

NAVER D-Commerce Report 2022

2022

Enhancing Diversity and Expanding the Ecosystem with SmartStore Seller Support



NAVER

EXECUTIVE SUMMARY



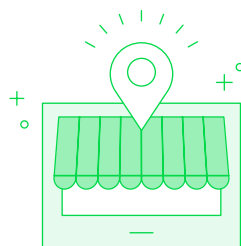
NAVER SmartStore: Expanding the E-commerce Ecosystem by Enhancing Diversity

“Diversity” is a core value shared across all services by NAVER. In essence, as the number of diverse and unique stores, sellers, creators increases, NAVER’s ecosystem becomes more prosperous overall. Hence, with the aim of promoting diversity of the platform ecosystem, NAVER continues to build a diverse technology platform based on its technological and service expertise.

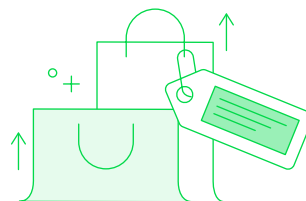
SmartStore, as NAVER’s main technology platform, offers the opportunity for any and all young adult sellers, small and medium-sized enterprises (SMEs), and local businesses—even those without capital or technological know-how—to create a store and start selling online.

In particular, SmartStore enables e-commerce sellers to focus on their business operations by providing tools and solutions for tasks ranging from store launch, product management, and marketing to order and payment, logistics, customer management, finance, business administration, and data analytics. Sellers can also participate in various programs that offer financing support, training, consulting, and studio rental services.

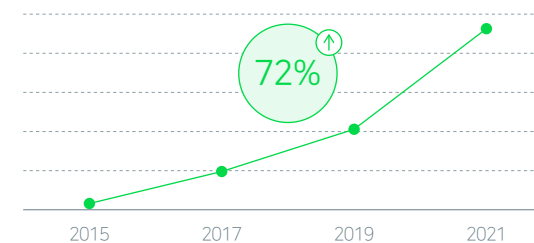
NAVER’s advanced seller support system has helped attract diverse sellers to the SmartStore platform. As of December 2022, there are approximately 550,000 SmartStores, with product listings having increased 50% year-over-year, making SmartStore the most diverse e-commerce ecosystem in South Korea. Thanks to its diverse pool of sellers and products, SmartStore has been able to meet the various shopping needs of more than 30 million NAVER users through search and recommendation technology. As a result, SmartStore has grown rapidly at a 72% compound annual growth rate(CAGR) from 2015 to 2021.



550K
SmartStores
Dec. 2022



50%
Increase in products
available on SmartStore
Dec. 2022 (YoY)



72%
CAGR of SmartStore
2015-2021

Seller Support Solutions and Services to Enhance Diversity on SmartStore

Business Solutions and Services

NAVER continues to add and improve various commerce solutions for business. These include BizAdvisor, a sales data analytics tool, and other promotion tools such as Wishlist, News Alert, as well as Chatbot/TalkTalk—a messaging and marketing notification service for sellers and customers.

In order to fulfill varying shipping needs of sellers and customers, NAVER also operates an online fulfillment data platform with logistics partners in the NAVER Fulfillment Alliance (NFA). Responding to contactless consumer trends, NAVER also launched “ShoppingLive” in July 2020. The service, which continues to see remarkable growth, has been a game changer for sellers, boosting their sales and marketing performance.



Financial Solutions and Services

From the world’s fastest ‘Fast Settlement’ service, ‘SmartStore Business Loan’ based on an alternative credit scoring system, and capital support programs such as Start Zero Fees and Growth Points to NAVER Business Finance Center and Safe Return Care, NAVER continues to strengthen its financial support services for e-commerce sellers.

Operations Solutions and Services

To help sellers operate their businesses, NAVER offers various services such as free training programs on ‘NAVER Business School’, facility rentals including ‘NAVER Square,’ and free professional consulting services.

Business Support



- Store Launch (registration, product listing)
- Marketing (special campaigns)
- Promotion (Wishlist, Notification Coupons)
- Customer Management (Chatbot/TalkTalk)
- Commerce Tools (ShoppingLive)
- Data Analytics Tool (BizAdvisor)
- CLOVA Message Marketing
- CLOVA Personalized Product Recommendations
- CLOVA Similar Product Recommendations
- CLOVA Related Product Recommendations
- CLOVA Live Chat
- Logistics (NAVER Fulfillment Alliance)
- Workplace (Cloud)
- Regular Subscription
- NAVER eXpert
- Brand Store New Product Marketing

Financial Support



- Start Zero Fees
- Growth Points
- Fast Settlement
- SmartStore Business Loan
- NAVER Business Finance Center (Offers information on public subsidies, Start Business Guide, financial/insurance guide)
- Safe Return Care

Operations Support



- Tech Support Training (ShoppingLive)
- Administrative Training (Finance, Tax, HR)
- Product Sales Training (Detail Page Design)
- Free Professional Consulting (eXpert biz consulting points)
- Facilities and Equipment (NAVER Square Studio and office space rentals)
- Brand Logo Design Services

Key Findings #1

Enhanced SmartStore seller support leads to more diversity and expands the ecosystem

Marking its fifth edition since 2018, the D-Commerce Report 2022 aims to assess the impact of NAVER SmartStore seller support solutions and services on promoting diversity in the SmartStore ecosystem and, in turn, the way in which an increase in diversity leads to market growth.

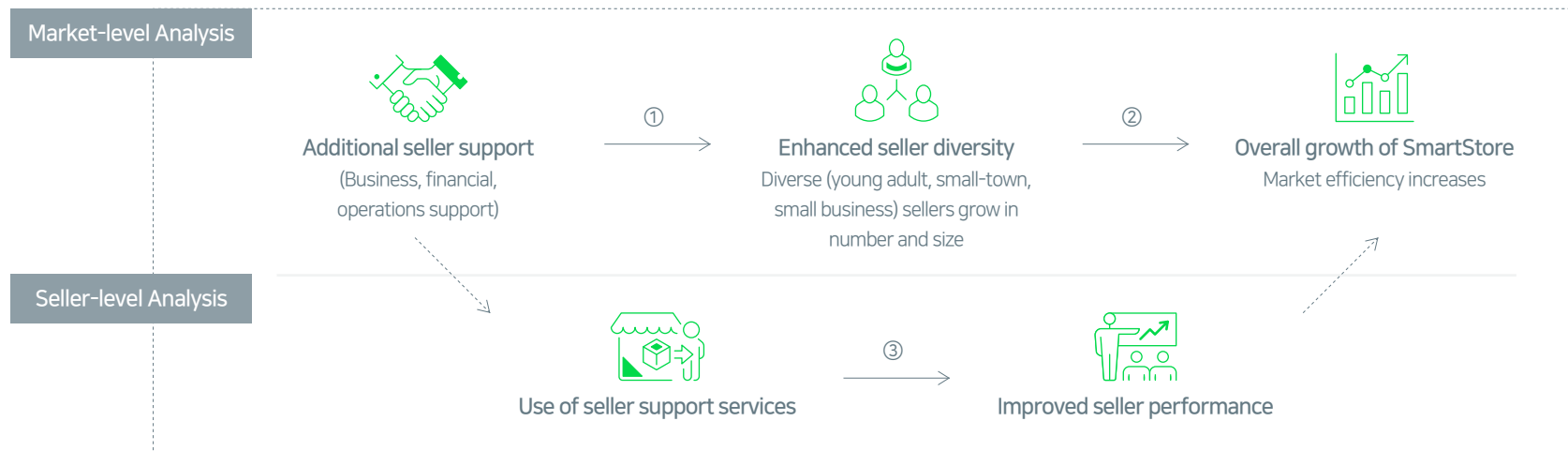
In Part 1, Professor Gunwoong Lee and his research team analyzed SmartStore data to see how seller support services affect diversity and growth of the ecosystem. In Part 2, Professor Boreum Choi and her research team conducted surveys and in-depth interviews of sellers to assess how sellers use the support services, whether they are satisfied with the services, and how the use of services impact their business performance.

In line with NAVER's core value of securing diversity in the ecosystem, SmartStore data analysis confirms the following:

- 1) As NAVER enhances SmartStore seller support services and solutions, young adult (ages 10-30s), small-town (non-metropolitan), small business (with less than 300 million KRW in sales) sellers experience higher growth trends in terms of the number of stores, merchandise value, and product order volume compared to non-young adult, large-city, large business sellers.
- 2) As young adult, small-town, small business sellers increase in visibility (in terms of page views), SmartStore's overall gross merchandise value and product order volume also increase. Specifically, these growth effects on gross merchandise value and order volume are 2-3x and 2-5x larger, respectively, compared to the effects of increased visibility of non-young adult, large-city, large business sellers. Hence, we can conclude that enhanced seller diversity results in overall market growth and efficiency.

In addition, this research analyzed seller-level data to determine whether the use of seller support services directly contributed to an improvement in sales performance. Sellers who use support services outperformed those who do not use the services in terms of gross merchandise value and order volume.

- 3) In particular, the positive effect of using seller support services on sales performance, including gross merchandise value and order volume, was greater for young adult, small-town, small business sellers than for non-young adult, large-city, large business sellers (2.8-3.1x vs. 2.3-2.4x). In conclusion, we can confirm that seller support services have a positive impact on business performance, especially for young adult, small-town, small business sellers.



Key Findings #2

Enhanced SmartStore seller support leads to more diversity and expands the ecosystem

Based on survey and interview data, we can conclude the following:

Regarding **business solutions and services**, SmartStore sellers most often used and were most satisfied with 1) store launch, 2) customer management, 3) promotion. Sellers showed the highest satisfaction-to-usage rate for CLOVA-related solutions and fulfillment services (NAVER Fulfillment Alliance), despite having been launched relatively recently.

Sellers that used business support services experienced a 64.3% increase in sales. Sellers that used promotion tools such as Wishlist, News Alert, and coupons were able to expand their customer base 6.3x more than sellers that did not use these tools.

Regarding **financial solutions and services**, SmartStore sellers most frequently used and were most satisfied with 1) Fast Settlement and 2) Start Zero Fees, followed by 3) Seller Growth Points.

Sellers that employed financial support services experienced a 41.6% increase in sales. Sellers that used Fast Settlement attracted 2.4x more customers compared to sellers that did not use the service.

Regarding **operations solutions and services**, SmartStore sellers most frequently used and were most satisfied with training programs. In particular, sellers ranked 1) product sales training, 2) administrative training, and 3) tech support training in order of satisfaction and usage.

※ For operations support services, we did not analyze effects on sales growth and customer expansion due to limitations in mapping survey and secondary data.



Analysis by Seller's Digital Literacy Level

Based on survey data, we grouped sellers according to their digital literacy level of **low, moderate, or high**, and then evaluated their rates of usage, satisfaction, and intent to continue use.

Sellers in the 'moderate' and 'high' groups frequently used data analytics tools (categorized as a business support service), while those in the 'low' group often utilized CLOVA similar product recommendation and related product recommendation services (both business support services).

As a result, we found that the lower the digital literacy level, the higher the tendency to use AI-assisted services rather than services they can control autonomously.

Therefore, we can conclude that NAVER's efforts to provide advanced technology—such as AI—as a tool anyone can easily use are being realized by sellers using the services.



Part 1-1 Market-level Analysis

Enhanced SmartStore seller support drives sales for diverse sellers including young adult, small-town, small business sellers

In line with NAVER’s core value of promoting diversity in the ecosystem, our analysis shows that, as NAVER enhances SmartStore seller support services and solutions, young adult, small-town, small business sellers experience higher growth trends in terms of store count, merchandise value, and product order volume compared to non-young adult, large-city, large business sellers. This indicates an increase in seller diversity in the market.

Based on SmartStore data covering a two-year span (from January 1, 2020 to December 31, 2021), we found that bolstering seller support services had a greater positive impact on boosting store count, merchandise value, and order volume of young adult, small-town, small business sellers compared to those of non-young adult, large-city, large business sellers. Hence, we were able to conclude that seller support services contributed to an increase in seller diversity in the market.

- Young adult (age 10 to 30s) sellers, compared to non-young adult sellers, grew 1.2x, 1.0x, and 1.7x faster in terms of merchandise value, order volume, and number of stores, respectively.
- Small-town sellers, compared to large-city sellers, grew 1.2x, 1.1x, and 1.3x faster in terms of merchandise value, order volume, and number of stores, respectively.
- Small business sellers, compared to business sellers, grew 2.1x, 2.2x, and 10.0x faster in terms of merchandise value, order volume, and number of stores, respectively.

Young Adult Sellers

(compared to non-young adult sellers)



Small-Town Sellers

(compared to sellers in large-city/urban sellers)



Small Business Seller

(compared to large business sellers)



Part 1-1 Market-level Analysis

Enhanced SmartStore seller support drives sales for diverse sellers including young adult, small-town, small business sellers

As stores of young adult, small-town, small business sellers become more visible, the total gross merchandise value(GMV) and order volume increase 2 to 5x faster than that of non-young adult, large-city, large business sellers—indicating that seller diversity positively impacts the growth of the entire market.

To assess the impact of diversity on GMV and order volume, we used a SARIMAX (Seasonal Auto-Regressive Integrated Moving Average with eXogenous factors) model.

- The growth effects of increased visibility of young adult sellers’ stores on total market GMV and order volume are 1.7x and 5x greater, respectively, than that of increased visibility of non-young adult sellers’ stores.
- The growth effect of increased visibility of small-town sellers’ stores on total market GMV is 3.1x greater than that of increased visibility of large-city sellers’ stores.
- The growth effects of increased visibility of small businesses on total market GMV and order volume are 3.1x and 2.4x greater, respectively, than that of increased visibility of large businesses.

Dependent Variable	Independent VariableDetail Page Views of Diverse Seller Group	Effect on Market Growth, Relative to Compared Group
Total GMV (KRW)	Young Adult Sellers	1.7x greater than non-young adult
	Small-town Sellers	3.1x greater than large-city
	Small Business Sellers	3.1x greater than large business
Total Order Volume	Young Adult Sellers	5.0x greater than non-young adult
	Small-town Sellers	not statistically significant
	Small Business Sellers	2.4x greater than large business

[Note] Young adult sellers: sellers ages 10s-30s, Small-town: sellers based in non-metropolitan area, Small business: sellers with less than 300M KRW in annual sales, according to the National Tax Service

Part 1-2 Seller-level Analysis

SmartStore seller support services improve sellers' performance

By analyzing seller-level data, we examined whether using seller support services helped improve sellers' performance.

For our analysis, we looked at data from February 1 to December 21, 2021 of sellers in the "homeware" and "gardening" categories of NAVER Shopping. To examine the effect on business performance, we conducted a t-test comparing the means of two seller groups: sellers who used business and financial support services and sellers that did not use the services.

※ For operations support services, we did not analyze effects on sales growth and customer expansion due to limitations in mapping survey and secondary data.



Business performance of sellers that use support services versus sellers that do not use the services

- Sellers that used the services, compared to those that did not, experienced a 2.6x greater increase (3.4x for business services, 2.3x for financial services) in order volume and a 2.5x greater increase (3.6x for business services, 2.2x for financial services) in GMV.

* Refer to the graph on page 9

Analysis by seller group

[Young Adult vs. Non-young Adult] Effect of Seller Support Service Use

(Young adult sellers refer to sellers in their 10s to 30s)

- Young adult sellers who used support services received approximately 3.1x more product orders than those that did not use the services. (The difference is about 2.4x for non-young adult sellers).
- Young adult sellers who used support services gained approximately 3.0x more GMV than those that did not use the services. (The difference is about 2.3x for non-young adult sellers).

[Small-town vs. Large-city] Effect of Seller Support Service Use

(Small-town sellers refer to those based in non-metropolitan areas)

- Small-town sellers who used support services received approximately 2.8x more product orders than those that did not use the services. (The difference is about 2.4x for large-city sellers).
- Small-town sellers who used support services gained approximately 2.8x more GMV than those that did not use the services. (The difference is about 2.4x for large-city sellers).

[Large Business vs. Small Business] Effect of Seller Support Service Use

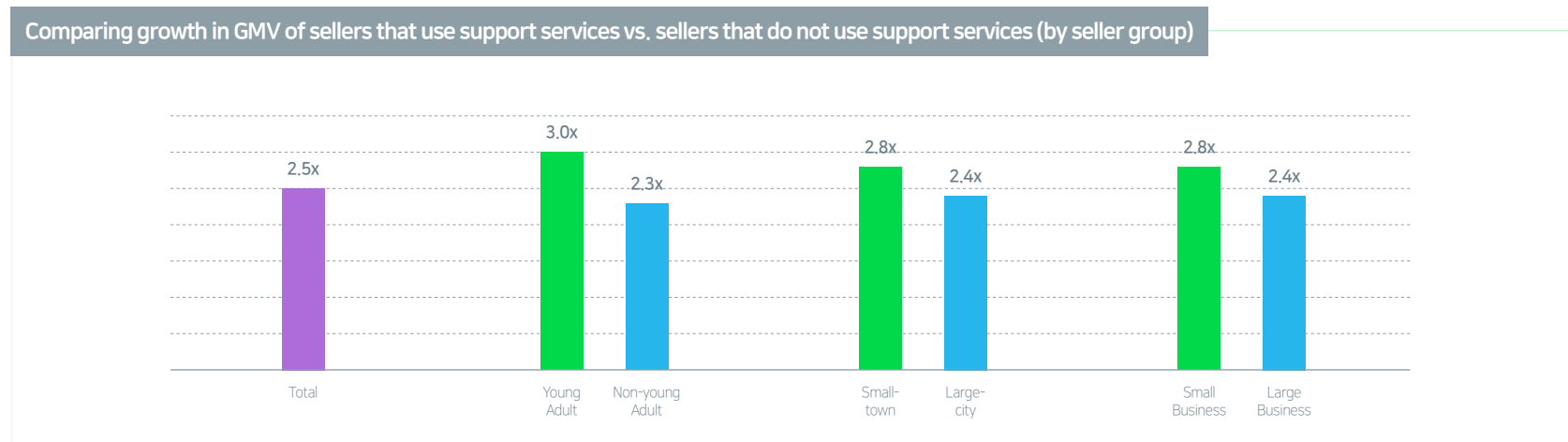
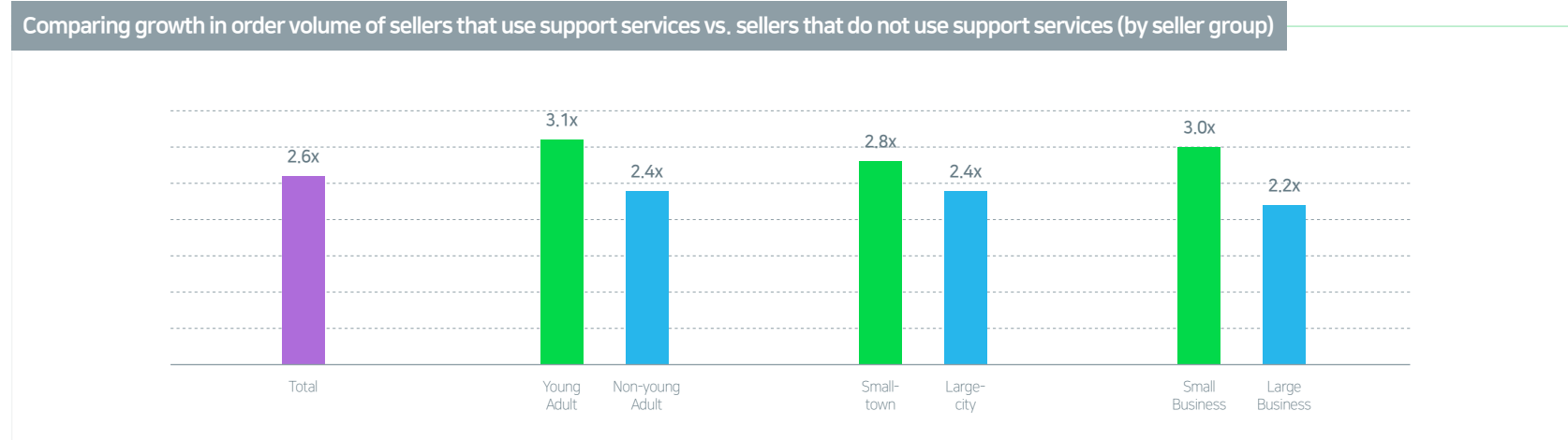
(Small business sellers refer to those that have sales less than 300 million KRW, according to the National Tax Service)

- Small business sellers who used support services received approximately 3.0x more product orders than those that did not use the services. (The difference is about 2.2x for large business sellers).
- Small business sellers who used support services gained approximately 2.8x more GMV than those that did not use the services. (The difference is about 2.4x for large business sellers).

Part 1-2 Seller-level Analysis

SmartStore seller support services improve sellers' performance

The results indicate that 1) sellers that used seller support services outperformed those that did not use these services in terms of gross merchandise value and product order volume; and 2) the overall positive effect of using seller support services was greater for young adult, small-town, small business sellers, compared to non-young adult, large-city, large business sellers (2.8 to 3.1x versus 2.3 to 2.4x).



[Note] Young adult sellers: sellers ages 10s-30s, Small-town: sellers based in non-metropolitan area, Small business: sellers with less than 300M KRW in annual sales, according to the National Tax Service

Part 2 Seller Survey and Interview Analysis

Business Support Services: Current Usage, Effect on Sales Growth and Customer Expansion

Part 2 of the D-Commerce Report 2022 analyzes survey data to examine, first, usage, satisfaction, and intent to continue use of seller support services (categorized into three types: “business,” “financial,” and “operations”), and second, the way in which seller support services affect sales growth and customer expansion.



Business Support Services: Usage, Satisfaction, and Intent to Continue Use

Out of the total 16 business support services, **store launch, customer management, and promotion services, in that order, had the highest rates of use and satisfaction.** Despite CLOVA Service having been released relatively recently in 2022, sellers indicated a high level of satisfaction and a strong intent to continue use.

CLOVA Live Chat and logistics services had the highest satisfaction-to-usage rate. We expect additional promotions to further increase usage.

Sellers' intent to continue use, relative to usage, appeared strongest for NAVER eXpert. We assume sellers seek professional help regarding details specific to each individual business.



Business Support Services: Effect on Sales Growth and Customer Expansion

For each support service, we compared the average sales data from the last three halves of sellers that used the support service and those that did not use support services. **Sellers that used support services recorded approximately 64.3% additional sales growth compared to sellers that did not use a service.**

We then examined **the effect of promotional services such as Wishlist, News Alert, and coupons on customer expansion.** We selected these services for the following reasons: 1) sellers using these services, compared to nonusing sellers, recorded higher average sales over the previous three halves, and 2) there was a high year-over-year growth in usage of these services in the first half of 2022. Based on our analysis, **sellers that used promotion services were able to expand their customer base (in terms of both gender and age) at an approximately 6.3x greater rate than that of sellers who did not use these services.**

Part 2 Seller Survey and Interview Analysis

Financial Support Services: Current Usage, Effect on Sales Growth and Customer Expansion



Financial Support Services: Usage, Satisfaction, and Intent to Continue Use

All 6 financial support services—Start Zero Fees, Fast Settlement, Growth Points, Safe Return Care, SmartStore Business Loan, and NAVER Business Finance Center—showed similar trends in terms of usage, satisfaction, and intent to continue use. In particular, sellers most often used and were most satisfied with **Fast Settlement and Start Zero Fees**, followed by **Growth Points**.

Furthermore, satisfaction and intent to continue use, both relative to usage, were highest for Growth Points out of all 6 financial support services. We can expect usage to increase with additional promotions.



Financial Support Services: Effect on Sales Growth and Customer Expansion

For each support service, we compared the average sales data from the last three halves of sellers that used the support service and those that did not use support services. Sellers that used support services recorded **approximately 41.6% additional sales growth** compared to sellers that did not use a service.

We then examined **the effect of Fast Settlement on customer expansion**. We selected these services for the following reasons: 1) sellers using these services, compared to nonusing sellers, recorded higher average sales over the previous three halves, and 2) there was a high year-over-year growth in usage of these services in the first half of 2022. Based on our analysis, **sellers who used Fast Settlement were able to expand their customer base** (in terms of both gender and age) at an **approximately 2.4x greater rate than that of sellers who did not use these services**.

Part 2 Seller Survey and Interview Analysis

Operations Support Services: Current Usage, Effect on Sales Growth and Customer Expansion



Operations Support Services: Usage, Satisfaction, and Intent to Continue Use

Among the 6 operations support services—tech support training (ShoppingLive), administrative training (HR, tax, finance), product sales training (detail page design), professional consulting, facility rentals (NAVER Square), and brand logo design services, training services had the highest usage and satisfaction rate. Sellers most likely used and were most satisfied with **product sales training, followed by finance training, and then tech support training.**

In particular, the satisfaction-to-usage rate was highest for administrative training. We expect usage to increase with additional promotions.

In addition, sellers showed the strongest intent to continue using brand logo design services, with which sellers hope to develop their store's brand identity and product value.



Analysis by Seller's Digital Literacy Level

Based on survey data, we grouped sellers according to their digital literacy level of low, moderate, and high, and then analyzed their usage, satisfaction, and intent to continue use regarding seller support services.

Sellers in the "moderate" and "high" groups often used data analytics tools (of the "business support service" category), while sellers in the "low" group frequently used CLOVA Similar Product Recommendations and CLOVA Related Product Recommendations.

As a result, we **found that the lower the digital literacy level, the higher the tendency to use AI-assisted services rather than services they can control autonomously.**

Part 2 Seller Survey and Interview Analysis

In-depth Interview of Sellers



Experience with Business Support Services



Myeongjak chimhyanghwan
(Health Products)

Unlike other online websites, I can easily upload a gif when **listing a product on SmartStore**. It does not require a separate html code or alternate program. All I need to do to upload an image is drag and drop the file, which is quite convenient. I can also re-size the image without error.



Silverfish
(Sports & Outdoor)

In addition to providing real-time support and resolving customer inquiries through **NAVER TalkTalk**, we also analyzed features of our most popular items for future product development.



Nadan Shop
(Fashion Accessories)

I always have **BizAdvisor** on when I am working. Based on real-time traffic and traffic source data, I sometimes edit my product keywords.



Myeongjak chimhyanghwan
(Health Products)

I look forward to starting a **"One Plus Deal"** campaign the most. I can choose to package either two of the same product or two different products as a buy-one-get-one-free deal. Regardless, these products may appear higher up on search results, since "One Plus Deal" products are showcased separately. In addition, some customers particularly look for these kinds of package deals, which is why I think it would be good to create a buy-one-get-one-free deal with our products as well.



Experience with Financial Support Services



Nadan Shop
(Fashion Accessories)

I had the chance to use the previous Quick Escrow service, which was quite similar to **Fast Settlement**. Compared to its predecessor, Fast Settlement does not go through an intermediary. Instead, NAVER directly manages the payment system, simplifying the payment process and making the service more trustworthy.



Silverfish
(Sports & Outdoor)

I first started selling on SmartStore without registering as a business, so I was ineligible to receive **Start Zero Fees**. If I compare my business then and now, currently receiving these benefits, Start Zero Fees have been really helpful in securing funding for my business.



Dasaeknongjang
(Food)

As a special event, I re-offered the **credits** I received from completing the training courses on NAVER Business School to customers that wrote high-rated reviews. This way I was able to garner more reviews, especially high quality reviews, and take in diverse customer feedback. I am very satisfied with the wide range of ways I can use these credit points.



Mama Step
(Baby & Family Care)

I currently use **Safe Return Care** for products with relatively small orders. Customers tend to hesitate purchasing items with few reviews, especially when it comes to baby care products. Nonetheless, Safe Return Care helps alleviate this problem by waiving return fees.

Part 2 Seller Survey and Interview Analysis

In-depth Interview of Sellers



Experience with Operations Support Services



Dasaeknongjang
(Food)

After taking a **course on product sales**, I applied what I learned from training and made changes to our product detail page. Once we had a more effective detail page, more orders started coming in, and our product was ranked higher in search results as well. Recently, I took a basic course on advertising services at NAVER Square Gwangju. I immediately started advertising the next day, which resulted in an increase in sales. Typically, we used to receive one or two orders a day, but now, we get up to six orders on a daily basis. Overall, the number of orders continues to increase.



Mama Step
(Baby & Family Care)

Though there are more options now, there were barely any consulting services available awhile back. As a one-person shop, I handle everything myself, which is why I tend to take a variety of training courses whenever I need help with areas such as customer management. In particular, the **tax-related courses (administrative/financial training)** were really helpful.



Dasaeknongjang
(Food)

I really appreciate the **brand logo design service**. Although everyone stressed the importance of having a logo, we, to be honest, had to prioritize buying delivery boxes since we had no capital. I expected it to take five or six more years to have a brand logo, but we were fortunately selected to receive the brand logo design service. The designers contacted our company to discuss our brand concept, and then sent us a few options from which we were able to choose the design we liked the most. They also sent us stickers and other packaging material, which we still very much use today.



Business Experience, in each Business Life Cycle Phase



Dasaeknongjang
(Food)

During the Launch Phase, rather than trying to absorb all the training course material, it is important to apply what you can one step at a time. This then eventually accumulates and leads to the development of the store.



Silverfish
(Sports & Outdoor)

In the beginning (Launch Phase), I was too agitated about creating the perfect product page. This was my mistake. Even if you think the product design or description is not perfect, you should first list your product to see how customers respond and then consider their feedback to modify the product page.



Dasaeknongjang
(Food)

In the Growth Phase, as you accumulate enough information about your store through blogging and active review management, you increasingly receive more inquiries about your products. Even if they do not directly lead to purchases, they increase your chances of acquiring new customers. In addition, by offering sufficient information about the product, you can increase your customers' trust.



Mama Step
(Baby & Family Care)

As the business expands into the Growth Phase, revenue increases along with taxes, which can be quite a sum. Though learning about taxes can be challenging, I thought it was important for me to take ownership of my business and learn the necessary skills. This is why I started taking NAVER's tax-related courses early on during the Launch Phase, and it took some time to fully internalize these skills.

SMARTSTORE MARKET-LEVEL AND SELLER-LEVEL ANALYSES

PART 1.

Professor Gunwoong Lee, Business School, Korea University
Mingi Song, Bongjin Sohn, Dongwon Shin

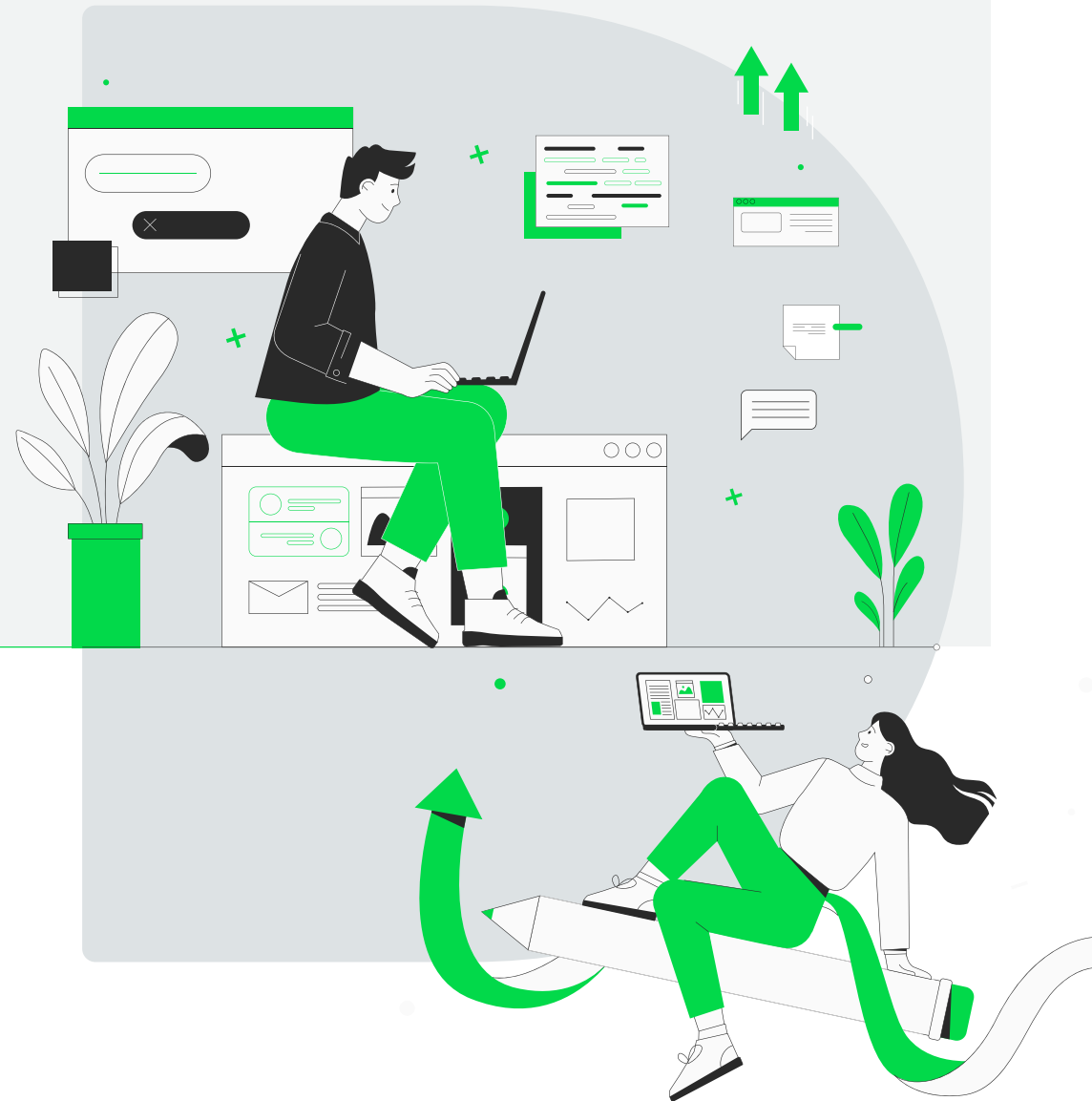
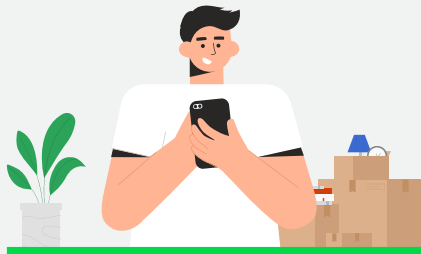


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Conclusion



This report has been published as an interactive PDF, allowing readers to move quickly and easily to pages in the report, and including shortcuts to the related web pages.

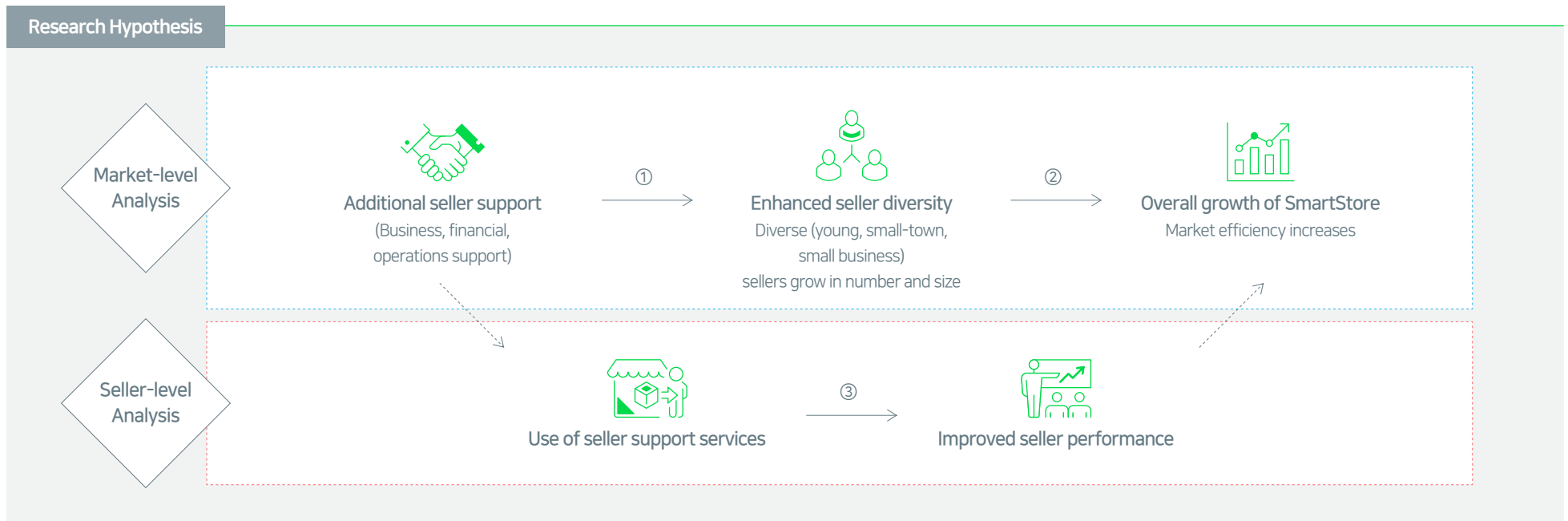


01. Introduction

01. Introduction

Purpose of the Study

- The purpose of this research is to examine, using empirical data, how NAVER's SmartStore seller support services promote seller diversity and how increased seller diversity, in turn, benefits the entire market. In other words, this research focuses on the role that NAVER's seller support solutions and services play in increasing seller diversity and their impact on the overall market.
- The research defines seller diversity using three proxy measures: sellers' age (i.e. young adults), sellers' location (i.e. based in a non-metropolitan area), and business size (i.e. small business with less than 300 million KRW in revenue). These factors are then taken into account to assess, both at the market- and seller-level, the impact of seller diversity on the overall market.
- By holistically examining the effect of seller support services on seller diversity and the overall SmartStore ecosystem, the research will provide an important blueprint for NAVER's future endeavors.



01. Introduction

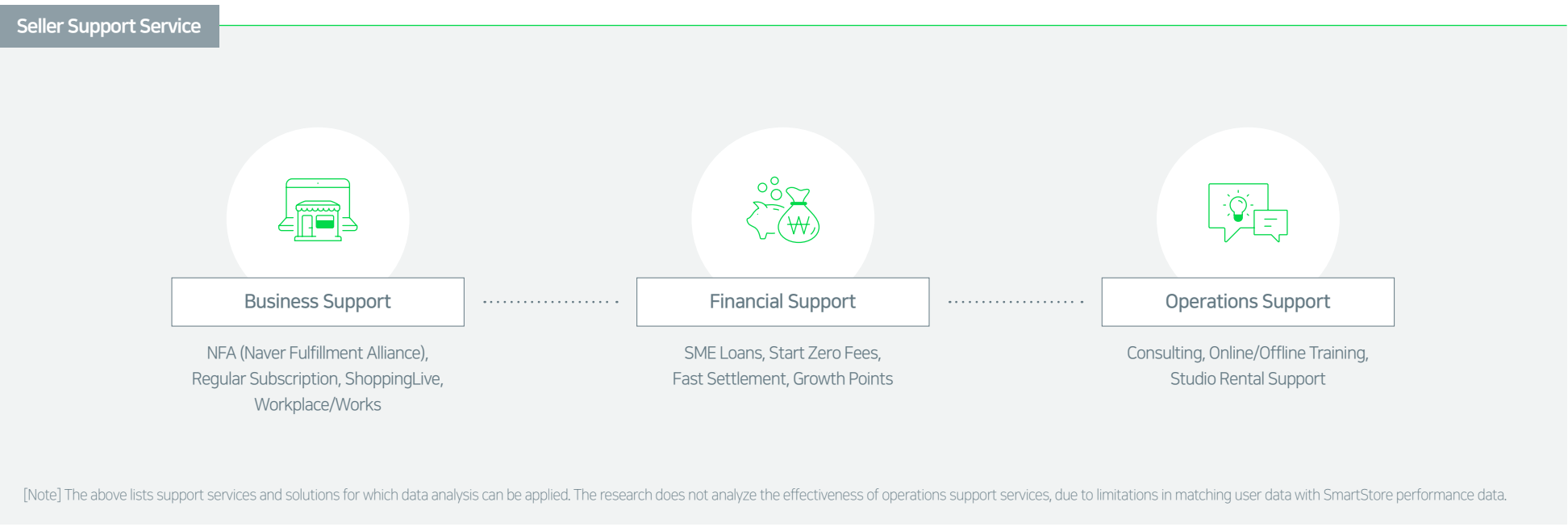
Literature Review

- The conventional platform effect involves a virtuous cycle for both sellers and buyers in a network. The network effect takes the shape of a positive feedback loop that connects different users of a platform (Liebowitz & Margolis 1994). Platform businesses may concentrate on expanding one side—either sellers or buyers—of the market, which then catalyzes both same-side and cross-side network effects. However, businesses must first overcome the “chicken or the egg” problem and create enough critical mass to trigger the network effect (Evans 2009).
- Since e-commerce platforms illustrate a multi-side market consisting of both sellers and buyers, the utility of the platform essentially increases with the number of diverse products, services, and content. This is especially true for e-commerce platforms, which, distinct from other innovative platforms, require users to create and share their content while various sides of the market interact seamlessly (Evans & Noel 2005). For e-commerce platforms to succeed, operating businesses must implement a multifaceted support system that drives either buyer or seller-side activity.
- Most platform businesses tend to allocate their resources on one side of the market to catalyze the network effect. Oftentimes businesses focus on the buyer side, as was the case for PayPal when the company offered a \$10 sign-up bonus as a way to reach and retain customers (Lee and Yang 2021). In contrast, Airbnb targeted the seller side, actively recruiting hosts and hiring professional photographers to help them better promote their rentals. By increasing the number of sellers on their platform, Airbnb was then able to expand their buyer pool (Teixeira & Brown 2018).
- Diversity on the platform both directly and indirectly impacts market performance. As one side of the platform grows, the entire network expands and becomes more diverse. This then activates a virtuous cycle that benefits all participants of the platform and the entire market (Gallagher & West 2009). An increase in the number of diverse suppliers leads to more consumers, which again bolsters supplier diversity and content quality. This results in lower transaction and search costs between consumers and suppliers, and more competition among suppliers, which ultimately induces rational consumption (Lee et al. 2019).

01. Introduction

Seller Support

- NAVER operates a range of services and policies aimed to support and promote sellers' online growth. Seller-friendly support programs help SMEs stay afloat in a highly competitive online market, and therefore, appeal to potential entrepreneurs planning to start a business. The biggest merit of NAVER SmartStore lies in its business, financial, and operations support system, which allows early stage businesses to focus solely on selling, lowers entry barriers, and enables sellers to offer high-quality products. This ultimately results in an enhanced e-commerce experience that benefits buyers, sellers, and platform operators alike.
- Seller support services attract more sellers, creating an environment in which diverse sellers can sell diverse products. In general, there are three types of seller support programs: first, "operations support" refers to educational training, consulting, or other programs that indirectly help store operations; second, "business support" includes Dashboard, auto-response system, Live Commerce, and other technology tools; and third, "financial support" consists of loans, Fast Settlement, and other programs that directly affect store operations. All of these support services and policies help empower sellers to operate a stable business.





02.

Market-level Analysis

2-1. Effect of Seller Support Services on Seller Diversity

2-2. Effect of Seller Diversity on Market Growth

02. SmartStore Market-level Analysis

Effect of Seller Support Services on Diversity and Market Growth

Purpose

Using merchandising data of NAVER Shopping, this research examines the effect of increased seller diversity on the overall market.

Data

The research analyzes merchandising data from January 1, 2020 to December 31, 2021 (730 days, in total) on NAVER Shopping.

The following variables are considered when measuring the effect of seller diversity: gross merchandise value, order volume, and seller information including age, size of city in which the business is located, and business size. For this research, we collected data on 408 seller groups (17 regions, ages 10-60s, four sizes of business) over 730 days.

(Total number of observations: 261,351)

Variable	Description
Gross Merchandise Value	Daily GMV of the entire market
Order Volume	Daily order volume of the entire market
Detail Page View	Daily detail page view of the entire market
Young Adulthood Status	Young adults refer to sellers ages 10s to 30s
City Size	Defined by city size of registered store location (categorized either 1. Small town or 2. Large city) (* Metropolitan cities qualify as large cities; all other areas are classified as small towns)
Business Size	Based on National Tax Service criteria of less than 300M KRW in annual sales for small businesses (categorized either 1.Small or 2.Large)

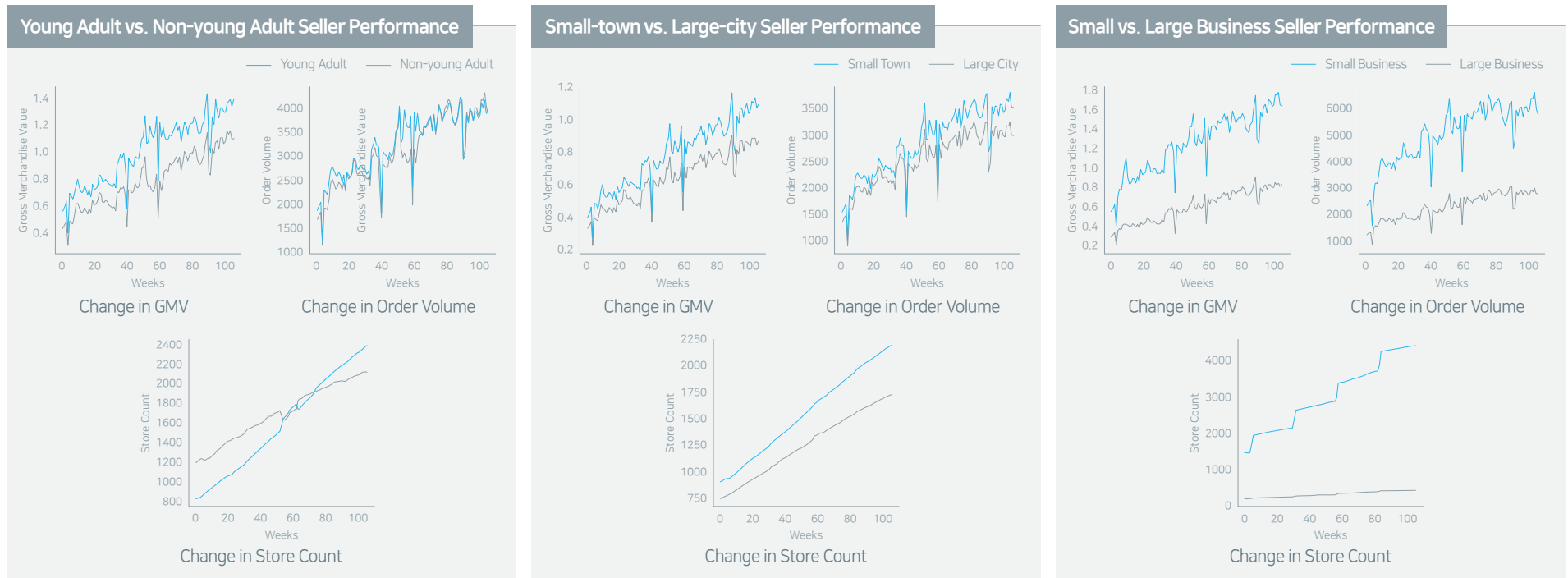
02. SmartStore Market-level Analysis

2-1. Effect of Seller Support Services on Seller Diversity

① Support services increase diversity by helping young adult, small-town, small business sellers grow.

We conducted a time series analysis comparing merchandise value and order volume of young adult, small-town, and small business sellers to that of non-young adult, large-city, large business sellers. The results show that the addition of seller support programs helps young adult, small-town, and small business sellers grow faster than their respective counterparts in terms of number of stores, order volume, and merchandise value.

- Young adult (ages 10 to 30s) sellers, compared to non-young adult sellers, grew 1.2x, 1.0x, and 1.7x faster in terms of merchandise value, order volume, and number of stores, respectively.
- Small-town sellers, compared to large-city sellers, grew 1.2x, 1.1x, and 1.3x faster in terms of merchandise value, order volume, and number of stores, respectively.
- Small business sellers, compared to large business sellers, grew 2.1x, 2.2x, and 10.0x faster in terms of merchandise value, order volume, and number of stores, respectively.



02. SmartStore Market-level Analysis

2-2. Effect of Seller Diversity on Market Growth

① More visibility for young adult, small-city, small business sellers leads to greater market growth.

We used a SARIMAX model to analyze the change in detail page views of stores owned and operated by young adult, small-town, small business sellers and its effect on gross merchandise value and order volume of the overall market.

- The growth effects of increased visibility of young adult sellers' stores on total market GMV and order volume are 1.7x and 5x greater, respectively, than that of increased visibility of non-young adult sellers' stores.
- The growth effect of increased visibility of small-town sellers' stores on total market order volume is 3.1x greater than that of increased visibility of large-city sellers' stores.
- The growth effects of increased visibility of small businesses on total market GMV and order volume are 3.1x and 2.4x greater, respectively, than that of increased visibility of large businesses.

Dependent Variable	Independent Variable Detail Page Views of Diverse Seller Group	Effect on Market Growth, Relative to Compared Group
Total GMV	Young Adult Sellers	1.7x compared to non-young adult sellers
	Small-town Sellers	3.1x compared to large-city sellers
	Small Business Sellers	3.1x compared to large business sellers
Total Order Volume	Young Adult Sellers	5.0x compared to non-young adult sellers
	Small-town Sellers	not statistically significant
	Small Business Sellers	2.4x compared to large business sellers

02. SmartStore Market-level Analysis

2-2. Effect of Seller Diversity on Market Growth

① More visibility of young adult, small-city, small business sellers leads to greater market growth.

Dependent Variable	Independent Variable	Estimated Value	Statistical Significance (p-value)
Total GMV	Detail Page View, Young Adult Sellers	403.622	p<0.000
	Detail Page View, Non-young Adult Sellers	240.530	p<0.000
Total Order Volume	Detail Page View, Young Adult Sellers	0.020	p<0.000
	Detail Page View, Non-young Adult Sellers	0.004	p<0.000

Dependent Variable	Independent Variable	Estimated Value	Statistical Significance (p-value)
Total GMV	Detail Page View, Small-town Sellers	563.803	p<0.000
	Detail Page View, Large-city Sellers	183.701	0.015
Total Order Volume	Detail Page View, Small-town Sellers	0.001	0.810
	Detail Page View, Large-city Sellers	0.002	0.308

Dependent Variable	Independent Variable	Estimated Value	Statistical Significance (p-value)
Total GMV	Detail Page View, Small Business Sellers	619.674	0.002
	Detail Page View, Large Business Sellers	197.520	p<0.000
Total Order Volume	Detail Page View, Small Business Sellers	0.019	p<0.000
	Detail Page View, Large Business Sellers	0.008	0.009



03.

Seller-level Analysis

3-1. Effect of Seller Support Service Use on Seller Performance

03. Seller-level Analysis

3-1. Effect of Seller Support Service Use on Seller Performance

Data

In part 2 of our research, we look at empirical data to analyze the effect of SmartStore seller support services on seller diversity as well as the impact of seller diversity (i.e. growth of young adult, small-town, small business sellers) on market growth. Part 3 analyzes seller-level data to examine how the use of seller support services affects seller performance.

Our analysis relies on data from February 1 to December 21, 2021 of sellers in the "homeware" and "gardening" categories of NAVER Shopping. Specifically, we use this data to examine how the use of business and financial support services boosts individual seller's performance.

Variable	Description
Gross Merchandise Value	Daily GMV of the entire market
Order Volume	Daily order volume of the entire market
Young Adulthood Status	Young adults refer to sellers ages 10s to 30s
City Size	Defined by city size of registered store location (categorized either 1. Small town or 2. Large city) <small>(*Metropolitan cities qualify as large cities; all other areas are classified as small towns)</small>
Business Size	Based on National Tax Service criteria of less than 300M KRW in annual sales for small businesses (categorized either 1.Small or 2.Large)
Business Support Service Use	Whether or not the seller has experience using a business support service (Workplace/Works, ShoppingLive, NFA, Regular Subscription, etc.)
Financial Support Service Use	Whether or not the seller has experience using a financial support service (SME Loans, Fast Settlement, Growth Points, etc.)

03. Seller-level Analysis

3-1. Effect of Seller Support Service Use on Seller Performance

① Sellers that use support services tend to perform better than their peers.

We conducted a t-test to compare the average business performance of sellers that used business and/or financial support services to that of sellers that did not use these services.

- Results : Sellers that used support services, compared to those that did not, received 2.6x more product orders and generated 2.5x more GMV. Sellers that used business support services gained 3.4x more orders and 3.6x more GMV; sellers that used financial support services gained 2.3x more orders and 2.2x more GMV.

Performance Indicators	Seller Support Service	(A) Mean, Sellers that Use the Service	(B) Mean, Sellers that Do Not Use the Service	Difference (A-B)	Statistical Significance (p-value)	Multiple (A/B)
Order Volume	Total	36.1	13.9	22.2	p<0.000	2.6x
	Business	59.9	17.6	42.2	p<0.000	3.4x
	Financial	34.3	14.7	19.6	p<0.000	2.3x
GMV	Total	691,098.5	271,469.6	419,628.9	p<0.000	2.5x
	Business	1,235,518.8	340,460.6	895,058.2	p<0.000	3.6x
	Financial	648,599.5	288,958.8	359,640.7	p<0.000	2.2x

[Note] In this comparative analysis, we excluded operations support services such as education, studio rentals, and consulting, due to limitations in mapping actual user data to SmartStore seller data.

03. Seller-level Analysis

3-1. Effect of Seller Support Service Use on Seller Performance

② Young adult sellers that use seller support services perform better than their peers.

We conducted a 2-by-2 t-test analysis to examine how young adult and non-young adult sellers that used seller support services performed in comparison to those that did not use the services.

- Young adult sellers that used support services received approximately 3.1x more product orders than those that did not use the services. Specifically, the use of business support services resulted in a 2.5x increase in orders; the use of financial support services, 3.0x. In addition, non-young adult sellers that used support services also experienced 2.4x more product orders than those that did not use the services. The use of business support services drove approximately 4.1x more orders; the use of financial services, 1.9x.
- In terms of GMV, young adult sellers that used support services performed 3.0x better than those that did not use the services. Specifically, the use of business support services resulted in a 2.6x increase in GMV; the use of financial support services, 2.9x. Non-young adult sellers that used services also gained 2.3x more GMV than those that did not use the services. The use of business support services drove 4.4x more GMV; the use of financial support services, 1.8x.
- In sum, the use of seller support services had a greater positive impact on the performance of young adult sellers than non-young adult sellers.

Performance Indicators	Seller Type	(A) Mean, Sellers that Use the Service	(B) Mean, Sellers that Do Not Use the Service	Difference (A-B)	Statistical Significance (p-value)	Multiple (A/B)
Order Volume	Young Adult	33.3	10.9	22.4	p<0.000	3.1x
	Non-young Adult	39.3	16.6	22.7	p<0.000	2.4x
GMV	Young Adult	648,805.9	219,201.2	429,604.7	p<0.000	3.0x
	Non-young Adult	741,863.2	319,890.3	421,972.9	p<0.000	2.3x

* Young adult sellers refer to sellers ages 10s to 30s.

03. Seller-level Analysis

3-1. Effect of Seller Support Service Use on Seller Performance

③ Small-town sellers that use seller support services perform better than their peers.

We conducted a 2-by-2 t-test analysis to see how small-town and large-city sellers that used seller support services performed in comparison to those that did not use the services.

- Small-town sellers that used support services received approximately 2.8x more product orders than those that did not use the services. Specifically, the use of business support services resulted in a 3.7x increase in orders; the use of financial support services, 2.5x. In addition, large-city sellers that used support services also collected 2.4x more product orders than those that did not use the services. The use of business support services drove 3.1x more orders; the use of financial support services, 2.2x.
- In terms of GMV, small-town sellers that used support services performed 2.8x better than those that do not use the services. In particular, the use of business support services resulted in a 3.8x increase in GMV; the use of financial support services, 2.5x. Large-city sellers that used services also generated 2.4x more GMV than those that did not use the services. Specifically, the use of business support services drove 3.5x more GMV; the use of financial support services, 2.1x.
- In sum, the use of seller support services had a greater positive impact on the performance of small-town sellers than large-city sellers.

Performance Indicators	Seller Type	(A) Mean, Sellers that Use the Service	(B) Mean, Sellers that Do Not Use the Service	Difference (A-B)	Statistical Significance (p-value)	Multiple (A/B)
Order Volume	Small Town	38.2	13.7	24.4	p<0.000	2.8x
	Large City	34.2	14.0	20.2	p<0.000	2.4x
GMV	Small Town	717,034.7	258,033.8	459,000.9	p<0.000	2.8x
	Large City	667,842.6	283,535.9	384,306.7	p<0.000	2.4x

* City size categorized by metropolitan (considered "large city") and nonmetropolitan ("small town") areas.

03. Seller-level Analysis

3-1. Effect of Seller Support Service Use on Seller Performance

④ Small business sellers that use seller support services perform better than their peers.

We conducted a 2-by-2 t-test analysis to examine how small and large business sellers that used seller support services performed in comparison to those that did not use the services.

- Small business sellers that used support services received approximately 3.0x more orders than those that did not use the services. Specifically, the use of business support services resulted in a 2.2x increase in orders; the use of financial support services, 3.0x. In addition, large business sellers that used support services also collected 2.2x more product orders than those that did not use the services. The use of business support services drove 2.3x more orders; the use of financial support services, 2.1x.
- In terms of GMV, small business sellers that used support services performed 2.8x better than those that did not use the services. In particular, the use of business support services resulted in a 2.3x increase in GMV; the use of financial support services, 2.8x. Large business sellers that used services also generated 2.4x more GMV than those that did not use the services. Specifically, the use of business support services drove 2.2x more GMV; the use of financial support services, 2.3x.
- In sum, the use of seller support services had a greater positive impact on the performance of small business sellers than large business sellers.

Performance Parameters	Seller Type	(A) Mean, Sellers that Use the Service	(B) Mean, Sellers that Do Not Use the Service	Difference (A-B)	Statistical Significance (p-value)	Multiple (A/B)
Order Volume	Small Business	20.7	6.9	13.8	p<0.000	3.0x
	Large Business	58.5	26.8	31.7	p<0.000	2.2x
GMV	Small Business	375,238.7	135,547.6	239,691.1	p<0.000	2.8x
	Large Business	1,109,821.5	456,986.2	652,835.3	p<0.000	2.4x

* Small businesses refer to those with annual sales of less than 300 million KRW, according to the National Tax Service.



04. Conclusion

04. Conclusion

The purpose of this research is to analyze the overall effect of seller support services and solutions offered on NAVER's platform, especially on enhancing diversity within the platform, which in turn leads to positive market outcomes (i.e. an increase in revenue and orders). Based on market- and seller-level analyses, the research finds the following:

4.1. Market-level Analysis

First, seller support services have an indirect effect on improving seller diversity at the market level. In particular, the addition of SmartStore seller support solutions and services leads to a greater increase in the number of stores, gross merchandise value, and order volume of young adult (ages 10-30s), small-town (non-metropolitan), small business (with annual sales of less than 300 million KRW) sellers compared to those of non-young adult, large-city, large business sellers.

Second, as user traffic to young adult, small-town, small business sellers increases, the overall GMV and order volume of SmartStore grows. The growth effects of increased visibility of young adult, small-town, small business sellers on GMV and order volume are 2-3x and 2-5x greater, respectively, than that of non-young adult, large-city, large business sellers. This implies that greater seller diversity drives both market growth and efficiency.

4.2. Seller-level Analysis

Based on our analysis at the seller level, the research finds that the use of seller support services has a direct positive impact on seller performance. Sellers that used support services performed better in terms of GMV and order volume, compared to those that did not use the services. This is especially the case for service-using young adult, small-town, small business sellers, whose GMV and order volume were 2.8x to 3.1x greater than that of their peers. On the other hand, the use of seller support services resulted in a 2.3x to 2.4x increase in performance for non-young adult, large-city, large business sellers.

In sum, seller support services clearly help improve seller performance, especially for young adult, small-town, small business sellers.

Works Cited

Evans, D. S. (2009). How catalysts ignite: the economics of platform-based start-ups. *Platforms, markets and innovation*, 416.

Evans, D. S., & Noel, M. (2005). Defining antitrust markets when firms operate two-sided platforms. *Colum. Bus. L. Rev.*, 667.

Lee, S., Lee, S. Y., & Ryu, M. H. (2019). How much are sellers willing to pay for the features offered by their e-commerce platform?. *Telecommunications Policy*, 43(10), 101832.

Liebowitz, S. J., and Stephen E. Margolis. 1994. "Network Externality: An Uncommon Tragedy." *Journal of Economic Perspectives*, 8 (2): 133-150.

Teixeira, T. S., & Brown, M. (2016). *Airbnb, Etsy, Uber: Acquiring the first thousand customers*. President and Fellows of Harvard College.

Lee, S. Y. & Yang, J. S. (2021). *The Future of Platform Business*. Leaders Book. (이성열, 양주성(2021), 플랫폼 비즈니스의 미래: 디지털 플랫폼 전쟁에서 어떻게 승리할 것인가?, 리더스북)

SELLER SURVEY AND INTERVIEW

PART 2.

Professor Boreum Choi,
School of Business Administration, University of Seoul
Yunhyo Cho, Taewoo Kim



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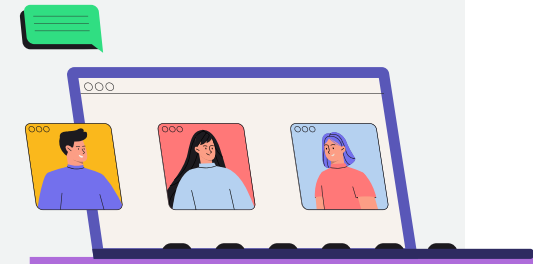


02.

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NAVER SmartStore Seller Support
Service Usage Data and Analysis

- 1) By Service Type
- 2) By Digital Literacy Level of Sellers



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In-depth Interview



This report has been published as an interactive PDF, allowing readers to move quickly and easily to pages in the report, and including shortcuts to the related web pages.



01.

Research Purpose & Methodology

01. Research Purpose & Methodology

Research Purpose

- The purpose of this study is to examine the ways in which NAVER SmartStore seller support services are currently in use and analyze their effect on seller performance.
- Based on survey data, we categorized seller support services into three groups: business, financial, and operations. For each service type, our aim is to assess rates of usage, satisfaction, and intent to continue use, and analyze the effect on sales growth and customer expansion.

Types of Seller Support Services

Business Support



- Store Launch (registration, product listing)
- Marketing (special campaigns)
- Promotion (Wishlist, Notification Coupons)
- Customer Management (Chatbot/TalkTalk)
- Commerce Tools (ShoppingLive)
- Data Analytics Tool (BizAdvisor)
- CLOVA Message Marketing
- CLOVA Personalized Product Recommendations
- CLOVA Similar Product Recommendations
- CLOVA Related Product Recommendations
- CLOVA Live Chat
- Logistics (NAVER Fulfillment Alliance)
- Workplace (Cloud)
- Regular Subscription
- NAVER eXpert
- Brand Store New Product Marketing

Financial Support



- Start Zero Fees
- Growth Points
- Fast Settlement
- SmartStore Business Loan
- NAVER Business Finance Center (Offers information on public subsidies, Start Business Guide, financial/insurance guide)
- Safe Return Care

Operations Support



- Tech Support Training (ShoppingLive)
- Administrative Training (Finance, Tax, HR)
- Product Sales Training (Detail Page Design)
- Free Professional Consulting (eXpert biz consulting points)
- Facilities and Equipment (NAVER Square Studio and office space rentals)
- Brand Logo Design Services

01. Research Purpose & Methodology

Research Methodology

The research uses the following three types of data:



Seller survey data

- Survey Period: August 4 – 24, 2022 (21 days)
- Respondents: 1,423 SmartStore sellers with informed consent on the use of personal data
- Topic: seller's demographic profile, online/offline business life cycle, operational challenges, seller support service usage, satisfaction, intent to continue use, effect on sales performance and customer base



Seller in-depth interview

- Interview Period: Oct 14 - Nov 1, 2022 (5 sessions)
- Subject: 5 sellers, with informed consent on the use of personal data, who completed the seller survey and agreed to participate in the in-depth interview
- Topic: reason for joining SmartStore, business life cycle and relevant characteristics, business challenges, seller support service usage and benefits



NAVER SmartStore data

- Data Collection Period: H2 Y2018 - H1 Y2022
- Subject: 1,423 SmartStore seller survey respondents with informed consent on the use of personal data
- Topic: SmartStore sales data, customer diversity, seller support service usage

Survey Topics

Topic	Response Options
Seller Gender	Male / Female
Seller Age	10s / 20s / 30s / 40s / 50s / over 60
Online Store Training Experience	NAVER Business School / outside of NAVER / no experience
Digital Literacy Level	Very low (I find it difficult to use the Internet without someone helping me) / Slightly low (I can use the Internet on my own but I am not proficient) / Moderate (I remember the URL for websites I regularly visit and face no difficulty accessing them) / Slightly high (I frequently download software from websites and public databases) / Very high (I can build and manage my own website or software program)
SmartStore Management Structure	The owner operates and manages the store / A staff member is exclusively in charge of managing the online store / All staff members collectively manage the store / Store account management is outsourced
Business Life Cycle Phase of SmartStore / Physical Store	Not in operation / Launch Phase (operating for less than 1 year, recording less than 3M KRW in profit) / Growth Phase (operating for less than 1 year and recording profit within 3M to 10M KRW range, or operating for 2-4 years but experiencing funding difficulties) / Maturity Phase (operating for more than 1 year and relatively well-funded, or operating for more than five years and experiencing funding difficulties) / Decline Phase (operating for more than 1 year, decline in revenue, industry in decline, lack of IT, and facing funding difficulties)
SmartStore Category of Registration	Fashion Apparel / Shoes & Accessories / Beauty / Electronics & Appliances / Furniture & Interior Design / Baby & Family Care / Food / Sports & Outdoors / Household Goods / Duty Free / Books / Other
SmartStore Current/ Highest Seller Grade	Seedling / Sprout / Power / Big Power / Premium / Platinum
Difficulties Operating SmartStore and Offline Stores	Delivery fee / Rent / Advertising costs / Labor costs / Operating costs / Revenue decline / Credit card fees / Increased market competition / Declining industry / Hiring challenges / Funding difficulties / Lack of information technology / Other / No difficulty / I do not operate a business
Frequency of Use (Business/Financial/Operations)	1 (never) / 2 / 3 / 4 / 5 (very often)
Satisfaction (Business/Financial/Operations)	0 (no experience using the services) / 1 (highly unsatisfactory) / 2 / 3 / 4 / 5 (highly satisfactory)
Most Used and Satisfying Service (Business/Financial/Operations)	Select one of the three service types
Service with Intent to Continue Use (Business/Financial/Operations)	0 (currently in use) / 1 (do not intend to use) / 2 / 3 / 4 / 5 (very much intend to use)
Sales Growth Due to Service Use (1) (Business/Financial/Operations)	1 (not at all) / 2 / 3 / 4 / 5 (very much so)
Sales Growth Due to Service Use (2) (Business/Financial/Operations)	Decrease by more than 50% / Decrease by 25% to 50% / Decrease by 10% to 25% / Decrease by less than 10% / No change / Increase by less than 10% / Increase by 10% to 25% / Increase by 25% to 50% / Increase by more than 50%
Customer Base Expansion Due to Service Use (1) (Business/Financial/Operations)	1 (not at all) / 2 / 3 / 4 / 5 (very much so)
Customer Base Expansion Due to Service Use (2) (Business/Financial/Operations)	No change / Acquired new customers of different gender / Acquired new customers of different age / Acquired new customers from different geographical regions



02.

NAVER SmartStore Seller Support Service Usage Data and Analysis

1) By Service Type

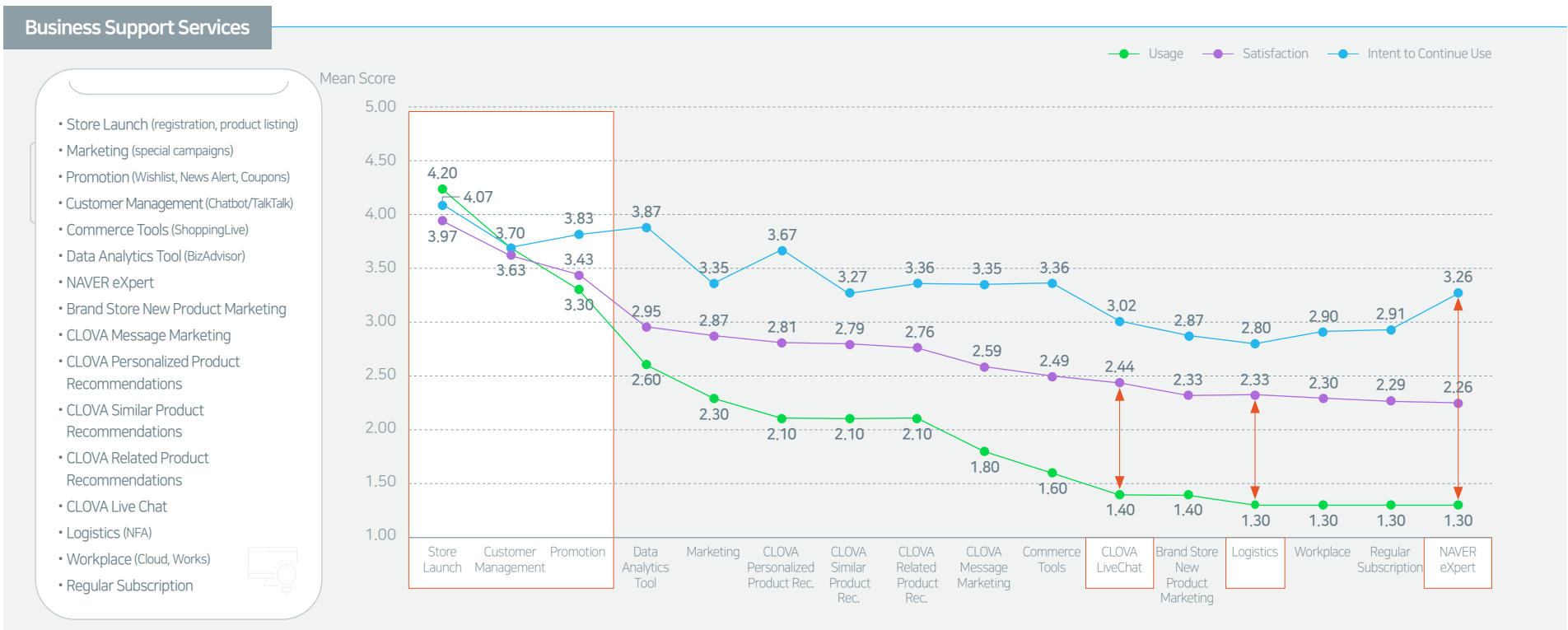
2) By Digital Literacy Level of Sellers

02. Seller Support Service Usage Data and Analysis

1-1) Analysis by Service Type (Business Support Services)

① Usage, Satisfaction, Intent to Continue Use

- Out of the total 16 business support services, store launch, customer management, and promotion services, in that order, had the highest rates of use and satisfaction.
- Although CLOVA was released relatively recently in 2022, sellers indicated a high level of satisfaction and a strong intent to continue use.
- CLOVA Live Chat and logistics services had the highest satisfaction-to-usage rate. We expect additional promotions to further increase usage.
- Sellers' intent to continue use, relative to usage, appeared strongest for NAVER eXpert, which suggests that sellers need personalized professional help.

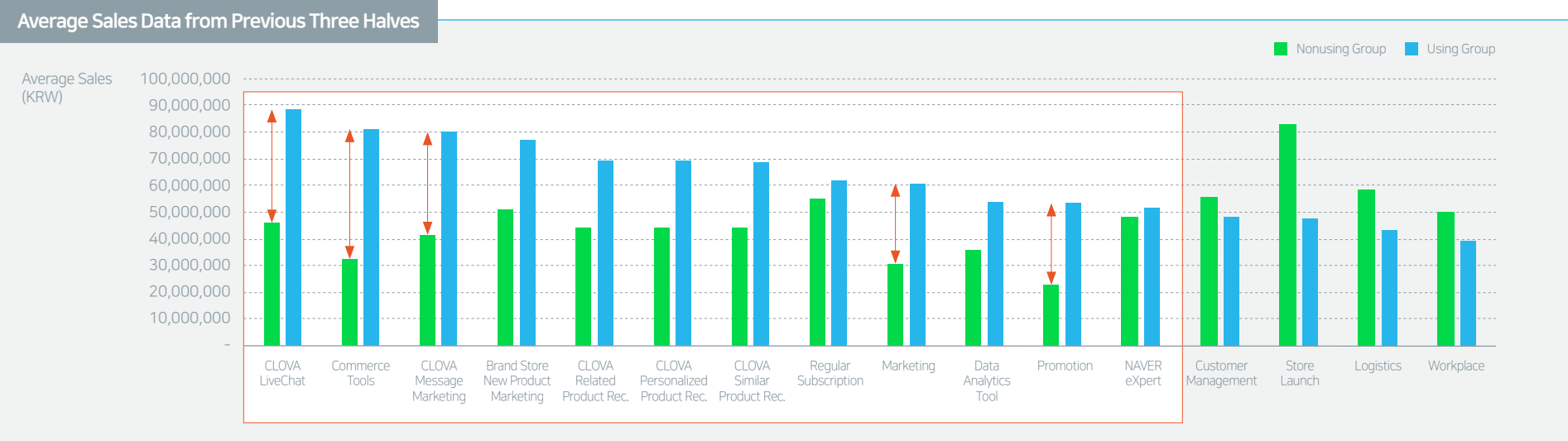


02. Seller Support Service Usage Data and Analysis

1-1) Analysis by Service Type (Business Support Services)

② Effect on Sales Performance

- For each support service, we compared the average sales data from the last three halves of two groups of sellers: those that use the support service (“using group”) and those that do not use support services (“nonusing group”). For 12 out of the total 16 business support services, sellers that use a service recorded higher sales and approximately 64.3% additional sales growth compared to sellers that do not use a service.
(Average sales data from H1 Y2022 were used for services that launched in H2 Y2021. These include CLOVA, logistics services, Regular Subscription, and Brand Store New Product Marketing).
- Sellers that use CLOVA LiveChat, commerce tools (including ShoppingLive), and CLOVA message marketing, in that order, recorded the highest average sales overall. The difference in average sales between sellers that use services and those that do not was most pronounced for commerce tools, CLOVA LiveChat, and CLOVA message marketing. (Of the previous three halves, average sales for the first half of 2022 is relatively high, which may explain higher sales data regarding recently launched services).
- Average sales between sellers that use promotion and marketing services were also significantly greater than that of nonusing sellers.
- Many sellers simultaneously use multiple services, which limits the ability to analyze the impact of each service independently. Nonetheless, we can confirm that the use of business support services, overall, has a positive impact on sales.

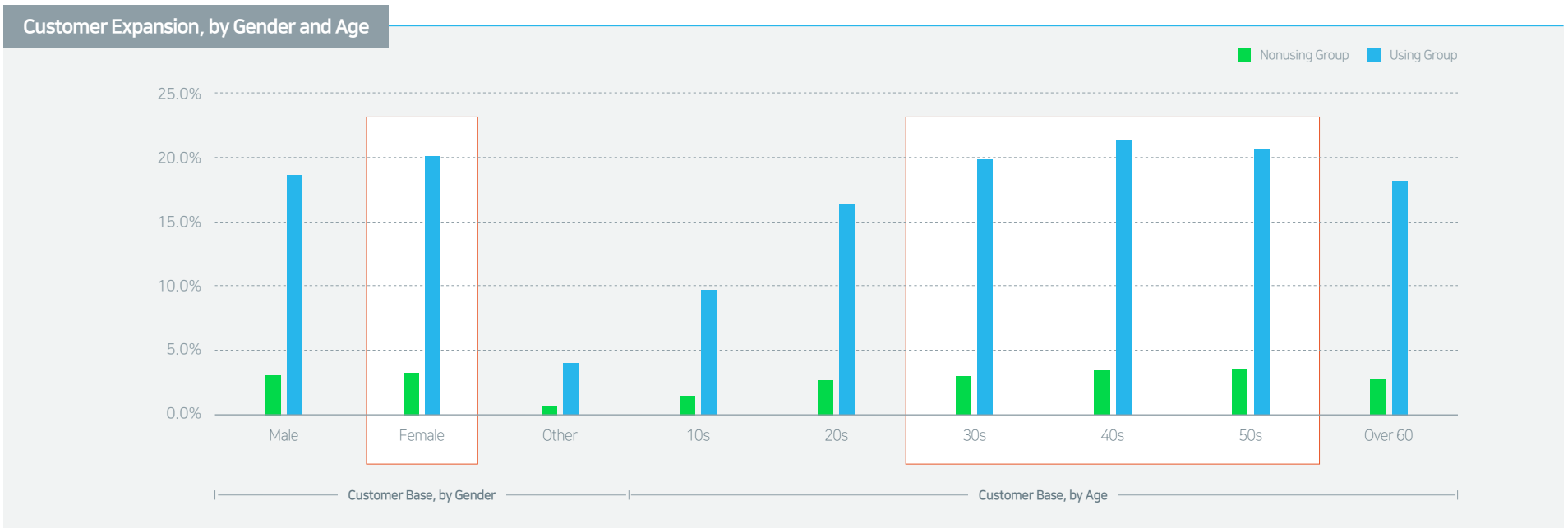


02. Seller Support Service Usage Data and Analysis

1-1) Analysis by Service Type (Business Support Services)

③ (Promotion) Effect on Customer Base

- We then examined the effect of promotional services such as Wishlist, News Alert, and coupons on customer expansion. We selected these services for the following reasons: 1) sellers using these services, compared to nonusing sellers, recorded higher average sales over the previous three halves, and 2) there was a high year-over-year growth in usage of these services in the first half of 2022. Based on our analysis, sellers that use promotion services were able to expand their customer base (in terms of both gender and age) at an approximately 6.3x greater rate than that of sellers who do not use these services.
- In terms of customer expansion, sellers who use these promotional services experienced a slightly higher percentage increase in female customers than male customers. They also saw the largest increase in customers in their 40s, followed by those in their 50s and 30s. These results were statistically significant ($p < 0.05$).
- Based on the average sales growth rate from the first half of 2021 to the first half of 2022, we can confirm that the use of promotional services has a positive impact on customer expansion.

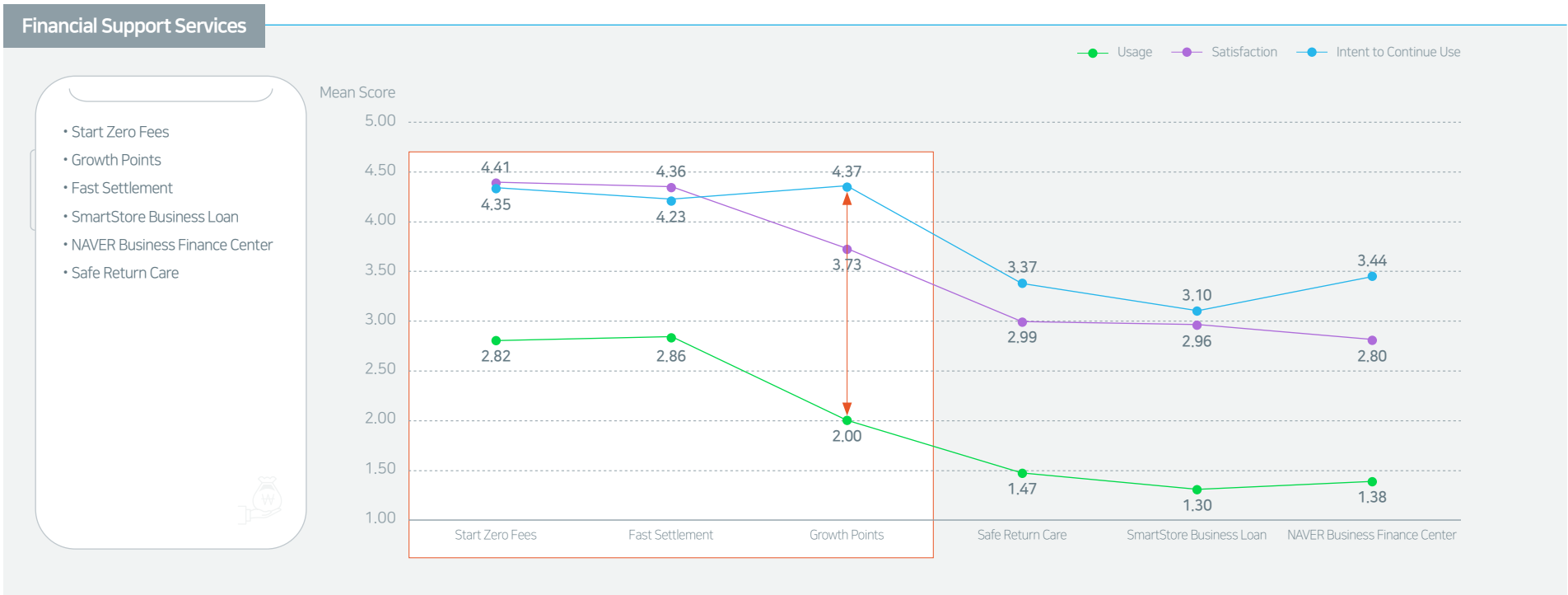


02. Seller Support Service Usage Data and Analysis

1-2) Analysis by Service Type (Financial Support Services)

① Usage, Satisfaction, Intent to Continue Use

- All 6 financial support services show similar trends in sellers' usage, satisfaction, and intent to continue use. Sellers most often used and were most satisfied with Fast Settlement and Start Zero Fees, followed by Growth Points.
- In particular, Fast Settlement and Start Zero Fees were the only two services for which sellers' intent to continue use was higher than their satisfaction rate.
- Furthermore, the satisfaction-to-usage rate and intent to continue use, relative to usage, were highest for Growth Points out of all 6 financial support services. We can expect usage to increase with additional promotions.

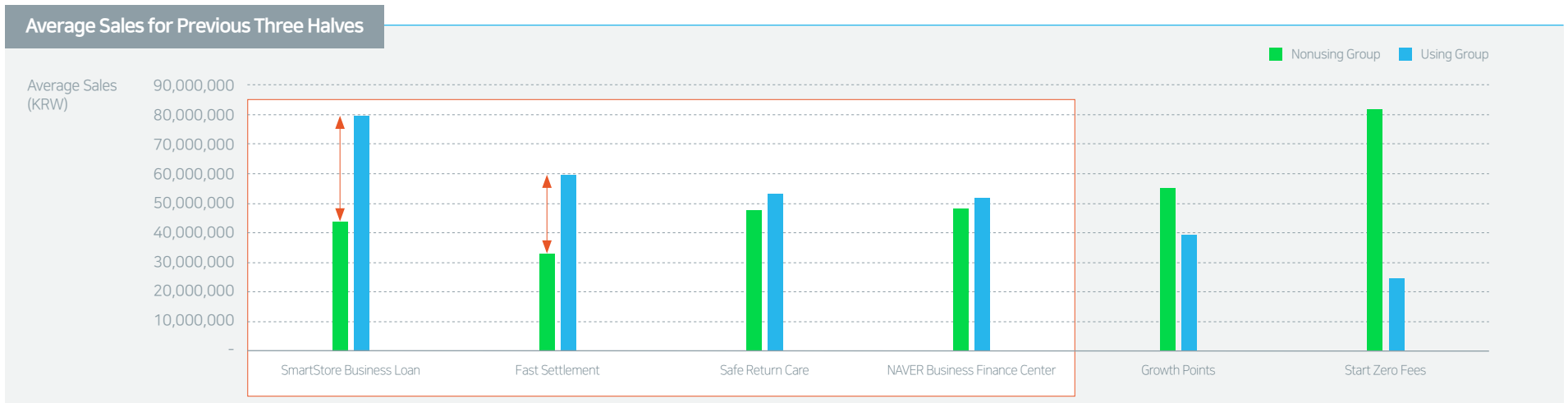


02. Seller Support Service Usage Data and Analysis

1-2) Analysis by Service Type (Financial Support Services)

② Effect on Sales Performance

- For each support service, we compared the average sales data of the using and nonusing seller groups, from the last three halves. For 4 out of the total 6 financial support services, the using group recorded higher average sales and approximately 41.6% additional sales growth compared to the nonusing group.
(Average sales data from H1 Y2022 were used for services that launched in H2 Y2021. These include Safe Return Care and NAVER Business Finance Center).
- Sellers that use SmartStore Business Loan, Fast Settlement, and Safe Return Care, in that order, recorded the highest average sales overall. The difference in average sales based on service use was also most pronounced for the above services, in the same order.
(Of the previous three halves, average sales for the first half of 2022 is relatively high, which may explain higher sales data regarding recently launched services).
- Since Growth Points and Start Zero Fees are limited to small early-stage businesses, we can assume that companies using these services will report relatively low revenue; hence the analysis indicates results contrary to that of other services.
- Many sellers simultaneously use multiple services, which limits the ability to analyze the impact of each service independently. Nonetheless, we can confirm that the use of financial support services overall has a positive impact on sales.



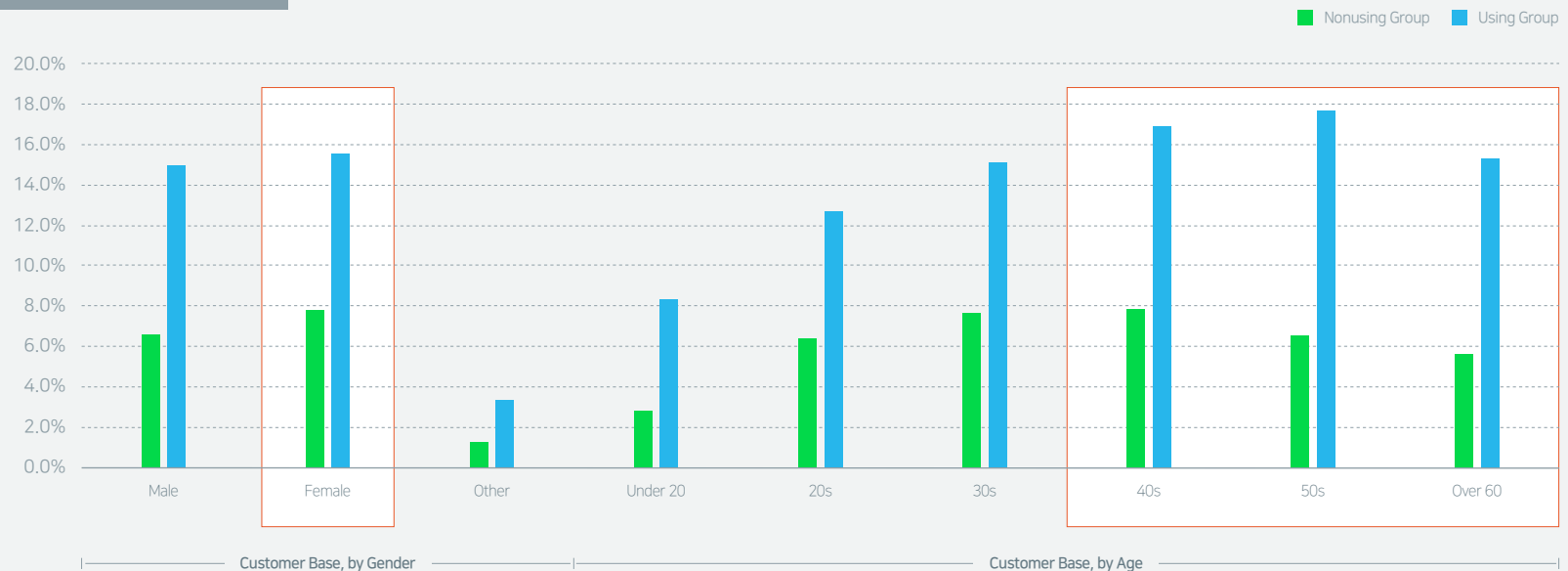
02. Seller Support Service Usage Data and Analysis

1-2) Analysis by Service Type (Financial Support Services)

③ (Fast Settlement) Effect on Customer Base

- We then examined the effect of Fast Settlement on customer expansion. We selected this service for the following reasons: 1) sellers using this service, compared to nonusing sellers, recorded higher average sales over the previous three halves, and 2) there was a high year-over-year growth in usage of this service in the first half of 2022. Based on our analysis, sellers who use Fast Settlement were able to expand their customer base (in terms of both gender and age) at an approximately 2.4x greater rate than that of sellers who do not use these services.
- In terms of customer expansion, sellers who use Fast Settlement acquired a slightly higher percentage increase in female customers than male customers. They also saw the largest increase in customers in their 50s, followed by those in their 40s and 60s.
- Although the results of this analysis are not statistically significant, we expect to find statistically significant results with a larger sample size.
- Based on the average sales growth rate from the first half of 2021 to the first half of 2022, we can confirm that the use of Fast Settlement has a positive impact on customer expansion.

Customer Expansion, by Gender and Age

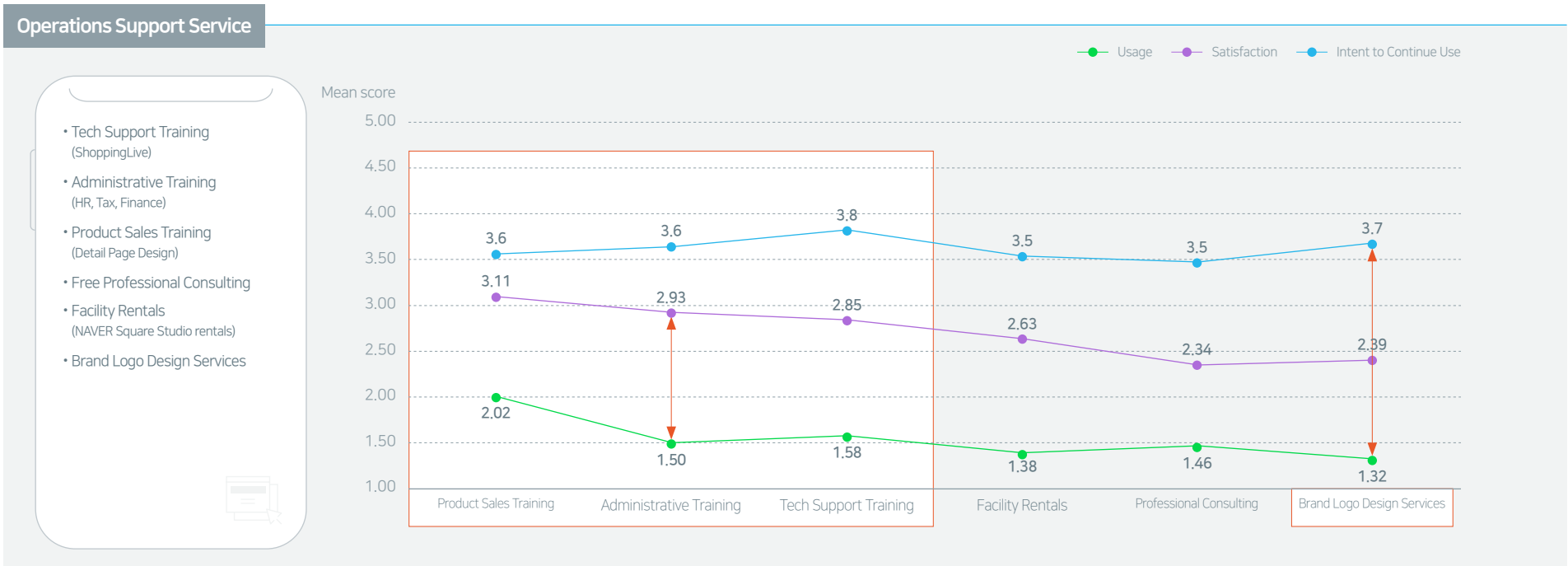


02. Seller Support Service Usage Data and Analysis

1-3) Analysis by Service Type (Operations Support Services)

① Usage, Satisfaction, Intent to Continue Use

- Among the 6 operations support services, training services have the highest usage and satisfaction rate. Sellers most likely used and were most satisfied with product sales training, followed by administrative training, then tech support training.
- In particular, the satisfaction-to-usage rate was highest for administrative training. We expect usage to increase along with additional promotions.
- In addition, sellers showed the strongest intent to continue using brand logo design services, which suggests that sellers expect the service to help establish their store's brand identity and product value.



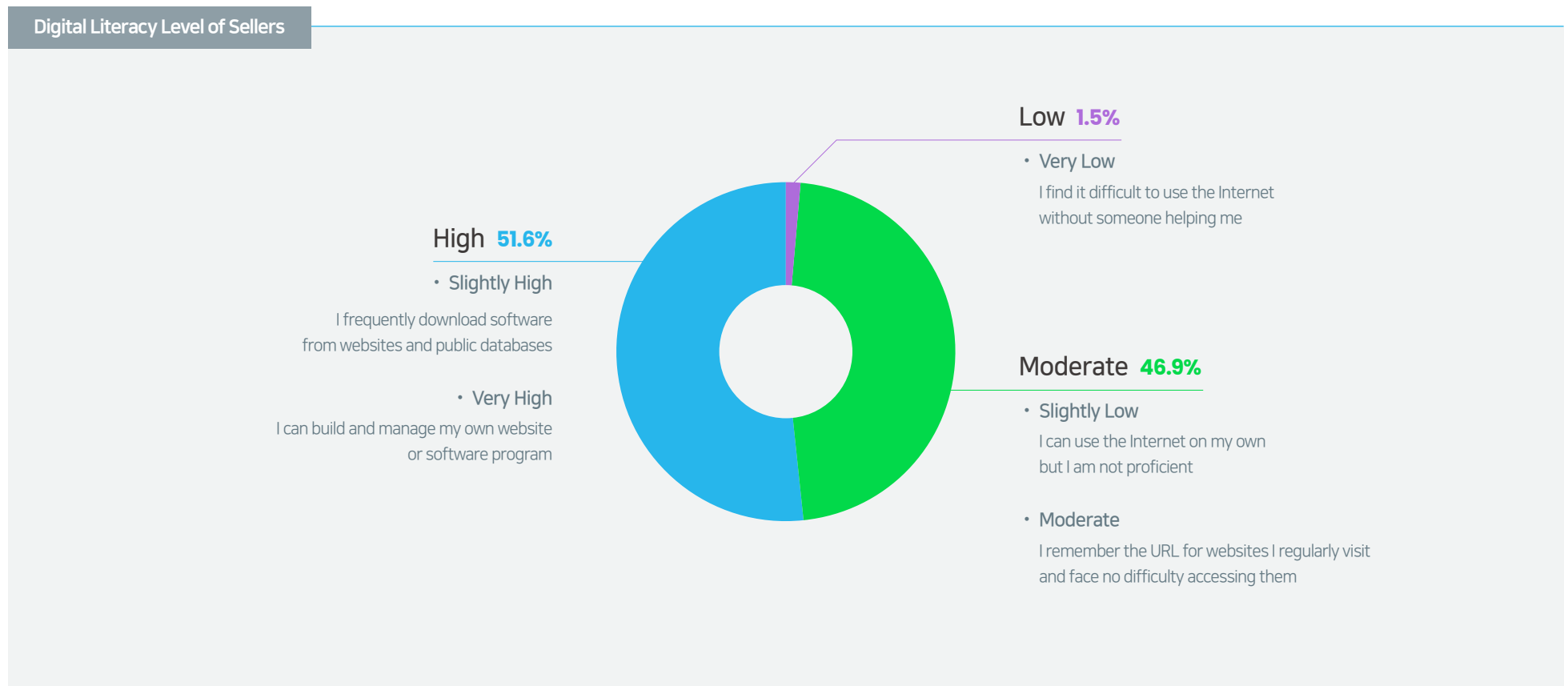
※ For operations support services, we did not analyze effects on sales growth and customer expansion due to limitations in mapping survey and secondary data.

02. Seller Support Service Usage Data and Analysis

2) Analysis by Seller's Digital Literacy Level

Digital Competence of Sellers

- Based on survey data, we grouped sellers according to their digital literacy level of low, moderate, or high.
- Sellers with advanced (or high-level) digital literacy made up the largest group, followed by those with moderate and low literacy.



02. Seller Support Service Usage Data and Analysis

2) Analysis by Seller's Digital Literacy Level

① Usage

We analyzed the top 6 most used services by each digital literacy level group.

- For all three groups (high, moderate, and low digital literacy), the top 3 most used services were store launch, customer management, and promotion—all three of which are classified as business support services.
- With the exception of the “low” digital literacy group, sellers selected Fast Settlement and Start Zero Fees, both financial support services, as the fourth or fifth most used service.
- In particular, many sellers in the “moderate” and “high” digital literacy groups use the data analytics tool (business support service), while those in the “low” digital literacy group show relatively stronger tendencies to use CLOVA similar product and related product recommendation services. These results illustrate that less digitally-skilled sellers are more likely to prefer AI-based services to other services over which they have more control.

	Top1	Top2	Top3	Top4	Top5	Top6
Low				 Financial Fast Settlement	 Business CLOVA Similar Product Recommendations	 Business CLOVA Related Product Recommendations
Moderate	 Business Store Launch	 Business Customer Management	 Business Promotion	 Financial Start Zero Fees	 Financial Fast Settlement	 Business Data Analytics Tool
High				 Financial Fast Settlement	 Financial Start Zero Fees	

02. Seller Support Service Usage Data and Analysis

2) Analysis by Seller's Digital Literacy Level

② Satisfaction

We analyzed the top 5 services with the highest satisfaction rates, according to each digital literacy level group.

- For all three groups (high, moderate, and low digital literacy), the top 2 services were Fast Settlement and Start Zero Fees, both classified as financial support services.
- All three groups ranked Growth Points and store launch either third or fourth, in terms of satisfaction.
- In particular, the "low" digital literacy group rated SmartStore Business Loan higher than other groups.

Although other factors cannot be ruled out completely, it appears that low digital literacy may be associated with difficulty in capital management.

	Top1	Top2	Top3	Top4	Top5
Low	 Financial Fast Settlement	 Financial Start Zero Fees	 Financial Growth Points	 Business Store Launch	 Financial SmartStore Business Loan
Moderate	 Financial Start Zero Fees	 Financial Fast Settlement	 Business Store Launch	 Financial Growth Points	 Business Customer Management
High	 Financial Fast Settlement	 Financial Start Zero Fees			

02. Seller Support Service Usage Data and Analysis

2) Analysis by Seller's Digital Literacy Level

③ Intent to Continue Use

For each digital literacy group, we analyzed the top 5 services for which sellers showed the strongest intent to continue use.

- All three "high," "moderate," and "low" digital literacy groups ranked Start Zero Fees and Fast Settlement (both financial support services) either first or second, in terms of intent to continue use.
- Growth Points (financial support service) took third place for all three groups.
- Our analysis illustrates that the lower the digital literacy, the stronger the intent to continue using operations support services. In particular, the "low" digital literacy group showed strong intent to continue using product sales training, followed by administrative training services. Based on these findings, we can conclude that less digitally skilled sellers have a greater tendency to use educational resources.

	Top1	Top2	Top3	Top4	Top5
Low	 Financial Start Zero Fees	 Financial Fast Settlement		 Operations Product Sales Training	 Operations Administrative Training
Moderate			 Financial Growth Points		 Operations Product Sales Training
High	 Financial Fast Settlement	 Financial Start Zero Fees		 Business Store Launch	 Business Customer Management



03.

In-depth Interview

03. In-depth Interview

1) Overview

Business Profile

Info. Type	Myeongjakchimhyanghwan	Dasaeknongjang	Silverfish	Nadan Shop	Mama Step
Years in Business	Less than 3 months	1-2 years	1-2 years	5+ years	2-5 years
Headquarters	Uiwang, Gyeonggi	Sinan, Cheonnam	Chulwon, Gangwon	Incheon	Seoul
Category of Registration	Food, Household & Health	Food	Sports & Outdoor	Fashion Apparel & Accessories	Baby & Family Care
Main Products	Traditional Korean Medicine (agarwood)	Sea salt, spinach, honey sweet potato, squash, butterbur, and other seasonal produce	Surfboards	Scarves and other fashion accessories	Stuffed animals and other baby products
Target Customer	Men and women in 30-60s	Women in 40-50s	Men and women in 20-40s	Women in 30-40s	Women in 30s, pregnant women
Physical Store	None (Planning to open in the future)	None	None (previously operated offline, planning to open in the future)	Currently open (in nearby commercial district)	None

Click the store icon to go to the website of each store

03. In-depth Interview

2) Detailed Response

① Reason for Joining SmartStore and Multi-homing Status

Reasons for Joining SmartStore

- High chances of attracting new customers, especially when using NAVER Blog simultaneously for advertising and customer management
- Low operating fees, compared to other online marketplaces, which eases the burden of early stage business expenses
- Greatly satisfied with convenient store registration and detail page design

Multihoming Status

- For most sellers, SmartStore was the first e-commerce platform they joined and currently is the highest revenue-generating channel
- Most sellers start off on NAVER SmartStore to establish a customer base, after which they plan to expand to different online channels

I chose SmartStore because of its user base, from which I can acquire potential customers. It also offers convenient product search and the lowest fee rate. I also find it helpful to be able to check how users, according to their age, access time, and query, discover and visit my store.



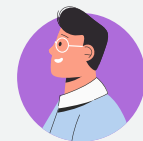
Myeongjak chimhyanghwan
(Health Products)



Mama Step
(Baby & Family Care)

Not only is SmartStore easy to launch but it also offers the most affordable fees—which is why SmartStore is the most compatible platform for SMEs. Customers can easily find product reviews, while sellers can conveniently advertise and manage their customer service via NAVER Blog.

I did not hesitate to join SmartStore after hearing about its easy registration and low fees. There seem to be more customers that find my store through search compared to other social media services or websites. I was also well-acustomed to the platform, which helped immensely when first launching the store.



Silverfish
(Sports & Outdoor)

03. In-depth Interview

2) Detailed Response

②-1 Benefits of Business Support Services

<p>Store Launch (Registration, Product Listing)</p>	<ul style="list-style-type: none"> Sellers found SmartStore easy to launch thanks to its informative tutorials and tips. They also cited the image/video upload system's high stability and compatibility, which helped them create detail pages more conveniently.
<p>Customer Management (NAVER TalkTalk)</p>	<ul style="list-style-type: none"> Sellers use TalkTalk to manage customers by communicating with them in real-time, in addition to handling customer inquiries. Sellers still found the service useful for acquiring and managing potential customers, even when an inquiry did not lead to an actual purchase.
<p>Promotion (Wishlist, Events)</p>	<ul style="list-style-type: none"> Sellers described SmartStore services to be convenient for organizing various discount events. Sellers mentioned they noticed an increase in customer trust as they gained more product reviews after holding a review reward event.
<p>Data Analytics Tool (BizAdvisor)</p>	<ul style="list-style-type: none"> Sellers stated they use the real-time data on visitor's traffic source, age, search query to better operate their store.
<p>Marketing (Special Campaigns, "One Plus Deal")</p>	<ul style="list-style-type: none"> Sellers actively utilized special campaigns and "One Plus Deals" (buy one, get one free) to increase their product exposure and expand customer acquisition channels.
<p>Commerce Tools (ShoppingLive)</p>	<ul style="list-style-type: none"> Though most sellers responded that they had never tried live commerce because they found it challenging, these sellers also said they intended on using it as a new opportunity to showcase their product in the future.

Unlike other online websites, I can easily upload a gif when **listing a product on SmartStore**. It does not require a separate html code or alternate program. All I need to do to upload an image is drag and drop the file, which is quite convenient. I can also re-size the image without error.



Myeongjak chimhyanghwan
(Health Products)



Silverfish
(Sports & Outdoor)

In addition to providing real-time support and resolving customer inquiries through **NAVER TalkTalk**, we also analyzed features of our most popular items for future product development.



Nadan Shop
(Fashion Accessories)

I always have **BizAdvisor** on when I am working. Based on real-time traffic and traffic source data, I sometimes edit my product keywords.



Myeongjak chimhyanghwan
(Health Products)

I look forward to starting a **"One Plus Deal"** campaign the most. I can choose to package either two of the same product or two different products as a buy-one-get-one-free deal. Regardless, these products may appear higher up on search results, since "One Plus Deal" products are showcased separately. In addition, some customers particularly look for these kinds of package deals, which is why I think it would be good to create a buy-one-get-one-free deal with our products as well.

03. In-depth Interview

2) Detailed Response

②-2 Benefits of Financial Support Services

Fast Settlement	<ul style="list-style-type: none"> Sellers were greatly satisfied with fast payout speed, noting it helped with cash flow.
Start Zero Fees	<ul style="list-style-type: none"> Sellers noted Start Zero Fees helped them overcome early stage funding difficulties.
Growth Points	<ul style="list-style-type: none"> Sellers used Growth Points to take training courses which helped them better operate their store. Sellers also awarded top reviewers with Growth Points, which improved review quality and helped with advertising.
Safe Return Care	<ul style="list-style-type: none"> Sellers said Safe Return Care helped assuage risks customers perceive when buying unfamiliar products which ultimately made their products more accessible.

I had the chance to use the previous Quick Escrow service, which was quite similar to **Fast Settlement**. Compared to its predecessor, Fast Settlement does not go through an intermediary. Instead, NAVER directly manages the payment system, simplifying the payment process and making the service more trustworthy.



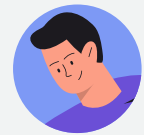
Nadan Shop
(Fashion Accessories)



Silverfish
(Sports & Outdoor)

I first started selling on SmartStore without registering as a business, so I was ineligible to receive **Start Zero Fees**. If I compare my business then and now, currently receiving these benefits, Start Zero Fees have been really helpful in securing funding for my business.

As a special event, I re-offered the **credits** I received from completing the training courses on NAVER Business School to customers that wrote high-rated reviews. This way I was able to garner more reviews, especially high quality reviews, and take in diverse customer feedback. I am very satisfied with the wide range of ways I can use these credit points.



Dasaeknongjang
(Food)



Mama Step
(Baby & Family Care)

I currently use **Safe Return Care** for products with relatively few orders. Customers tend to hesitate purchasing items with few reviews, especially when it comes to baby care products. Nonetheless, Safe Return Care helps alleviate this problem by waiving return fees.

03. In-depth Interview

2) Detailed Response

②-3 Benefits of Operations Support Services

Product Sales Training

- To stay competitive, sellers took into account the diverse SmartStore success cases and up-to-date business trends covered in the training course.
- Sellers realized an increase in sales by applying what they learned from the training course.

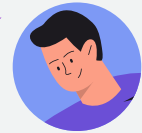
Administrative Training

- Most sellers expressed high interest in and received practical help through tax-related training.

Brand Logo Design Services

- Sellers were able to create a polished brand logo with the help of a professional designer.
- Sellers improved their brand value by building a unique image for their store.
- Sellers saved the time and money they would have spent on brand logo design.

After taking a **course on product sales**, I applied what I learned from training and made changes to our product detail page. Once we had a more effective detail page, more orders started coming in, and our product was ranked higher in search results as well. Recently, I took a basic course on advertising services at NAVER Square Gwangju. I immediately started advertising the next day, which resulted in an increase in sales. Typically, we used to receive one or two orders a day, but now, we get up to six orders on a daily basis. Overall, the number of orders continues to increase.



Dasaeknongjang
(Food)



Mama Step
(Baby & Family Care)

Though there are more options now, there were barely any consulting services available awhile back. As a one-person shop, I handle everything myself, which is why I tend to take a variety of training courses whenever I need help with areas such as customer management. In particular, the **tax-related courses (administrative training)** were really helpful.

I really appreciate the **brand logo design service**. Although everyone stressed the importance of having a logo, we, to be honest, had to prioritize buying delivery boxes since we had no capital. I expected it to take five or six more years to have a brand logo, but we were fortunately selected to receive the brand logo design service. The designers contacted our company to discuss our brand concept, and then sent us a few options from which we were able to choose the design we liked the most. They also sent us stickers and other packaging material, which we still very much use today.



Dasaeknongjang
(Food)

03. In-depth Interview

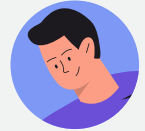
2) Detailed Response

③ Business Experience in Each Business Life Cycle Phase

	Launch Phase	Growth Phase	Maturity Phase	Decline Phase
Key Criteria for Business Phase	<ul style="list-style-type: none"> All five businesses noted business experience, change in sales, and product diversity. When defining the "Decline" phase, businesses mentioned challenges such as "lack of IT skills" and "increased competition" as well as "decline in sales." 			
Major Challenges	<ul style="list-style-type: none"> Constructing a marketing strategy Creating detail pages 	<ul style="list-style-type: none"> Securing inventory and managing customers when orders increase Managing funds due to lack of tax-related expertise 	<ul style="list-style-type: none"> Risks of business failure due to intense competition 	
Lessons Learned	<ul style="list-style-type: none"> Heed attention to acquiring customers through search Use promotional campaigns to increase first-time purchase rates Take product sales training courses and apply them one by one Do not be a perfectionist when creating the first page 	<ul style="list-style-type: none"> Manage customer data by actively responding to reviews and running a blog Take financial/administrative training courses in advance to familiarize yourself with tax knowledge 	<ul style="list-style-type: none"> Develop new products to expand customer base 	

During the Launch Phase, rather than trying to absorb all the training course material, it is important to apply what you can one step at a time. This then eventually accumulates and leads to the development of the store.

Dasaeknongjang (Food)



Silverfish (Sports & Outdoor)

In the beginning (Launch Phase), I was too agitated about creating the perfect product page. This was my mistake. Even if you think the product design or description is not perfect, you should first list your product to see how customers respond and then consider their feedback to modify the product page.

In the Growth Phase, as you accumulate enough information about your store through blogging and active review management, you increasingly receive more inquiries about your products. Even if they do not directly lead to purchases, they increase your chances of acquiring new customers. In addition, by offering sufficient information about the product, you can increase your customers' trust.



Dasaeknongjang (Food)



Mama Step (Baby & Family Care)

As the business moves on to the Growth Phase, revenue increases along with taxes, which can be quite a sum. Though learning about taxes can be challenging, I thought it was important for me to take ownership of my business and learn the necessary skills. This is why I started taking NAVER's tax-related courses early on during the Launch Phase, and it took some time to fully internalize these skills.

NAVER