

ANALYSIS OF MOBILITY STARTUPS BASED ON FLOW OF FUNDS

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INTRODUCTION: STARTUPS INCREASING THEIR PRESENCE

Startups as a Driving Force of Transformation

Recently, there have been a series of moves by major players to join hands in the mobility field. In September 2018, the Renault-Nissan-Mitsubishi Alliance announced that it would partner with Google. In the following month, Honda Motor announced that it would invest in one of General Motors' subsidiaries, while Toyota Motor and Softbank Group agreed to set up a joint venture. These are symbolic examples where automakers cross industrial borders, as they are facing revolutionary change. Moreover, these examples highlighted another important perspective regarding an ecosystem in the mobility field.

At a joint press conference on October 4, Akio Toyoda, president of Toyota Motor Corporation, said, "Every time I opened a door (of a potential partner), there sat Son-san ahead of me", indicating that "a group of companies" that Softbank has invested in is the key determinant of making an alliance with the IT conglomerate. Of note, Softbank Group has particular strength in ride-sharing area, being the biggest shareholder in ride-sharing startups such as Uber, Didi, and Grab. Google has also aggressively invested in mobility startups such as Lyft and Lime. The abovementioned General Motors' subsidiary funded by Honda Motor is Cruise. This self-driving startup was acquired by General Motors in 2016 and also invested in by Softbank. Behind the scene of major players joining forces are startups that drive such moves.

Startups and Large Companies Connected by Investments

Startups are increasing their presence not only in mobility but also in other fields. According to US research company CB Insights, global venture capital investment reached a record high of USD 164.4 billion in 2017, up 3.6-fold from five years ago. One of the factors behind this is aggressive investment by major companies and their corporate venture capitals (CVSs). Through such investment, large companies and startups have become more connected than before¹.

This report focuses on mobility startups and get an overview of them based on flow of funds. While there is no single definition of a startup, a company that is younger than 10 years old and has raised capital of USD 1 million or more is counted as a "startup" in this report². Such companies are extracted from Crunchbase³.

¹ The ratio of venture capital investment in total investment by companies and CVC was up from 24% in Oct-Dec 2016 to 28% in Jan-Mar 2018.

² Startups after exits (IPO, M&A) are also included.

³ Crunchbase is one of the largest databases in the world, which covers more than 600,000 companies.

INVESTMENT DESTINATIONS

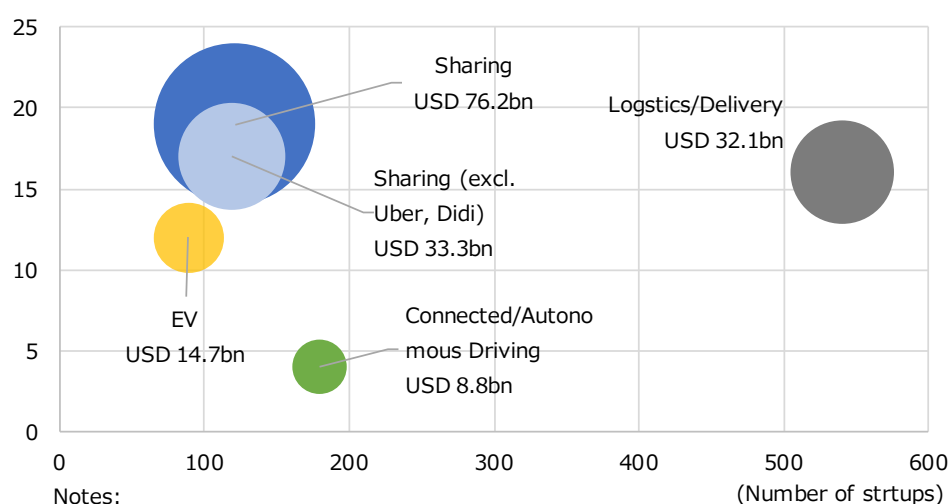
“Sharing” and “Logistics/Delivery” Two Major Destinations of Funds

The number of mobility startups that meet the above criteria was 1,781 as of end-September 2018, of which 52 were unicorns valued at over USD 1 billion⁴. Those 1,781 companies have raised a total of USD 162.3 billion, accounting for roughly 20% of the total fundraising of USD 865.6 billion by all startups (about 30,000) based on the definition above.

First, to identify areas that particularly attract investment, these mobility startups were categorized into groups in accordance with “CASE” (Connected, Autonomous, Shared, Electric)⁵ in Chart 1. Then, “connected(C)” and “autonomous driving (A)” were integrated into one group as many players overlap.

Chart 1: Overview of Mobility Startups (as of end-Sep 2018)

(Number of unicorns)



Notes:

- 1) The size of a circle represents the amount of fund-raising.
- 2) An "Others" group is omitted as it does not have a large cluster.

Source: Prepared by MGSSI based on Crunchbase data.

The most-funded group is “sharing(S)”, which raised USD 76.2 billion and accounted for nearly 50% of the total investment in mobility startups. Looking at the breakdown of this group, “ride-sharing”, including ride-hailing, raised an overwhelming total of USD 68.5 billion, followed by “one-mile” (bicycle-sharing, etc.) of USD 6.3 billion, and “car-sharing” of USD 1.3 billion. Even excluding Uber and Didi, which raised a combined total of a massive USD 42.8 billion, the “sharing” group outperformed “EV (E)” and “connected/autonomous driving” by a wide margin. “Sharing” stands out in “CASE”, as also evidenced by many unicorns belonging to this group.

Meanwhile, “CASE”-related investments account for only about 60% of the total investment in mobility startups, and the number of “CASE”-related companies does not reach even 30%. A large cluster other than “CASE” is “logistics/delivery” (an area related to movement of goods). Startups categorized in “logistics/delivery” raised a total of USD 32.1 billion, which is almost equivalent to “sharing” excluding Uber and Didi⁶.

Concentration of Investments in Top Companies Suggests Overenthusiasm for “Ride-sharing”

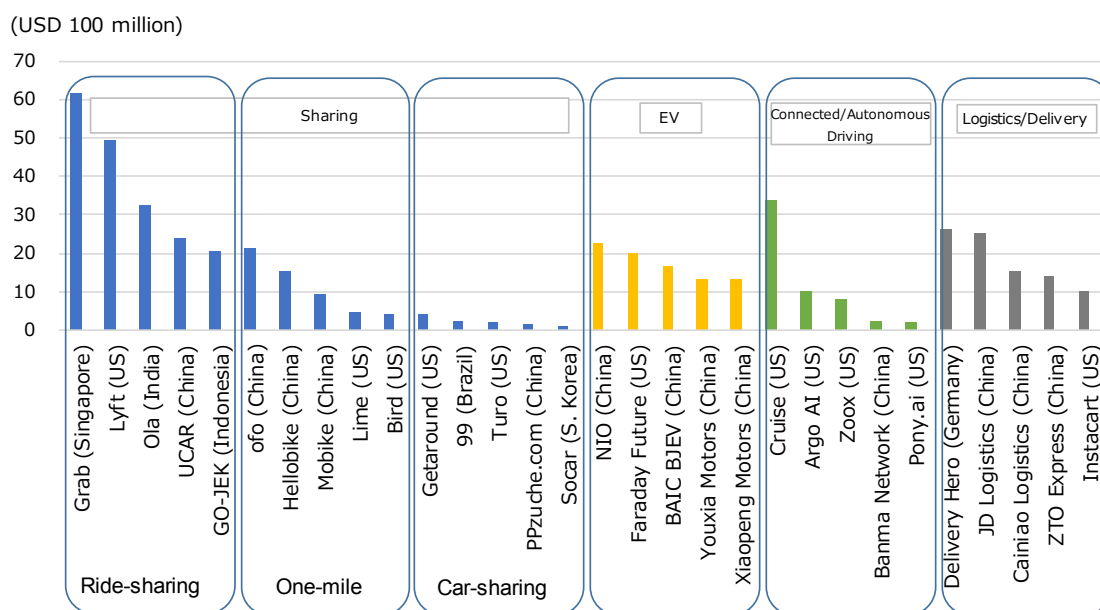
Chart 2 lists the top five investment destinations in each area to understand which startups have attracted funding. “Sharing” was divided into “ride-sharing” (excluding Uber, Didi), “one-mile”, and “car-sharing”.

⁴ Including former “unicorn” companies after exits.

⁵ CASE stands for the four key words (Connected, Autonomous, Shared, Electric) that could turn the auto industry upside down. Daimler announced it at the Paris Motor Show 2016.

⁶ Classification based on category groups of Crunchbase. No overlapping between groups.

Chart 2: Top 5 Investment Destinations by Area (Accumulated basis; as of end-Sep 2018)



Note: Uber (US) (about USD 22.2 billion) and Didi (China) (about USD 20.6 billion) are excluded.
 Source: Prepared by MGSSI based on Crunchbase.

“Ride-sharing” includes ride-hailing companies such as Grab, Lyft, and Ola, as well as GO-JEK, which not only provides a motorbike-hailing service but also conducts unique business, including delivery of various products/services, in Indonesia. In “ride-sharing”, investments tend to concentrate on leading companies, even excluding Uber and Didi. As such, the players seem to be almost fixed. In “one-mile”, key players include ofo and Mobike, which offer a bicycle-sharing service in China and other parts of the world, and Lime and Bird, which also provide scooter sharing service.

In “EV”, Chinese players have a significant presence. EV startup NIO⁷, which is often referred to as the Chinese version of Tesla and went public in September 2018, seems to be one step ahead of its rivals, but unlike “ride-sharing”, there is no single company that stands out as the champion.

In “connected/autonomous driving”, the abovementioned Cruise is the leading player, followed by Argo AI, a Ford-backed startup that develops autonomous driving technologies including AI and LiDAR (light detection and ranging). US startups have a strong presence on this front.

Players in “logistics/delivery” are roughly divided into two groups: those handling logistics not only for home delivery and those specialized in home delivery. JD Logistics, Cainiao Logistics, and ZTO Express have grown as logistics affiliates of e-commerce giants such as JD.com and Alibaba, but in recent years, these companies’ services, including automated warehouse and smart logistics, have attracted much attention. For example, JD Logistics opened the world’s first fully automated distribution station in a suburb of Shanghai, with intelligent robots working inside. Cainiao Logistics built a logistics system which monitors the real-time operational status of trucks and warehouses and autonomously assigns work, and succeeded in the first “drone-delivery test across the ocean” in China.

Delivery Hero is a listed online food-delivery service company, which went public on the Frankfurt Stock Exchange in June 2017. It operates in more than 40 countries internationally, connecting restaurants and customers. The company doesn’t solely focus on its marketplace business, but also conducts operational work, including management of drivers and fleet. Meanwhile, Instacart specializes in the marketplace function, which connects users (those who request) and crews (those who want to work). It offers a grocery delivery service, in

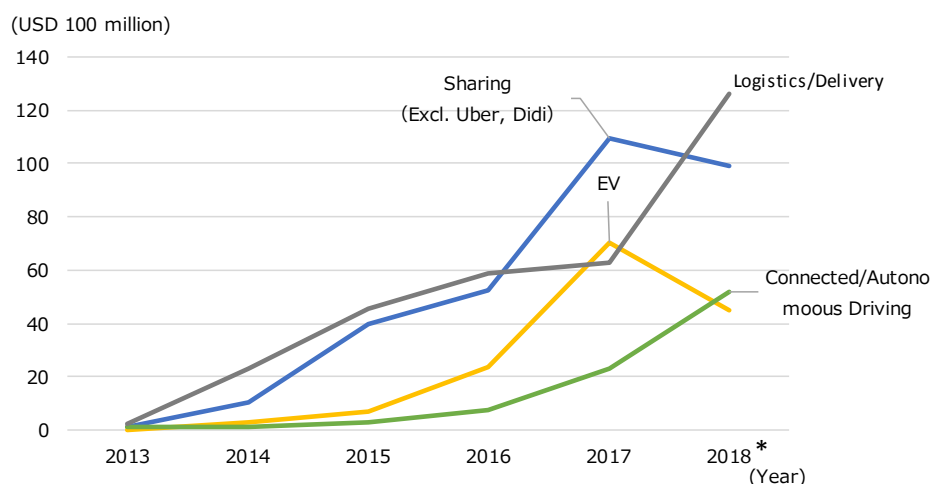
⁷ Funds raised from IPO not included.

which customers select items through a web application and the order is delivered by a personal shopper. By introducing a dynamic pricing model, it enables instant (one-hour to same-day) delivery while minimizing its own assets.

“Connected/Autonomous Driving” and “Logistics/Delivery” Gaining Momentum

Chart 3 shows chronological changes in each group’s fundraising.

Chart 3: Changes in Each Group's Funding



Notes:

1) * Jan to Sep for 2018

2) "Sharing" a total of 119 companies, "EV" a total of 89, "Connected/Autonomous Driving" a total of 179, and "Logistics/Delivery" a total of 540.

Source: Prepared by MGSSI based on Crunchbase data.

The group with the strongest momentum is “logistics/delivery”. The amount of funds raised by this group from January to September 2018 was well above that during the full year of 2017. The fundraising by “connected/autonomous driving” is also on the rise. Meanwhile, investment in “sharing” and “EV”, which surged in 2017, slowed in Jan-Sep 2018. While we need to look at trends in Oct-Dec 2018, the chart indicates that investment in “sharing” and “EV” increased first, followed by “logistics/delivery” and “connected/autonomous driving”.

WHO IS INVESTING

“Major IT Companies” and “Major Automakers/Auto Parts Manufacturers” as Investors

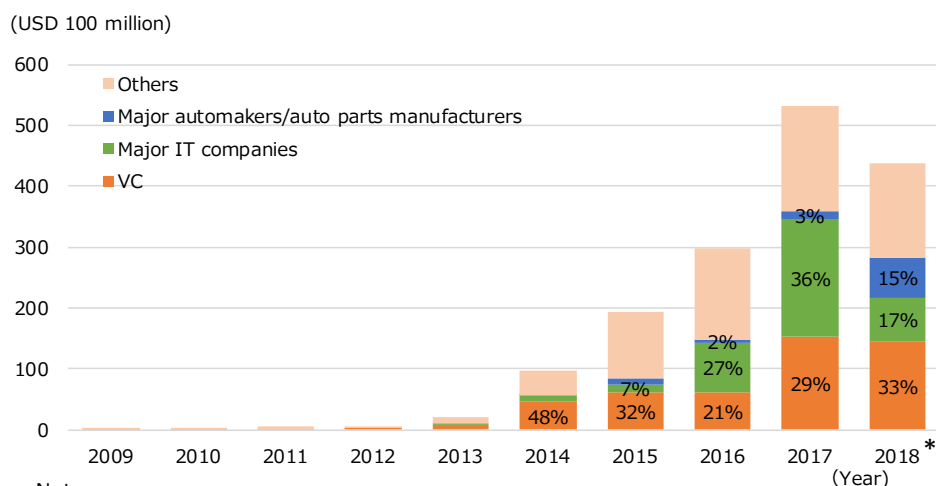
In this section, the focus will be shifted from investees to investors.

First, companies which have invested in mobility startups as a lead investor were picked, and grouped into “venture capital”, “major IT companies⁸”, and “major automakers/auto parts manufacturers⁹” in Chart 4. It shows the trend of investment by these three groups.

⁸ Softbank, Rakuten, Google, Apple, Intel, Alibaba, Tencent, Baidu (incl. their CVCs).

⁹ Toyota, Honda, Nissan, GM, Ford, Daimler, Volkswagen, BMW, Porsche, Renault, PSA, Denso, Magna.

Chart 4: Investments in Mobility Startups by Each Investor Group



Note:

- 1) *Jan to Sep for 2018
- 2) Investment in which the lead investor is a company in the group.

Source: Prepared by MGSSI based on Crunchbase data.

“Major IT companies” have increased their presence rapidly from 2016, with their share at merely 7% in 2015 to 36% in 2017. Major factors behind this include aggressive investments by Softbank (including Softbank Vision Fund), Alibaba, and Tencent. While venture capitals are key players, “major IT companies” also play a certain role.

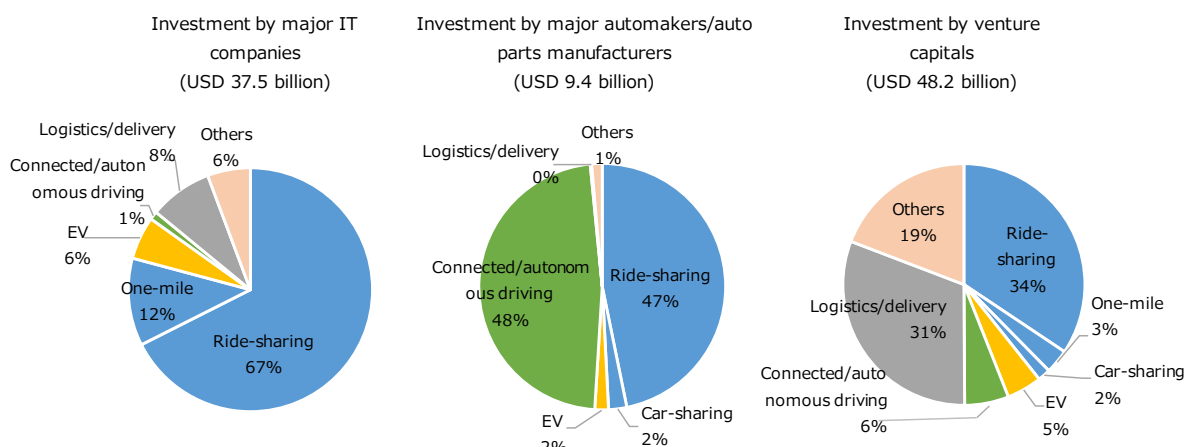
It should also be noted that investment by “major automakers/auto parts manufacturers” surged from 2018, with their share up from 3% in 2017 to 15% in 2018, boosted by investment by Toyota and GM.

Mobility seems to be an area where major companies and startups are more likely to be connected.

Major Investment Destinations of Each Investor Group

Next, the investment destinations by each group were exhibited in Chart 5, which makes it easier to compare the characteristics. It shows there are clear trends in each group.

Chart 5: Breakdown of Investment in Mobility Startups by Investor Group



Source : Prepared by MGSSI based on Crunchbase data.

“Major IT companies” have mainly invested in “sharing” startups. This is partly because their platform business, including matching and unified payment functions, and startups’ “sharing” business go well together. Meanwhile, their lower proportion of “connected/autonomous driving” can be explained by their existing strength in this area and preceding collaboration with companies categorized as non-startups such as NVIDIA (established in 1993).

Investment by “major automakers/auto parts manufacturers” is roughly divided into “ride-sharing” and “connected/autonomous driving”. Examples of investment in “autonomous driving” include GM’s acquisition of Cruise and Ford’s investment in Argo AI. The management team members of Cruise and Argo AI said that major automakers’ investment helped them implement/mass-produce products/services, as well as secure employees by improving brand image.

Meanwhile, “venture capitals” have invested in “logistics/delivery” as heavily as in “ride-sharing”. Of note, investment in “logistics/delivery” has surged from the beginning of 2018¹⁰. Unlike the other two groups, which may aim for “strategic investment” to take in business models and technologies from other companies, the purpose of venture capitals’ investment is to realize capital gains from the sale of stock. As such, venture capitals apparently recognize “logistics/delivery” as an area with high growth potential.

CONCLUSION: FOCUS ON “LOGISTICS/DELIVERY”

This report analyzed mobility startups from the viewpoint of investees and timing of investment as well as investors and their investment destinations. The overview shows that “sharing” and “logistics/delivery” (i.e., areas which are closely related to movement of people/goods) have attracted more funds than other areas related to “CASE”. While investment in “connected/autonomous driving” is currently increasing, which is an important perspective for manufacturers, what investors (companies and funds) expect from startups may not be developing the technology itself but their role in peripheral services that are changing along with advances in technology.

Meanwhile, competition in “sharing”, including “ride-sharing”, seems to have gone through the first round already. In addition, “venture capitals” started to pour a large amount of funds into “logistics/delivery”. As such, more focus should be put on “logistics/delivery” going forward. While movement of people is drawing much attention, the analysis in this report suggests the importance of focusing on how the industry related to movement of goods will be reorganized.

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¹⁰ Venture capitals’ investment in “ride-sharing” was USD 8.9 billion in 2017 and USD 2.3 billion in 2018 (through September); that in “logistics/delivery” was USD 1.6 billion and USD 5.2 billion.