

**Purchasing Wheelchair Attachable Shopping Carts At DaRunFa Grocery
Store In Shanghai For Challenged Shoppers**

for

DaRunFa Shanghai (PuDong District) Managing Team

by

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Dear members of DaRunFa managing team,

Here is my report “Purchasing Wheelchair Attachable Shopping Carts At DaRunFa Grocery Store In Shanghai For Challenged Shoppers.” With this study, I have gained a deeper understanding about the reasons to why there are less challenged shoppers in grocery stores. Challenged shoppers not only need special assistance, they also need privacy and personal freedom when shopping. The wellness of customers is always the DaRunFa’s top priority, I hope that we can listen to customers’ diverse demands, and making adjustments in our service in order to serve them better.

My report will include the following information:

1. This report will contain reasons of why purchasing wheelchair attachable shopping carts is necessary
2. The results from my online customer survey.
3. Cost Analysis

I am truly grateful for the experience that this project has brought. Thank you in advance for your time, please contact me by e-mail or phone if you have any questions.

Sincerely,



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Abstract

Most grocery stores in China failed to provide challenged shoppers shopping carts that meet their needs. In other words, the poor experiences of challenged shoppers are largely ignored. This report aims to reveal challenged shoppers shopping experience and propose a possible solution to address it. Data collected from online survey and current literature suggest that challenged shoppers, in particular, value personal space, integrity, and independence when shopping. However, they face many challenges in reality, because the grocery stores have many unreasonable designs—such as high shelves; and the stores usually do not provide them with suitable shopping carts. Instead, the stores expect the challenged shoppers to purchase shopping carts themselves. But why unchallenged shoppers are privileged, and they don't need to buy shopping carts while challenged shoppers do? This is the main problem that will be discussed in this report.

It is recommended that any grocery store to follow these recommendations to help challenged shoppers in stores:

1. Providing challenged shoppers shopping tools, such as wheelchair attachable shopping carts and baskets.
2. Encouraging the grocery store staff to be less involved and give challenged shoppers more personal space.
3. Design the stores in a more disabled- friendly way, such as lowering the shelves.

I. Introduction

A. Background

As International Day of Persons with Disabilities approaches (December 3rd), we need to again raise awareness to improve handicapped people's living experience, starting with the very essential things, such as purchasing daily necessities at the grocery store. According to Kaufman (1999) "Disabled persons and their consumer advocate groups indicate that barriers still exist in many store operations." (Kaufman, 1999, p. 479). Although most grocery stores in Shanghai provided wheelchair access and the staff were trained to help the handicapped people when shopping, not enough space and privacy were provided to challenged customers while they are shopping for goods.

B. Needs Assessments

There's an enormous pressure that challenged shoppers face when shopping. According to McMillen & So"derberg (2002)'s study "One participant, who used to do her shopping in a big department store, transporting herself in a wheelchair, described how rushing people tripped on her footrests on the wheel chair in their eagerness to pass by" (McMillen& So"derberg, 2002, p. 179). Other participants reported similar situations, where they feel like they are causing trouble to others.

Thus, a disabled friendly store should find a way to mitigate challenged shopper's stress, not increasing it. Kaufman's (1995) report denote that what challenged shopper wants is not always person-to-person assistance. What do we feel if we always need to dependent on others when shopping? As customers, we sometimes need assistance, but other times we just want to shop without interference because we don't know exactly what we want to buy. This is a feeling that

we all share, and challenged shopper might not get such freedom due to one reason: not enough wheelchair attachable shopping carts.

C. Proposed Problem

Challenged shoppers in grocery stores were viewed as a group of customers that need special assistance. This perception takes away their privacy and freedom to shop mindlessly, and pressuring them to have a list of daily necessities they want to purchase. This is a very different shopping experience compared to non-handicapped customers, and it is also an issue that grocery stores tend to overlook. The amount of shopping carts and the amount of wheelchair shopping carts in the store were not evenly distributed (some stores have non-wheelchair attachable shopping carts), which pressured challenged customers to seek special help when there's an absence of shopping carts that can fit their needs. In order to protect the challenged customers' personal space and their privacy, the grocery store should accommodate them using all resources they could, which includes increasing the use of wheelchair attachable shopping carts is one way to solve the issue.

D. Scope

To assess the feasibility of purchasing wheelchair attachable shopping carts, the following areas of inquiry were investigated :

1. What kind of assistance do challenged customers need?
2. What kind of shopping carts do they[challenged shoppers] prefer?
3. Do staff's assistance give challenged customers pressure?
4. What internal conflicts challenged customers faced when entering the store?
5. How challenged shoppers perceive privacy and personal space in grocery stores?

The main sources for this inquiry were from the survey (see Appendix) results. For information regarding the challenged shoppers' additional demands was from scholarly papers (see literature review).

E. Procedure

The study will be based on customer surveys aimed at the challenged customers. In order to protect their privacy, this survey will be conducted online. Another reason to conduct the survey online is to decrease person-to-person contact, due to the ongoing COVID-19 situation.

II. Body

A. Challenged Shoppers Demands (Literature Review)

While the grocery stores' paid attention to provide easy access for people in wheelchairs, not enough attention was paid to customer's shopping experience. Thanks to Carol Felker Kaufman's article "Shop'til you drop : Tales from a physically challenged shopper", it revealed many personal experience of handicapped customer, and allowed us to see the areas of improvement. The author states that shopping has become a depressing experience for most challenged shoppers, because they face the fact that "shopping often has to depend on the time of others" (Kaufman, 1995, p. 45). John J. Burnett's (1996) study reveals that "most of (37.3%) the disabled shop primarily with fiends, while 28.9 percent shop with relatives, 27.7 percent shop with an attendant, and only 6.1 percent shop alone"(Burnett, 1996, p.12).

Thus, the goal of public infrastructures (such as grocery stores), should not only focusing how how to help challenged shoppers but to " promote conservation of the patient's energy, as well as their structural, personal and social integrity" (Kaufman, 1995, p. 42).

After reviewing Kaufman (1995)'s article, I also acknowledged the limitations of my study. For example, Kaufman (1995) states that different challenged shoppers have different needs. The wheelchair attachable shopping carts that my study focus on, is only one of the possible solutions that can improve challenged shoppers shopping experiences. According to Kaufman (1995) : “ people with emphysema are found to change their living patterns, in terms of doing errands like banking and shopping, in order to conserve their energy. Tactics like planning their shopping, and saving breath by stopping to rest every block or so, are conscious efforts of such shoppers to maintain their independence, yet prevent health difficulties.” (Kaufman, 1995, p. 42). This is an example of how to help a particular group of challenged shoppers, purchasing wheelchair attachable shopping carts is a more general solution to the proposed problem. Additional issues such as unreasonable designs that Kaufman (1995) included (e.g high shelves, the doors of freezing stones) were not the focus of this study. However, Kaufman (1995) did mention that “ shopping carts were an awkward height for use with wheelchairs” (Kaufman, 1995,p. 46).

B. Collected Data (from Survey)

In total, I have collected 60 response. Over 30% of respondents are challenged shoppers. Perhaps because the survey was designed to collect challenged shoppers' opinions, more challenged shoppers answered the questionnaire than usual. In this data section, I have sorted my 10 questions into three types. The first type is Yes& No questions, the respondents can simply answer “yes” or “no.” The second type is Opinion questions, the respondents have to answer these questions using complete sentences. The third type of questions concerned about customers' feeling.

Type 1 : Yes& No questions (Yes-red; No-yellow)



Fig 1. Yes& No Questions survey data

According to figure 1, 47% of both challenged shoppers as well as others find having a shopping list stressful. Furthermore, over 67% of respondents recommend that DaRunFa purchase wheelchair attachable shopping carts, this means that the non-challenged shoppers also recommend the grocery store to purchase wheelchair attachable shopping carts.

Type 2. Opinion questions

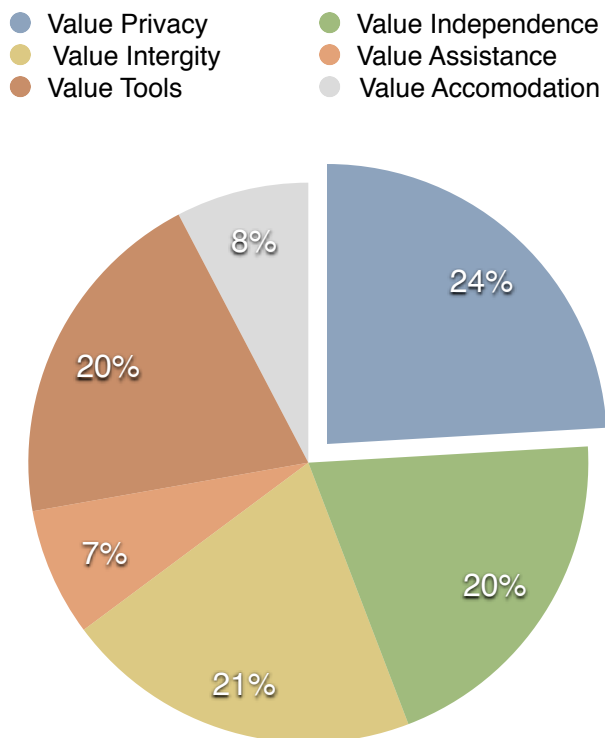


Chart 1. Type 2 Opinion Questions

Most respondent (24%) had reported that shopping is a private experience for them. They would like less involvement unless it's necessary. Same thing goes for challenged shoppers, showing shopping list to grocery's staffs sometimes make them feel like they were deprived of privacy. They turned to online shopping when it comes to private goods. When the rest of the shoppers are able to enjoy that kind of privacy, challenged shoppers cannot, my observation is, they needed help from the staffs because there's no tool for them to use. As Kaufman (1995) suggested, the most important thing for them is to “ promote conservation of the patient's energy, as well as their structural, personal and social integrity” (Kaufman, 1995,p. 42).

Type 3. How Do customers feel

Chart 2. Show shopping list to staffs.

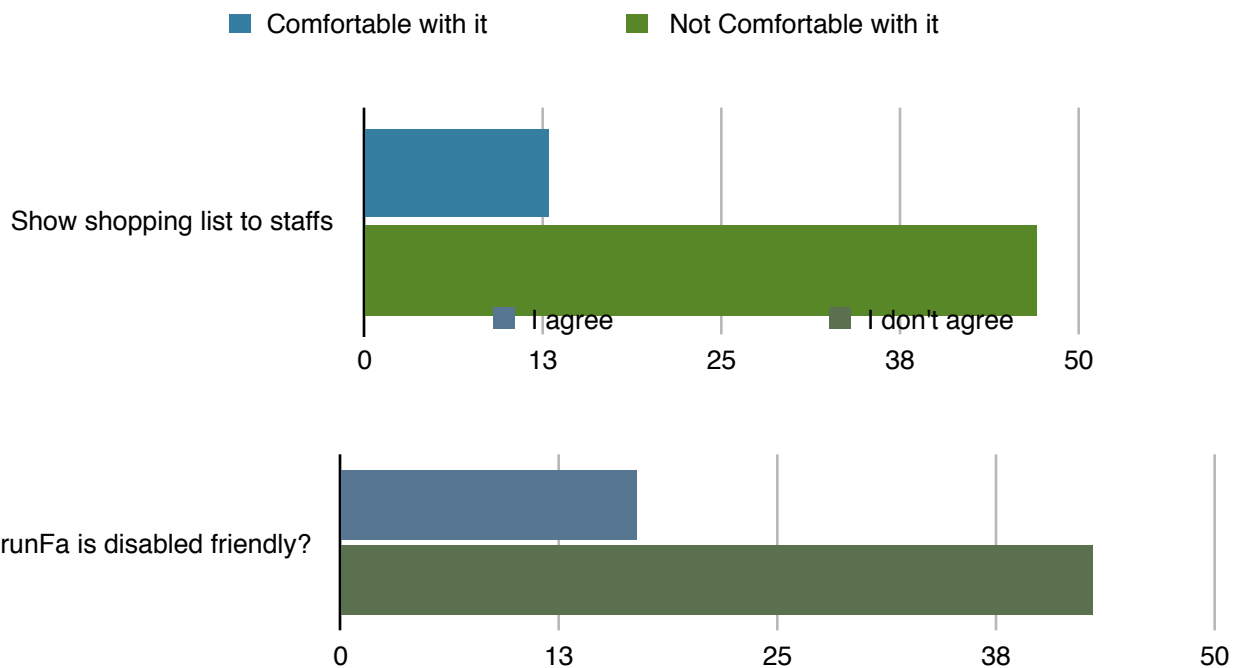


Chart 3. Do customers think the store is accommodating handicapped customers sufficiently

As shown in the two charts, 47 out of 60 respondents reported that they feel uncomfortable to show shopping list to the staffs, compared to 13 out of 60 respondents who did. 43 out of 60 of respondents think that the store is not disabled friendly, compared to 13 out of 60 respondents who did. Therefore, it is highly recommended that the store to purchase wheelchair attachable shopping carts as one way of improving challenged shoppers' experience.

III. Cost Analysis

A. Product Description

Design#1 Baskets attached to wheelchair

Fig. 2 Shopping carts for use with wheelchairs (All rights go to : Terry Gipson. retrieved from <https://patents.google.com/patent/US8794655B1/en>)

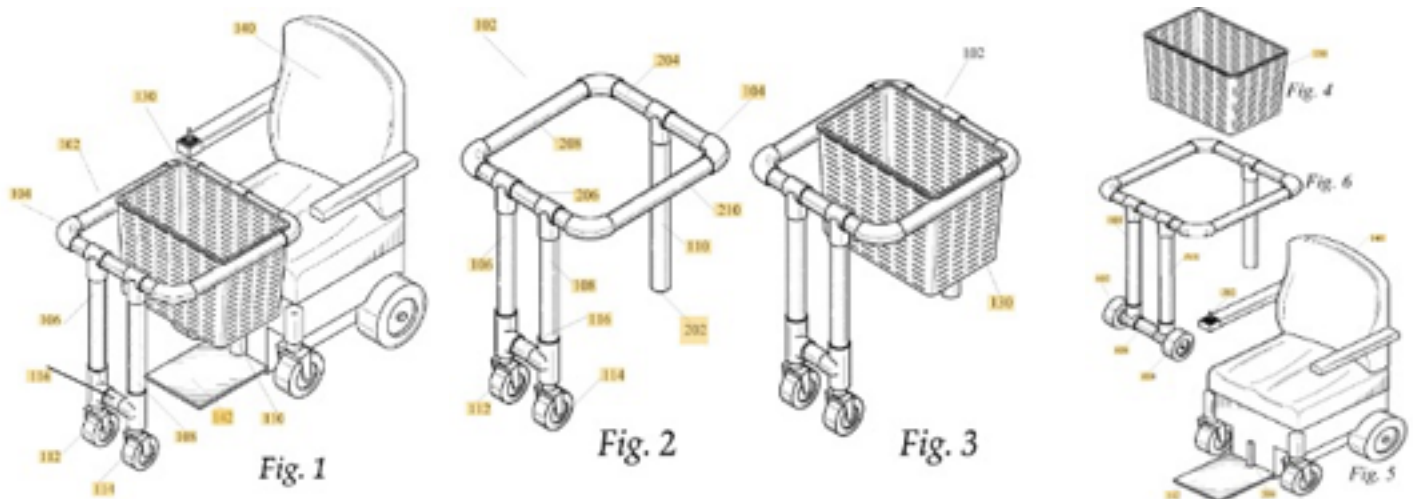


Fig. 3. Real example of Terry Gipson design.



Design #2 wheelchair attachable shopping cart

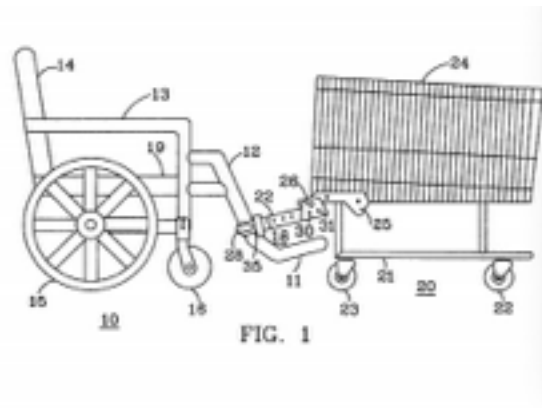


Fig.4 wheelchair attachable shopping cart (All rights go to: Forshee/ patent number US 6,702,313)



Fig5. Real example of Forshee's design (retrieved from <https://www.resna.org/sites/default/files/legacy/conference/proceedings/2007/Practice/Mobility/Forney/Photo1.jpg>)

The reason to show both types of shopping carts is because store should have purchase these two kinds. Unchallenged shoppers have two types of shopping carts, one with the basket, one with the pulley. Therefore, the challenged shoppers should have access to these kinds as well.

B. Available Wheelchair Attachable Shopping Carts Available in the market

Shopping cart

Type 1. An Alternative \$200 CAD+ \$ 50 CAD (transportation expenses)



Fig7. Available on WireProduct (<http://wireproduct-cart.com/grocery-baskets-shopping-carts/101-shopping-cart-wheelchair>)

Type 2. Scooter Basket \$125 CAD



Fig. 8 Scooter Basket, Available at(https://www.waltonmedical.com/products/scooter-basket?variant=44498220556¤cy=CAD&utm_medium=product_sync&utm_source=google&utm_content=sag_organic&utm_campaign=sag_organic&gclid=CjwKCAiAoOz-BRBdEiwAyuv-A614rTiNSZpNmEhF3zYcHvWVmc4_t41nyzv_i1X7SuozSMJR6KGrnkhoCjAwQAvD_BwE)

C. Comparative Result

According to Wheels Of Fortune website, normally one grocery store needs to have 250 shopping carts. Based on survey results, because 30% of respondents are challenged shoppers, we estimate that we will be needing $30\% * 250$ shopping carts, and that is 75 shopping carts for challenged shoppers.

Unfortunately, there's no design#2 shopping cart available on the market, therefore it is recommend to purchase Type 1 & 2 shopping carts as presented above. It is recommended that we buy thirty three of Type 1, and thirty three of Type 2.

It is estimated that we will be spending \$1,0000Canadian Dollars (50,000 RMB) to purchase both types, because these shopping carts ranged from \$100-\$200.

IV. Conclusion

A. Summary of Findings

Majority of survey respondents reported that privacy, integrity and independence should be valued when shopping, whether they are challenged shoppers or unchallenged shoppers, people need to feel respected when shopping. Shoppers also stated that they are uncomfortable showing shopping list to the staffs because it may deprive their privacy. Thus, although sometimes they appreciate special assistance, the store still needs to find a way that insures shoppers privacy and personal space.

B. Recommendations

1. If possible, purchase all two types of shopping carts to accommodate different challenged shoppers need.
2. However, if not possible, the store can design a tool that attaches the shopping carts to challenged shoppers' wheelchair.
3. Providing challenged shoppers special assistance only when it's necessary, for example, if the challenged shoppers come to the staff, then it is appropriate to help them. Otherwise, respecting challenged shoppers personal space.
4. If possible, change the unreasonable designs such as high shelves.

Purchasing Wheelchair Attachable Shopping Carts in at DaRunFa Grocery store in Shanghai Survey

I am an undergraduate student at UBC engaged in a technical writing project. The purpose of this survey is to obtain primary data for analysis and investigation that aims to provide recommendations for improving your experience with shopping at DaRunFa Grocery store. The final formal report will be addressed to DaRunFa Grocery store manager. The data I gather from this survey will serve the ultimate purpose of providing recommendations for increasing shopping satisfaction of handicapped people. The survey contains 10 multiple choice questions, and it should take you less than 5 minutes of your time. Your response are voluntary and anonymous. Thank you, I appreciate your generous participation in my survey.

* Do you have physical barriers when shopping?

- a) Yes
- b) No

* While shopping groceries, what kind of shopping experience are you looking for

- a) Uninterrupted shopping environment
- b) Staffs are enthusiastic in helping you
- c) Help are available and easily accessible when you need it

* Do you have a shopping list when you go to the supermarket

- a) I usually do
- b) I know what I want to buy, but I enjoy the experience of going around the store and see what else I might need.
- c) I do not have the habit to create a shopping list

* Do you find having a shopping list stressful?

- a) Yes, sometimes
- b) Yes, most of the times
- c) No, not at all.

* Are you comfortable with providing your shopping list (if you do have one) to our staff ?

- a) Yes, if showing my list will not invade my privacy
- b) Yes, I think that is more efficient and less time-consuming
- c) No, because of privacy issue

* If you have physical struggles when shopping, would you prepare a shopping list?

- a) Yes, because I need the staff to help me

- b) No, I enjoy shopping alone
 - c) It depends
- * Do you think the store is accommodating handicapped customers sufficiently?
- a) Yes, I do find the staffs are supporting
 - b) No, there's more improvements could be done.
 - c) If you checked b option, please provide your reason here
-

- * If you have physical struggles when shopping, what kind of things that bugs you the most ?
- a) Too much attention on me when shopping
 - b) I always need someone else to accompany me
 - c) It's hard to buy things on my own with my wheelchair
- * Would you recommend the store to purchase wheelchair attachable shopping carts?
- a) Yes
 - b) No

References:

Burnett, J. J. (1996). What services marketers need to know about the mobility-disabled consumer. *Journal of Services Marketing*.

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Kaufman–Scarborough, C. (1999). Reasonable access for mobility-disabled persons is more than widening the door. *Journal of Retailing*, 75(4), 479-508.

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