.
P. Make report
Q. Review the project report
R. Submit for publish

List of Events
1. Project started
2. Literature Reviewed
3. Discussed with expert
4. Selected Research proposal
5. Research proposed
6. Designed questionnaire survey forms
7. Made Pilot test questionnaire
8. Made Final questionnaire
9. Made Pilot survey
10. Found out the challenges of the ride-sharing survey
11. Solved the Challenges
12. Final surveyed at field level.
13. Proposed model
14. Model developed
15. Analyzed and founding
16. Made report
17. Reviewed the project report
18. Submitted for publish

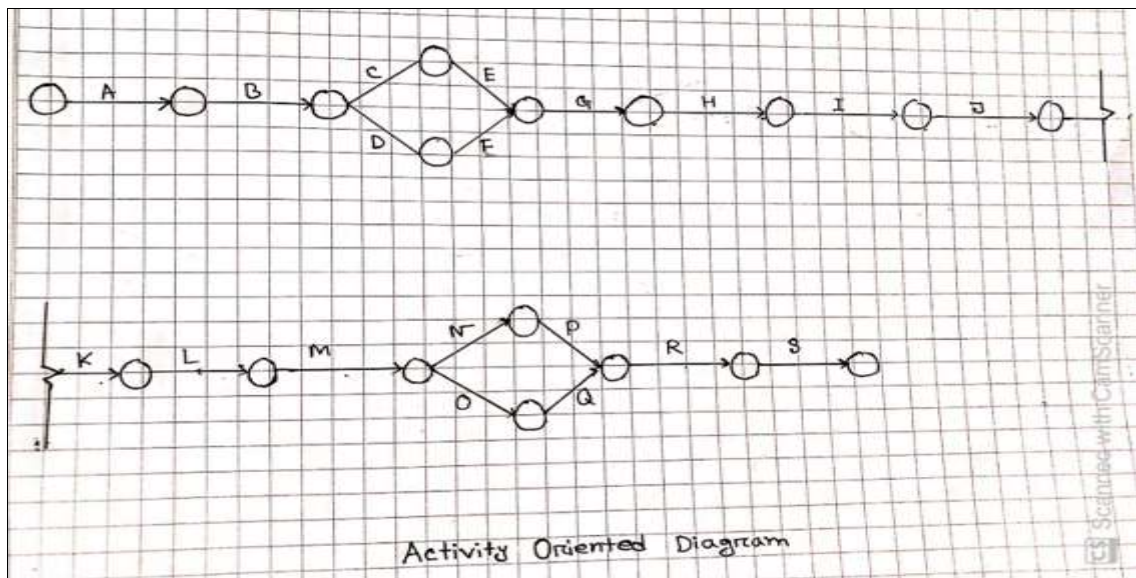**Fig 1:** Diagrams

Table 1: Time Estimation:

Activity No.	Activity	Optimistic time (week)	Most likely time (week)	Pessimistic time (week)
1	In-depth literature review	8.57	10	12.57
2	Taking expert opinion	1.00	1.43	1.86
3	Research proposal	1.00	1.43	2.14
4	Finalize the Research proposal	1.00	2.14	2.57
5	Design questionnaire survey forms	2.14	3.00	4.00
6	Pilot test questionnaire	0.71	1.00	1.43
7	Final questionnaire	0.43	0.57	0.86
8	Preliminary investigations	1.00	1.29	1.71
9	Pilot survey	1.43	2.14	2.57
10	Find out the challenges of the ride-sharing survey	1.00	1.43	2.00
11	Solving the Challenges	0.71	1.00	1.43
12	Final survey at field level	4.29	5.71	6.43
13	Proposed model	0.71	1.00	1.43
14	Model development	2.14	3.00	3.57
15	Interpretation	0.71	1.00	1.43
16	Analysis and findings	2.43	3.00	3.57
17	Make report	2.14	2.57	3.00
18	Review the project report	0.71	1.00	1.43
19	Submit for publishing	1.00	2.14	2.86

Table 2: The Gantt Chart
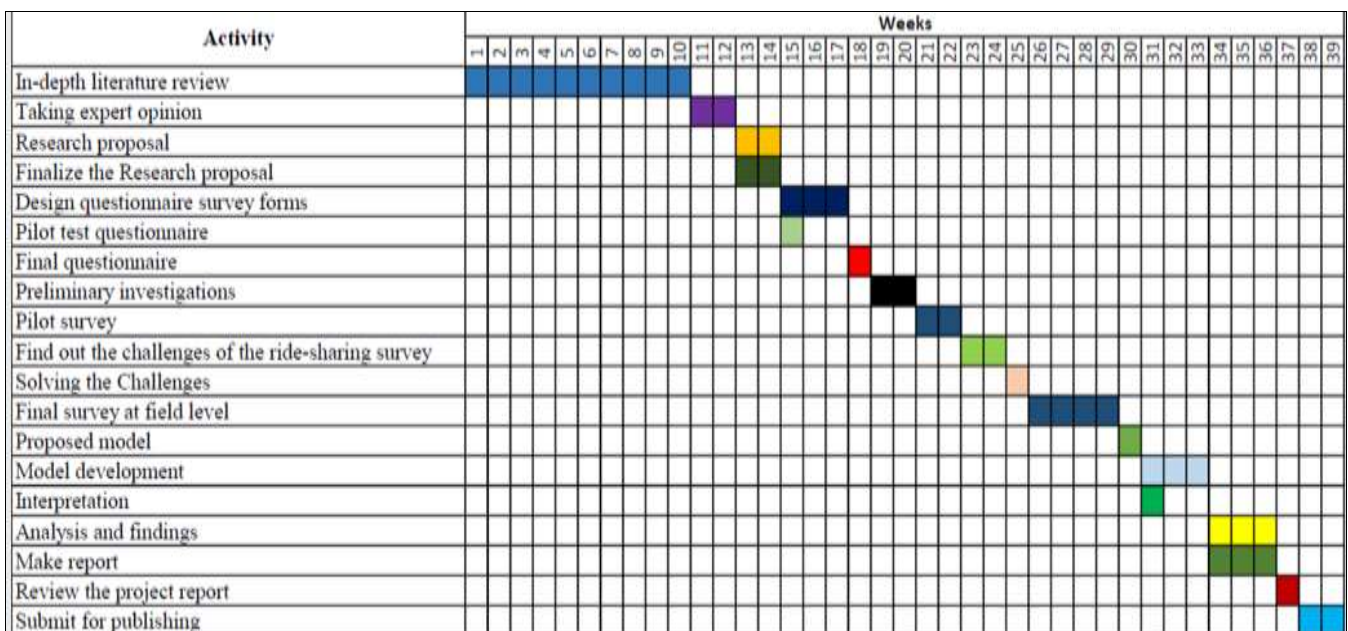
Table 3: The Certainties

Activity	Predecessor	To	Tl	Tp	tE	Variance	ST Deviation
In-depth literature review	0	8.57	10.00	12.57	10.19	0.44	0.67
Taking expert opinion	1	1.00	1.43	1.86	1.43	0.02	0.14
Research proposal	2	1.00	1.43	2.14	1.48	0.04	0.19
Finalize the Research proposal	3	1.00	2.14	2.57	2.02	0.07	0.26
Design questionnaire survey forms	3	2.14	3.00	4.00	3.02	0.10	0.31
Pilot test questionnaire	4,5	0.71	1.00	1.43	1.02	0.01	0.12
Final questionnaire	6	0.43	0.57	0.86	0.60	0.01	0.07
Preliminary investigations	7	1.00	1.29	1.71	1.31	0.01	0.12
Pilot survey	8	1.43	2.14	2.57	2.09	0.04	0.19
Find out the challenges of the ride-sharing survey	9	1.00	1.43	2.00	1.45	0.03	0.17
Solving the Challenges	10	0.71	1.00	1.43	1.02	0.01	0.12
Final survey at field level	11	4.29	5.71	6.43	5.59	0.13	0.36
Proposed model	12	0.71	1.00	1.43	1.02	0.01	0.12
Model development	13	2.14	3.00	3.57	2.95	0.06	0.24
Interpretation	13	0.71	1.00	1.43	1.02	0.01	0.12
Analysis and findings	14,15	2.43	3.00	3.57	3.00	0.04	0.19
Make report	16	2.14	2.57	3.00	2.57	0.02	0.14
Review the project report	17	0.71	1.00	1.43	1.02	0.01	0.12
Submit for publishing	18	1.00	2.14	2.86	2.07	0.10	0.31
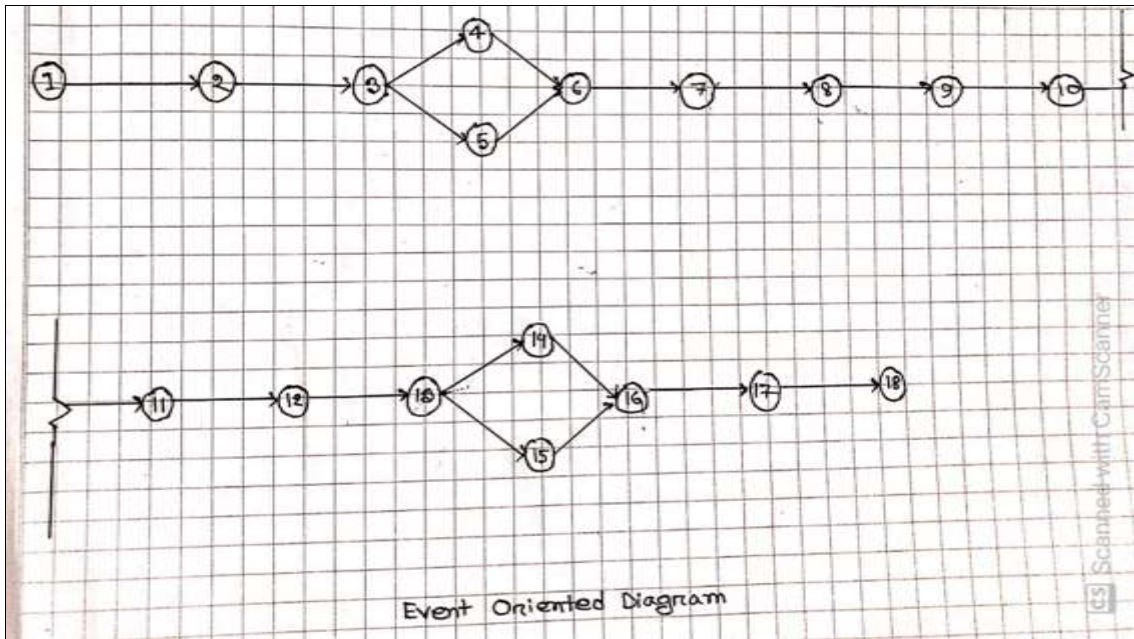
Fig 2: Diagrams
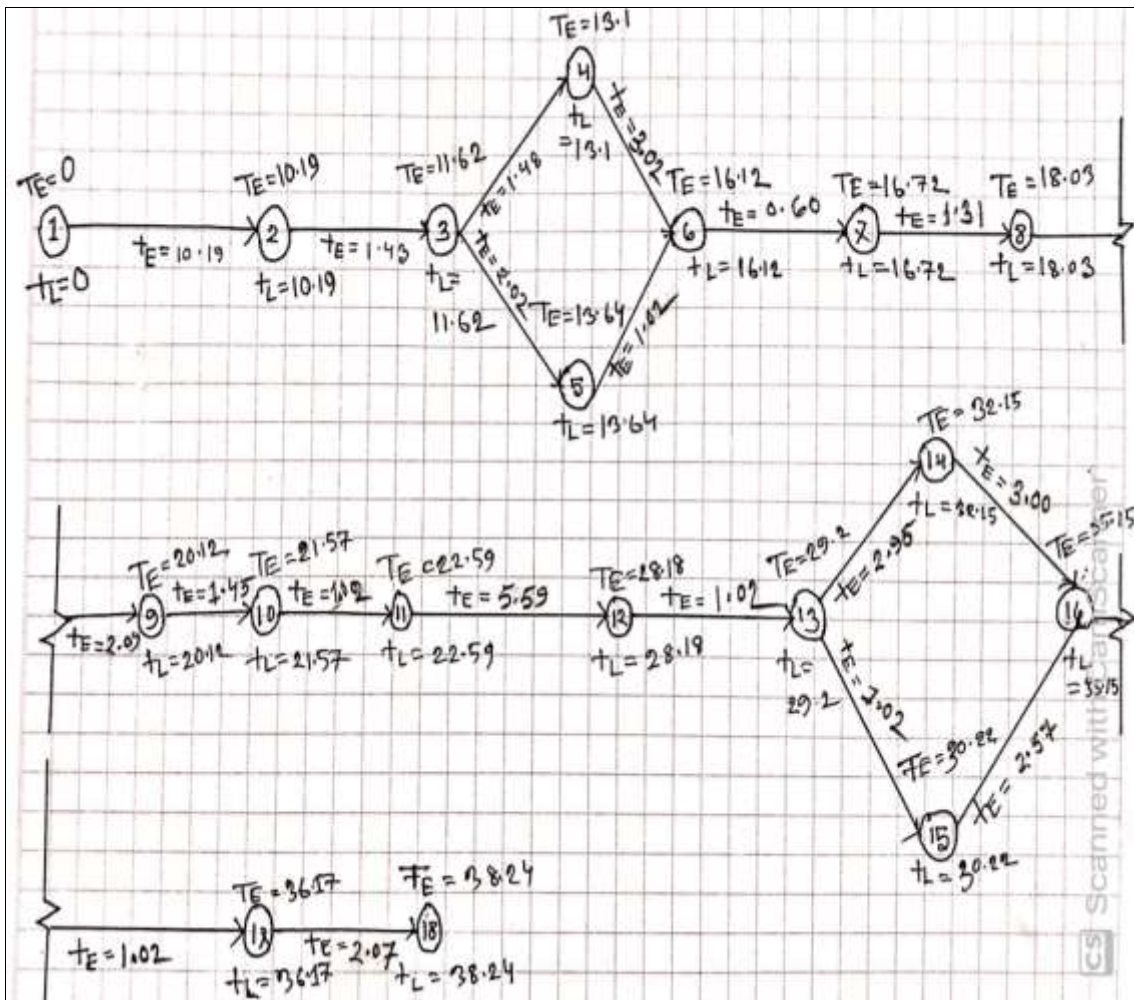
Fig 3: Network Diagram

Table 4: Expected Time for Each Path

Path Name	Te	Remarks
1-2-3-4-6-7-9-8-9-10-11-12-13-14-16-17-18	38.24	Critical Path
1-2-3-5-6-7-8-9-10-11-12-13-14-16-17-18	37.78	
1-2-3-4-6-7-8-9-10-11-12-13-15-16-17-18	35.88	
1-2-3-5-6-7-8-9-10-11-12-13-15-16-17-18	34.42	

Table 5: Earliest expected time the latest allowable occurrence time and slack

Events	TE	TL	Slack (TL - TE)
1	0	0	0
2	10.19	10.19	0
3	11.62	11.62	0
4	13.1	13.1	0
5	13.64	13.64	0
6	16.12	16.12	0
7	16.72	16.72	0
8	18.03	18.03	0
9	20.12	20.12	0
10	21.57	21.57	0
11	22.59	22.59	0
12	28.18	28.18	0
13	29.2	29.2	0
14	32.15	32.15	0
15	30.22	30.22	0
16	35.15	35.15	0
17	36.17	36.17	0
18	38.24	38.24	0

Table 6: Computation of activity times & float times for each activity

Activity	Duration	EST	EFT	LST	LFT	FT	FF	FID
1.2	10.19	0	10.19	0	10.19	0	0	0
2.3	1.43	10.19	11.62	10.19	11.62	0	0	0
3.4	1.48	11.62	13.1	11.62	13.1	0	0	0
3.5	2.02	11.62	13.64	11.62	13.64	0	0	0
4.6	3.02	13.1	16.12	13.1	16.12	0	0	0
5.6	1.02	13.64	14.66	13.64	14.66	0	0	0
6.7	0.6	16.12	16.72	16.12	16.72	0	0	0
7.8	1.31	16.72	18.03	16.72	18.03	0	0	0
8.9	2.09	18.03	20.12	18.03	20.12	0	0	0
9.10	1.45	20.12	21.57	20.12	21.57	0	0	0
10.11	1.02	21.57	22.59	21.57	22.59	0	0	0
11.12	5.59	22.59	28.18	22.59	28.18	0	0	0
12.13	1.02	28.18	29.2	28.18	29.2	0	0	0
13.14	2.95	29.2	32.15	29.2	32.15	0	0	0
13.15	1.02	29.2	30.22	29.2	30.22	0	0	0
14.16	3	32.15	35.15	32.15	35.15	0	0	0
15.16	2.57	30.22	32.79	30.22	32.79	0	0	0
16.17	1.02	35.15	36.17	35.15	36.17	0	0	0
17.18	2.07	36.17	38.24	36.17	38.24	0	0	0

Calculation of time duration

The expected time for critical path is
TE = 38.24 weeks
The Standard Deviation, σ = 6.18

For 95% probability
$95 - 94.52$
$94.52 - 95.54 =$
$z - 1.6$
$1.6 - 1.7$
Z=1.65
Ts = σ z+
TE = 6.18*1.65+38.24 = 48.44 weeks

For 75% probability
$75 - 72.57$
$72.57 - 78.80 =$
$z - 0.6$
$0.6 - 0.7$
Z=0.639
Ts = σ z+

TE = 6.18*0.69+38.24 = 42.50 weeks

For 50% probability
Z=0
Ts = σ z+
TE = 6.18*0+38.24 = 38.24 weeks

Conclusion

Ride Sharing services are getting more popular day by day. In Bangladesh, young people are using this service. But the helmet quality in Bangladesh is not so good. And mostly the cost is too high than public transport in Bangladesh. Government should take proper steps to ride sharing services. Contact base ride sharing services is not secured in Bangladesh.

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