

# A Study on the Placement Evaluation and Marketing Strategy of Shared Power Banks in Singapore

Yanxi Wu

North London Collegiate School, Singapore, 109708, Singapore

---

## ABSTRACT

The sharing economy, marked by collaborative consumption, has seen considerable growth globally. While prevalent in China, its popularity lags in other nations. This paper focuses on power bank sharing services in Singapore, a country embracing innovative sharing solutions. With rising mobile device usage, power bank sharing addresses the need for convenient, on-the-go charging. This paper employs a SWOT analysis, and evaluates a specific power bank sharing company in Singapore. Strengths lie in the app's convenience and growing electronic device reliance, while weaknesses encompass privacy and safety concerns. Opportunities arise from the city-state's tech-savvy and Chinese-dominated population and compact urban landscape, which makes them easily accept this new service. However, threats include regulatory uncertainties and single profit mode do need to be considered. In conclusion, Singapore's demographic and sharing-friendly environment positions power bank sharing as a potent manifestation of the sharing economy's innovation, catering to contemporary demands for accessible and sustainable energy solutions.

## KEYWORDS

Placement evaluation; Marketing strategy; Shared power banks

---

## 1. INTRODUCTION

### 1.1. Research Background

The concept of 'Sharing Economy' was first introduced by Marcus Felson, and the first Online Sharing Economy was launched in 1995. A sharing economy can be described as an economic model that allows goods and resources to be shared by individuals and groups in a collaborative way such that physical assets become services. After developing for nearly twenty years, with better accessibility of the internet and mobile devices in recent years, establishing a business in the sharing economy has become so simple that managing shared transactions has never been easier. Advances in big data and online platforms have fostered the enormous development of the sharing economy. An example of a modern Sharing Economy is the bike-sharing that was once so popular in China. In 2014, when the sharing economy suddenly became a popular trend, Dai Wei and a few partners co-founded the bike-sharing company 'OFO', which was initially proposed as a solution to the problem of travelling on university campuses. A year later, a total of more than 2,000 OFO shared bicycles appeared on the campus of Peking University, and a few months later, OFO quickly burst into flames in Beijing's major colleges and universities. And then the market gradually moved from campus to society. Having seen the rapid development of bike sharing, capital has also targeted the development potential behind it. Coupled with the rapid development of the Sharing Market, capital has been involved in the investment of shared bicycles. The Shared Bicycle Industry Development Index Report released by the China Academy of Information and Communications Technology (AICT) in 2017 shows that China's shared bicycles have shown explosive growth since October 2016, with the

shared bicycle penetration index increasing nearly eightfold in one year, and the scale of shared bicycle users reaching a staggering 209 million people in 2017. However, since 2017, the bike-sharing industry has gone into a period of precipitation and gradually gone downhill.

Compared with the sharing bikes that were briefly popular, the market for shared power banks is more sustainable. Of the shared goods, shared power banks are undoubtedly among the most common and best operated. For the supply side, the rapid development of shared charging power banks and good financing in recent years, coupled with the low cost and high demand for rechargeable items, can provide sufficient resources for consumers, which in turn can obtain higher economies of scale for the producer, and also attract more consumers and investors. One of the most popular countries for shared mobile chargers is China, which as of 2022 has reached 4,673,000 points of coverage, with more than three hundred cities covered.

From the perspective of demand, mobile phones have become an essential part of people today. Most places have popularised digital life, such as mobile phone payment, electronic bus cards, and other services. This provides people with a convenient life but also makes people more dependent on mobile phones. In addition, with the development of mobile phone entertainment software, some high-definition audio, video, or games for the battery loss is relatively large, so the current people for rechargeable treasure are more dependent on the desire to be able to borrow power at any time, thus making it a necessity.

In China, the sharing power bank market has developed very prosperous, and both marketing strategies and business management are very mature. At the same time, the competition in the market is also fierce, with various enterprises emerging. However, in Singapore, the sharing power bank market has not yet matured and the market is not as competitive compared to China.

And, as China's shared power bank market has been successful, a well-established system has been put in place. So to a certain extent, Singapore's market can learn from China's market, summarising and analysing the reasons for its success and learning the lessons from its failure.

## **1.2. Research Questions**

After recognizing the sustainability of the sharing economy and being inspired by the important changes it could bring about, and after realising that there is not yet a leading company that plays a monopoly role in the Singapore shared rechargeables market, the research questions were then formulated. These research questions were the foundation that initiated the entire study and laid the groundwork for this paper: whether the Singaporean market is similar to the Chinese market, whether the same experience could be successful in Singapore, and whether launching a business as a shared power bank could be profitable. In order to come up with clear answers to these questions, this paper will analyse and assess the feasibility of launching and monetizing a sharing power bank business in Singapore. This paper will collect data from the audience of charging station sharing in Singapore, the existing similar businesses, the density of existing charging stations, the marketing strategy for this business, and analyse the demand, competitors, and cost. This paper will use questionnaires, SWOT analysis, and Excel data categorization to evaluate the business.

### 1.3. Research Framework

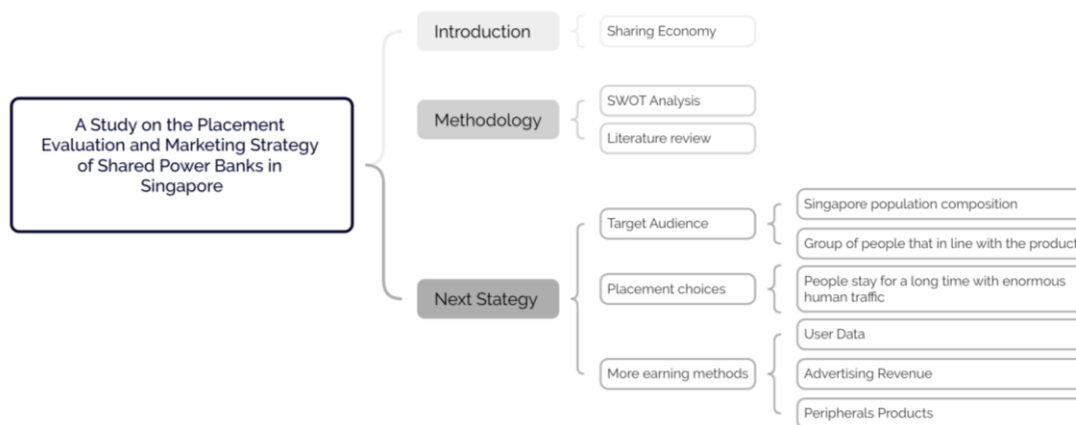


Figure 1. Research Framework

## 2. LITERATURE REVIEW

### 2.1. Some research about Sharing Economy

#### 2.1.1. Reflections on the Economics of the Rapid Growth of the Sharing Economy

Lin dissects the nature of the sharing economy and analyses the reasons for its rapid growth, namely the development of information technology, market demand, and high return on capita [1]. It also gives an example of a low-cost, high-return business such as sharing power banks [1]. This journal also lists the shortcomings of the development of the sharing economy, such as the susceptibility to the problem of imbalance of interests and vicious competition in the industry. This gives the SWOT analysis used in this thesis ideas about the strengths and weaknesses of the shared power banks industry.

#### 2.1.2. The Realistic Dilemma of Sharing Economy Development and Countermeasure Suggestions

Li explores several features of the sharing economy, such as the separation of ownership and use of products, which can be seen as key to the profitability of the sharing economy. She also gives the significance of the development of the sharing economy, [2] which provides the basis for the research of this paper.

#### 2.1.3. A Case Study of Sustainable Operations Management in the Sharing Economy

Tan summarises the current development situation of the sharing economy, puts forward the current problems of the sharing economy, and proposes a solution path for these problems [3].

#### 2.1.4. Research on the optimal allocation of resources in the sharing economy

Tang analyses the reasons for the popularity of the sharing economy, such as strengthening efficiency, reasonable resource allocation and so on. Potential problems in the sharing economy are also addressed [4].

#### 2.1.5. Research on the Dilemma and Innovation of China's Sharing Economy Administrative Supervision—Take Shared Power Bank as An Example

Diao claimed that the failure of the case of bicycle sharing was due to inadequate supervision. In order to solve the problem, the government should be involved in and take action. He gives suggestions for improving the regulatory system for the sharing economy [5].

## **2.2. Some Research Relevant To Power Banks**

### **2.2.1. Research on the development strategy of shared charging treasure based on relevant model analysis**

Chen uses SWOT analysis to analyse the current situation of Xiao dian Technology in terms of strengths, weaknesses, opportunities, and threats, and to assist in planning its future development [6]. This provides ideas for this paper and provides a methodology that can be used.

### **2.2.2. Shared Chargers Industry Development Research and Development Trend Forecasts**

Xing was conducted to figure out the audience of shared chargers by surveying a group of 304 people to figure out whether they have used shared power banks [7]. At the same time, the types of scenarios in which people need power banks are summarised through data cohabitation to provide further insights into people's needs [7].

### **2.2.3. Analysis of Shared Mobile Power Operation Models--Taking Street Power as an Example**

Hu summed up the profit model of shared charging treasure, one is to rely on leasing to get rent. By providing short-term rental services to users to get rental income. Shared charging treasure capital recovery speed, so the return on capital is very fast. The other is to rely on advertising. With the increase in the number of users, advertising will become a good income [8].

### **2.2.4. Analysis of the development status of the shared charging treasure industry**

Jin pointed out that in the promotion process, there are several problems with the shared power banks, such as low penetration, few outlets, a single profit model, security risks, and privacy. Such as: low penetration rate, few placement outlets, single profit model, security risks and privacy concerns. These issues also apply to the Singapore market and these concerns are considered in this paper [9].

### **2.2.5. Analysis of the main business models of the sharing economy**

Hou explores the profit model of shared items, analyses it with the example of shared charging treasure, and divides the operation mode into agent mode, service mode and direct mode. merchant mode and direct management mode. It also makes suggestions for a more diverse approach to the profitability of this industry [10].

### **2.2.6. Value Evaluation of Shared Mobile Power Enterprises ——A Case Study from Xiaodian**

Huang compares and analyses the head enterprises in the shared charging treasure industry in terms of financing scale, point layout, user scale, product experience, operation mode and other aspects, and makes a rating on their competitiveness [11].

## **2.3. Research Relevant to Singapore Marketing**

### **2.3.1. Study on Marketing Strategy of Luzhou Baijiu Entering Singapore**

Xiong analyses the consumption habits of Singaporeans in terms of basic demographic characteristics, household expenditures, shopping habits, and consumption priorities. [12] This contributes to this paper's understanding of the Singapore market.

### 2.3.2. A Strategic Study on Shenzhen Cross-border E-commerce Enterprises' Expansion into the Singapore Market

Zhang believes that Singapore is socially integrated and deeply influenced by Chinese culture. According to the 2020 Census, Singapore has a total population of 5.69 million, of which Chinese make up the majority (74 percent). According to the 2020 Census, Singapore has a total population of 5.69 million, of which the Chinese make up the majority (74 percent). Singapore has a strong Chinese cultural influence, with people receiving and identifying with Chinese information and products. People are receptive to and recognize Chinese information and products. As a result, it is easier for Singaporeans to accept and try out the charging device [13].

## 2.4. Learning Marketing Strategies

### 2.4.1. The Marketing Problems and Countermeasures of Samsung Mobile Phone of M Company in Heilongjiang Region

Chen is mainly based on the current marketing difficulties faced by Samsung mobile phones in Company M. He analyses the problems and causes of the marketing difficulties, and at the same time uses the 4Ps marketing theory to analyse the Product, Price, Place and Promotion [14] of Samsung mobile phones in an attempt to find out the ways to help Samsung increase its sales.

### 2.4.2. Business Plan for Power Bank Sharing Project of Dadi, Ltd

Gao claimed that due to people's reliance on mobile phones, "low battery anxiety" [15] has become a major pain point for smartphone users. But to effectively extend the battery life of mobile phones, at present, neither the upstream battery manufacturers nor smartphone manufacturers have a set of effective solutions, and it is unlikely to develop such products in the short term.

### 2.4.3. SWOT ANALYSIS: A THEORETICAL REVIEW

GÜREL explains the place of SWOT analysis in the strategic management process, followed by the components of SWOT analysis. The role of SWOT analysis in several different cases is also shown [16].

### 2.4.4. Marketing in Singapore: An analysis of macro trends

Wirtz examines the key variables of the marketing environment in Singapore. Specifically, trends in the economic, demographic and cultural environment are described, as well as trends in consumer behaviour and the macro marketing mix [17].

### 2.4.5. RURAL TOURISM MARKETING STRATEGY AND SWOT ANALYSIS: A CASE STUDY OF BANDAR PASIR MANDOGÉ SUB-DISTRICT IN NORTH SUMATERA

Analysis using "Weakness-Strength-Opportunity-Threat" (SWOT) approach Based on the field findings of SWOT analysis, the authors have developed feasible marketing strategies for Bandar Pasir Mandogé Tourism Sub-district of Asahan District Feasible Marketing Strategies[18].

## 2.5. Singapore Customer Market

### 2.5.1. Immigration, population, and foreign workforce in Singapore: An overview of trends, policies, and issues

Yang examines Singapore's high immigration rate and the impact of economic development and national policies on it [19].

## 2.5.2. Marketing Analysis of Chinese Electronics Products in Singapore

Sui believes that Singapore has a huge electronics market and that Chinese electronics companies should enter the Singapore market by choosing better products, prices, channels and promotional strategies [20].

## 2.5.3. A Study on Optimising China Southern Airlines' Marketing Strategies in the Singapore Market

Luo applies PEST and Porter's analysis tools to analyse the external marketing environment and competitive environment of China Southern Airlines in the Singapore market, which focuses on the core competitiveness of its main competitors. Through the analysis of the competitive situation of China Southern Airlines in the industry, [21] it highlights the threats and opportunities faced by China Southern Airlines in the Singapore market. Through the analysis of the competitive situation with domestic and international counterparts, it highlights the threats and opportunities facing China Southern Airlines in the Singapore market. This research has also helped this paper to a certain extent by analysing the traditional business model in the sharing economy system and considering the profitability model in terms of both deposit and rent, which are the primary sources of income for the sharing power bank business.

# 3. METHODOLOGY

## 3.1. Methodology

### 3.1.1. Literature review method

From China National Knowledge Infrastructure (CNKI), Google Scholar and other channels, let the literature, data, and find, collate and summarise the sharing economy, marketing strategy, Singapore market analysis of related information to analyse the theoretical basis for the development of the research in this paper.

## 3.2. Analysis of Theoretical Models of Marketing Strategy

SWOT analysis is a commonly used method of analysis in enterprise management, based on the internal resources and external environment perspective, to explore the strengths, weaknesses, opportunities, and threats of the enterprise, so as to further develop future development plans for the enterprise. and threats, so as to further develop the future development plan for the enterprise. This paper applies SWOT analysis to analyse the strengths, weaknesses, opportunities, and threats of the shared power bank industry in Singapore, and on this basis makes an assessment and concludes whether it is worth investing in.

# 4. MARKETING STRATEGY OF SHARED POWER BANKS IN SINGAPORE

## 4.1. Company Profile of PowerOn

Singapore Poweron Technology Pte Ltd It is an innovative company committed to providing users with high-quality, convenient and robust charging services. PowerOn SG adopts the latest smart charging technology, featuring fast charging, intelligent recognition and long battery life, providing users with a more convenient, efficient and safe charging experience. PowerOn charging devices are manufactured by internationally renowned suppliers, and each product undergoes strict quality inspection and safety testing to ensure that every mobile power source used by users is safe and reliable. As Singapore's most ubiquitous shared-charger business, PowerOn has rental stations across

various districts in Singapore, including convenience stores, shopping malls, hotels, hawker centres, restaurants, bars, retail outlets and entertainment venues. Moreover, they have their own self-developed software which is fully functional inside.

## **4.2. SWOT Analysis**

### **4.2.1. Strength**

(1) Plenty of sites, easy for borrowing and returning.

On PowerOn's software, it has designed a map with stations replaced with hikes. Customers can click on the icon to see the address of the site that has a rechargeable battery, thus making it easier for them to borrow or return it.

(2) The software is fully functional and user-friendly

Not only does each site have an address displayed on the software, but it also indicates how many power banks are available for rent, so that people don't have to make a visit but don't have any power banks available to borrow.

(3) Multiple payment methods

In order to consider customers of different nationalities or those who do not have a local bank card because they are travelling, PowerOn has set up many kinds of payment methods on the software, including: Paynow and Grabpay for Singaporean locals, WeChat pay for Chinese, and credit card payment which is available in the whole world.

(4) Quick to rent and easy to return.

As long as once downloaded the software and continue to register, complete the recharge within the software, customers will only need to sweep the code, pay the deposit and lend three steps. It is also easy to return the shared power banks, just plug the rechargeable treasure into the box, the software will automatically deduct the fee.

With the advantages of quick rental and easy return, shared power banks can effectively solve the problem of people's charging difficulty and slow charging, attracting a lot of user groups.

### **4.2.2. Weakness**

(1) Single profit model

At present, the profit model of PowerOn is relatively single, although there are two profit models: deposit flow and leasing fee, but deposit flow is only applicable to the initial stage, and PowerOn relies more on leasing fee in the middle and late stages. However, high rental fees will reduce consumers' willingness to use the service, and the high deposit (S\$20) will discourage people from borrowing.

(2) There are safety and privacy concerns.

Although charging device companies claim that they are safe to use, there are still concerns about privacy leaks: charging device explosions have occurred from time to time, and charging device explosions can lead to safety accidents and become a public safety hazard; public charging cabinets may be vulnerable to hacking, leading to information theft; and since charging device rentals require WeChat or credit card payments, these accounts come with bundled personal information, which can lead to serious consequences if leaked. Once leaked, the consequences will be serious.

(3) Too much of a hassle to download the software and register

Due to being in Singapore, PowerOn is unable to use WeChat apps and create store in Wechat as conveniently as in China, instead requiring users to download the software and then register and top

up within it. And this set of steps takes a long time, so it can lead to potential customers choosing not to borrow because it's too much of a hassle or they're in a hurry.

#### 4.2.3. Opportunity

##### (1) The role of mobile phones is irreplaceable

The development of shared charging treasure will inevitably depend on the prosperity of electronic products. With the development of 5G, we will use smartphones, smart tablets or other electronic products more frequently, whether for shopping, entertainment, payment or daily contact, and the high intensity of reliance on the use of such products will also lead to rapid consumption of electronic equipment. Battery storage technology has not been able to achieve a breakthrough in recent years, under the existing energy storage technology, most users need to charge several times a day to meet the needs of daily life or work, so the application scenarios and usage needs of shared charging treasure are also more extensive.

Therefore, the application scenarios and usage requirements of shared chargers are also more extensive.

##### (2) Accumulation of Consumption Data Provides Room for Growth

With the growing development of PowerOn, it has accumulated a lot of offline user consumption data, which brings new growth opportunities. It can cooperate with digital media companies to help them realise precision marketing, and the screen of the charging station can become part of the customised advertisement and a form of offline advertising. The PowerOn software can also be embedded with adverts as a form of online advertising.

#### 4.2.4. Threat

##### (1) Threat of better technology

In the long run, the shared power bank industry still faces tough challenges. As a shared power bank is the complementary product of smartphones and other electronic devices, with the improvement of battery life or the upgrade of wireless fast charging technology, it will bring certain impact to the shared charging treasure enterprises. In the future, the development of technology will make the standby time of electronic devices longer and the battery life stronger, and the demand for shared charging treasure will gradually decrease.

##### (2) Threats from Competitors

Currently, the shared charging battery industry is in a prosperous stage of development, in addition to PowerOn, in the Singapore market, Breeze, XINDIAN and other companies also occupy a portion of the market share.

##### (3) People raising awareness

As mobile phones play an increasingly important role in people's lives, more people are becoming more aware of carrying charging devices with them. Consumers generally bring their own chargers and power banks when travelling long distances or on business trips, which also reduces the space available for shared chargers.

According to an online survey conducted by LG Electronics in South Korea, nearly 90 percent of people feel panic when their mobile phone's battery drops to less than 20 per cent.

When the battery of a mobile phone drops to less than 20 per cent, nearly 90 percent of people experience a feeling of panic. LG calls this "low battery anxiety", which is often referred to as "low battery anxiety".

"Low battery anxiety" has become a common theme among smartphone users. But in order to effectively extend the battery life of mobile phones, at present, battery manufacturers and smartphone manufacturers do not have a set of effective solutions. Whether it's using brand new technology to

increase battery cell capacity or increasing the size of mobile phone batteries to get more power storage, it's unlikely that there will be a major breakthrough in the short term that will increase them significantly. Furthermore, with the emergence of the '5G era', more and more services have been digitised, and the rapid development of the Internet has facilitated the development of mobile applications for mobile phones, turning smartphones into devices that combine gaming, watching dramas, dating, communication and payment, which has led to a further decline in the range of mobile phones, and an increase in the power consumption of mobile phones instead of a decrease.

It can be found that the slow development of battery cell technology, far less than the rapid development of smartphone technology. And such a paradoxical situation is exactly what is good for the shared power bank market, making it flourish. Because the emergence of shared power banks fits with the 'green environmental protection' issue that is valued by the public nowadays. In the long run, the shared power bank industry will effectively enhance the use efficiency of power banks, reduce idle resources, advocate green sharing, achieve the environmental protection goal of energy saving and cost reduction in the battery industry, and create a new round of innovative hot spots in the sharing economy.

### **4.3. Analyse Company's Next Strategic Decision from A Placement Perspective**

#### **4.3.1. Singapore market size and basic characteristics of the population**

According to the National Statistics Office (NSO), the total population in 2018 was 5,638,700. In terms of ethnicity, 74.3 percent of the resident population is Chinese, 13.4 percent Malay, 9 per cent Indian and 3.2 per cent others. The male-to-female ratio of the resident population was 1:1.04, with more people in the 25-64 age group. The Singapore Household Expenditure Survey Report 2017/18 found that food accounted for 20.3 percent of monthly household expenditure in 2017/18, the second highest after housing and related. Meanwhile, food and non-alcoholic beverages and food services accounted for 32 per cent and 68 per cent of household expenditure on food respectively. The share of expenditure on food services increased from 64 percent in 2012/13 to 68 per cent in 2017/18. The higher expenditure on food services brought the share of restaurants, cafes and bars to 37 per cent of the total expenditure on meals. Nonetheless, spending in shopping centres, food courts, cafés, canteens, kiosks and street vendors continues to account for the largest share of spending on meals away from home.

#### **4.3.2. Location of power bank rental stations**

The most frequent locations where people have used shared power banks are in shopping malls, restaurants and other food and beverage venues, as well as entertainment venues such as KTVs and billiard halls. This phenomenon may be related to the fact that people stay for a long time in the above locations, and that staying in these locations for several hours leads to the problem of insufficient power for mobile phones, which in turn increases the frequency of the use of shared chargers in these locations. Moreover, the fixed use of rental power banks in a single location allows users to return them at the rental station they started at, instead of having to search for a nearby rental station to return them. This can also be viewed on PowerOn's software, where most of the rental stations are located in places where users spend a lot of time, such as restaurants, shopping malls, and gyms. The internal map of the rental stations shows that most of the stations are located in commercial areas, such as Bugis, Orchard, and other high-foot-traffic areas. According to the survey in 4.3.1, many people in Singapore still choose to eat out, with higher expenditure on food services bringing the share of expenditure on restaurants, cafes and bars to 37 per cent of the total expenditure on meals. Therefore, the choice of these rental stations is still reasonable, and the longer people stay at the location, the greater their need for rechargeable batteries.

### 4.3.3. Target Market

Post-80s, 90s and 00s Chinese and Singaporeans who are skilled in the use of electronic devices, mostly white-collar business people, rely on the use of electronic devices in the office and life, accept new things faster, pay close attention to personal feelings, and have a certain degree of spending money, and the convenience and whether it is good to use is the most important issue they care about when using charging devices.

As the concept of charging sharing was introduced in China many years ago, such a business plan has been implemented and is now a booming industry. So Chinese, and Chinese-speaking Singaporeans will have at least heard of the service, so acceptance will be relatively higher.

**Table 1.** Language Statistics of Singapore Residents

In % of resident households Aged 5 years and older	1980	1990	2000	Change in %-points from 1980 to 2000
English	11.6	18.8	23	11.4
Mandarin	10.2	23.7	35	24.8
Chinese dialects	59.5	39.6	23.8	-35.7
Malay	13.9	14.3	14.1	0.2
Tamil	3.1	2.9	3.2	0.1
Others	1.7	0.8	0.9	-0.8
Total	100	100	100	-

Sources: Singapore Census of Population 1990, Release 3, Literacy, Languages Spoken and Education; Singapore Census of Population 2000, Advance Data Release, No. 3.

The graph above shows that the number of Chinese-speakers living in Singapore is on the rise. And the decrease in Chinese-dialect-speakers represents a decrease in the population share of the older generation, replaced by an increase in the share of the new generation of Chinese-speakers. Young people, who are more in tune with the period, are more receptive to new products and rely more heavily on electronics. It is these young people who are the main customer group that shared power banks are aimed at. From the statistics, the population of targeted customers is demonstrated, and the situation is definitely an advantage for sharing power bank firms.

### 4.3.4. Finding alternatives to traditional methods of profitability

The shared charging is traditionally profitable in two main ways, which are through the hourly rate of rent collection and fees from selling the chargers directly when users don't exchange them for new ones. The drawback of the traditional profit model is that profit is too monotonous, basically only relies on rental income, with slow payback. However, with the accumulation of users, shared charging companies can develop multiple methods of profitability.

#### (1) User Data

The software has accumulated a large amount of consumer data in the background, which can help tap into the new needs of users, for example, when borrowing and returning from different places, the software can push different information according to the user's location. At the same time, the shared charging treasure company can cooperate with other merchants, doing big data analysis for merchants to carry out accurate marketing.

#### (2) Advertising Revenue

Advertising revenue is generated by renting the multimedia interactive screens of the stations, advertising stickers on the body of the devices, and customised services for rechargeable batteries. Calling attracts advertisers through the charging network it builds, which maximises and monetises the media attributes.

### (3) Peripherals Products

Based on the activities derived from celebrities, films, IP derivatives and other cultural and entertainment elements, the shared charging treasure operator helps the partner to promote and provide customised products to enhance interaction with fans, such as cooperating with celebrities and launching pop-up activity of their same power banks for sale and rent. At the same time, the partner can drive traffic to the operator and merchants to increase brand exposure.

## 5. CONCLUSION

### 5.1. Main Conclusion

Sharing economy is a new form of business born with the progress of social development. Compared with traditional business models, the sharing economy meets people's consumption needs at a lower cost and enables people to enjoy more services within limited conditions. As a new mode of sharing economy, sharing power banks perfectly align with the people's demand in this period with prosperity technology. Compared with other shared items, shared power banks started later, but achieved better results in a shorter time. The shared power bank industry has developed and adapted for several years, and is currently achieving a mature market with fierce competition among companies. However, different from the Chinese market, the Singaporean market is still in a state of development and not so saturated. This paper examines whether there is a future for the rechargeables business in Singapore, and whether it will have a place in the market by examining the needs of the audience groups for this. This paper examines whether there is a future for the rechargeables business in Singapore, and whether it will have a place in the market by examining the needs of the audience groups for this. Within this research context, this paper applies a SWOT model analysis to assess the enterprise value of PowerOn SG in the Singapore market, using PowerOn SG as the subject of the study. The research findings of this paper are:

Firstly, according to SWOT analysis, it points out its advantages such as quick rental and easy return, practical software and multiple payment methods; disadvantages such as a profit model, security risks and privacy concerns; opportunities such as a new wave of demand in the 5G era and the accumulation of consumer data that provides new space for growth; and threats such as the improvement of battery quality, the threat of substitutes and competing products, and concludes that, despite the challenges, there is no substitute for people's demand for shared power banks.

Secondly, by analysing the company's next strategic decision and target market from the perspective of placement, this paper makes recommendations for the sharing charging company regarding the location of the rental station and the portrayal of the target group through data search conducted by references and databases. The data shows that there is a large percentage of Mandarin speakers in Singapore. This coincides with the analysis of the audience groups in this paper. It also shows that as a new industry, charging sharing is relatively easy to be accepted and widely used in the Singapore market. It has a promising future due to its large audience base and the fact that it meets the needs of the current era.

Thirdly, through exploring more profitable ways for the shared charging treasure industry, it can effectively solve the problem of its single profit model. In such a highly developed digital era, the original way of relying only on rent and deposit profit should be improved, sharing power bank enterprises should take advantage of the advantage of a large user base, expand advertising or cooperation with other companies, and make legally and reasonable use of the user's information.

### 5.2. Research Limitations and Future Improvements

This research represents a pioneering investigation into the sharing power banks in Singapore, a nascent field within the country's sharing economy. However, certain limitations and avenues for

future improvement must be acknowledged. The scarcity of data and literature in this emerging industry poses a challenge to a comprehensive analysis, necessitating collaborative efforts with industry stakeholders and governmental bodies to build a more robust dataset. To address the dearth of research, future scholars could employ questionnaire-based analyses, engaging potential users, service providers, and regulators to glean valuable insights. In addition, studying the regulatory and ethical status of shared chargers in Singapore will also serve as a guide for policymakers and industry participants. An in-depth study of the cultural influences and behavioural factors in Singapore further constitutes an important direction for future research. By addressing these issues, subsequent research will contribute to a more nuanced understanding of the dynamics and potential of shared power banks in Singapore's evolving sharing economy.

## REFERENCES

- [1] Lin Hua Chun, Li Wu Jiang, Wang Nan & Hu Mia Wei. (2020). Economic thinking of the rapid development of sharing economy--Taking sharing charging treasure as an example. *Rural Economy and Science and Technology* (08), 104-105.
- [2] Li Jing. (2023). Realistic dilemmas and countermeasure suggestions for the development of sharing economy. *Modern Business* (18), 19-22. doi:10.14097/j.cnki.5392/2023.18.038.
- [3] Tan Wei Wen. (2023). A case study of sustainable operation and management in sharing economy. *National Circulation Economy* (17), 99-102. doi:10.16834/j.cnki.issn1009-5292.2023.17.014.
- [4] Tang Yun zhi. (2019). Research on optimal allocation of resources in sharing economy (Master's thesis, Shanghai University of Finance and Economics). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202201&filename=1021004629.nh>
- [5] Diao Shuwei. (2020). Research on the Dilemma and Innovation of Administrative Regulation of Sharing Economy in China (Master's thesis, Tianjin University of Finance and Economics). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202102&filename=1021571681.nh>
- [6] Chen Sisheng. (2019). Research on the Development Strategy of Shared Charging Treasure Based on SWOT Analysis--Taking Xiaodian Technology as an Example. *National Circulation Economy* (09), 92-93. doi:10.16834/j.cnki.issn1009-5292.2019.09.043.
- [7] Xing Chen, Li Miao, Royce Yuan Chen, Ziyi Chen & Piao Ting Song. (2019). Research on the development of Beijing's shared charging treasure industry and development trend prediction. *Modern Marketing (Lower Decade)* (12), 136-137. doi:10.19932/j.cnki.22-1256/f.2019.12.076.
- [8] Hu Ji Kang. (2020). Analyzing the operation mode of shared mobile power--Taking Street Power as an example. *Rural Economy and Technology* (03),182-183.
- [9] Jin Chaojuan & Dai Guojuan. (2021). Analyzing the development status of shared charging treasure industry. *Light Industry Science and Technology* (12),116-117.
- [10] Hou Ling xi, Hou Feng Wang & Zhenqiang Cheng. (2020). Analysis of major business models of sharing economy. *Journal of Shanghai Lixin College of Accounting and Finance* (05), 109-120. doi:10.13230/j.cnki.jrsh.2020.05.009.
- [11] Huang Chen. (2022). Shared charging treasure enterprise value assessment (Master's thesis, Central University of Finance and Economics). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFDTEMP&filename=1022590517.nh>
- [12] Xiong Liu. (2021). Research on Marketing Strategy of Luzhou Baijiu Entering Singapore. *Brewing* (02), 29-34.
- [13] Zhang Lilian. (2023). Strategic research on Shenzhen cross-border e-commerce enterprises to develop the Singapore market. *Foreign Economic and Trade Practice* (09), 84-90.
- [14] Chen Lingfeng. (2019).Research on Marketing Problems and Countermeasures of M Company's Samsung Mobile Phone in Heilongjiang Region (Master's thesis, Harbin Institute of Technology). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202101&filename=1020399801.nh>
- [15] Gao Jing. (2017). Business plan of charging treasure sharing project of Da Di Company (Master's thesis, Lanzhou University). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202102&filename=1017716927.nh>
- [16] GÜREL, E. (2017). SWOT analysis: A theoretical review. *Journal of International Social Research*, 10(51), 994–1006. <https://doi.org/10.17719/jisr.2017.1832>
- [17] Wirtz, J. (1995). Marketing in Singapore: An analysis of macro trends. *Der Markt*, 34(4), 128–145. <https://doi.org/10.1007/bf03032042>

- [18] Ritonga, H. M., Setiawan, N., El Fikri, M., Pramono, C., Ritonga, M., Hakim, T., & Nasution, M. D. T. P. (2018). Rural Tourism Marketing Strategy And Swot Analysis: A Case Study Of Bandar PasirMandoge Sub-District In North Sumatera. *International Journal of Civil Engineering and Technology*, 9(9), 1617-1631.
- [19] Yang, H., Yang, P., & Zhan, S. (2017). Immigration, population, and foreign workforce in Singapore: An overview of trends, policies, and issues. *HSSE Online*.