



Phablet Phenom: Samsung Galaxy Note Pens Best-Seller

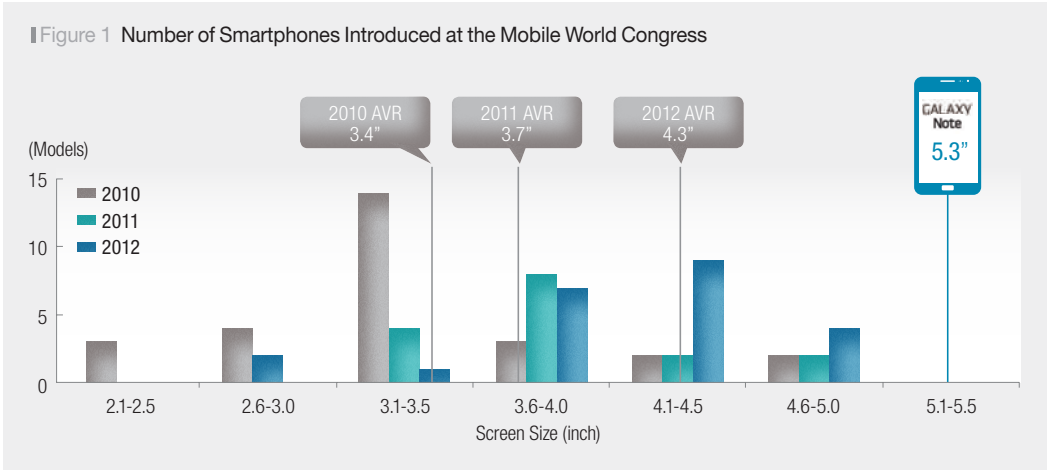
KIM Byeong-Wan

FAR BEYOND EXPECTATIONS

The rollout of the Samsung Galaxy Note in October 2011 prompted more than a few perplexed looks. The screen with a diagonal width of 5.3-inches made it too big to be considered a standard smartphone but also too small to be called a tablet. This made the Galaxy Note, a hybrid, or “phablet” following in the footsteps of Dell’s Streak, which failed to inspire

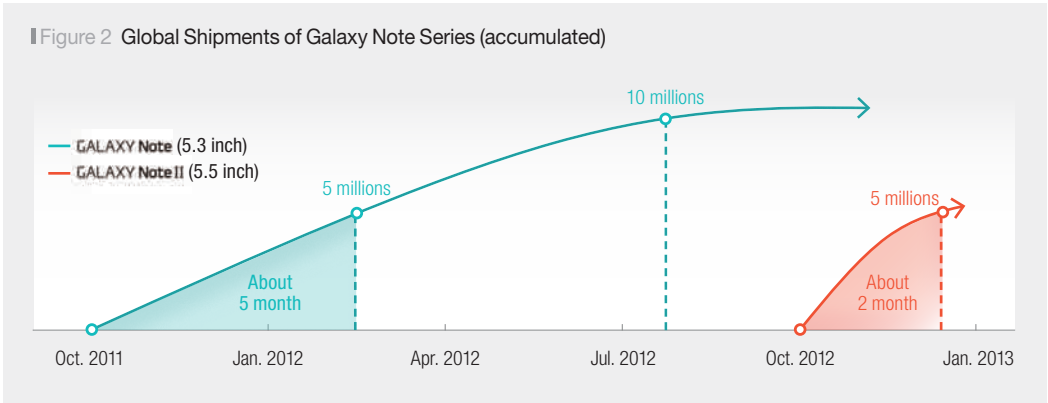
much enthusiasm a year earlier. Also, the Galaxy Note sported a stylus pen to operate its big screen, a seemingly obsolete tool when lined up against finger touch alternatives. Thus, market analysts dialed down the chances of the Galaxy Note becoming a hit beyond a narrow range of consumers, a view that Samsung Electronics did not share.

However, the Galaxy Note instantly dispelled the



skepticism. Five million units were sold around the world in its initial five months and sales reached 10 million in the second half of 2012, when the Galaxy Note 2 was unveiled. Putting an exclamation mark on the original size, the second version featured an even bigger diagonal screen, at 5.5 inches. Riding the buzz from the maiden version, Galaxy Note 2 chalked up five million sales in two months, double the speed of its predecessor. Moreover, it became one of the candidates for the “Best Smartphone” in Global Mobile Awards honored by the Mobile World Congress (MWC) 2013. Thus, what seemingly started as a device with a niche market became a mainstream option.

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Small Changes, Bigger Success

Galaxy Note 2 was released a year after the original and sold twice as fast. The hardware was upgraded with a 1.6GHz quad-core Exynos and 2GB RAM. Also, Android 4.1 (Jelly Bean) was chosen for the operating system (OS), placing Note 2 ahead of rivals. Of course, such processors are the norm among high-end smartphones. They do not fully explain the stellar sales of Galaxy Note 2. The essence of its success, in short, was maximizing the phablet’s strengths and minimizing its shortcomings.

Table 1 Comparison between Galaxy Note I and II

	Galaxy Note I	Galaxy Note II
SoC	1.4GHz dual-core Exynos	1.6GHz quad-core Exynos
RAM	1GB	2GB
OS	Android 2.3 (upgraded to 4.0)	Android 4.1
Screen Size	5.3"	5.5"
Dimensions	146.8/82.9/9.7 mm	151.1/80.5/9.4 mm
Battery	2,500 mAh (9.25 Wh)	3,100 mAh (11.78 Wh)

Note: Features can vary by nations.

The design was changed to make the Note 2 easier to hold. This addressed the main disadvantage of a smartphone with a diagonal 5-inch screen. The width and depth were trimmed by 2.4mm and 0.3mm respectively, while the height was increased by 4.2mm. Whereas the original Galaxy Note was nearly rectangular, the new version had a linear design similar to the Galaxy S3, Samsung Electronics’ flagship smartphone. As a result, the Galaxy Note 2 took on a slimmer appearance. With the adjustment of some millimeters, potential buyers felt the Galaxy Note was not unwieldy, as they assumed.

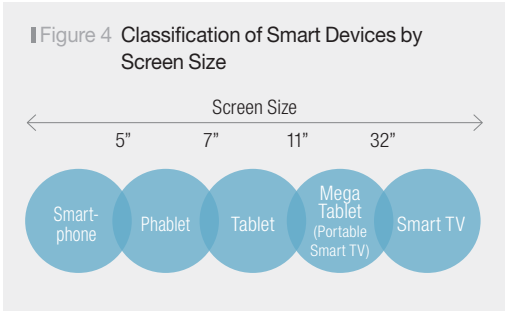
In addition, users could customize the interface depending on the hand they mostly use. Normally, people use a thumb to make a phone call with one hand or to type. When the screen is large, the thumb cannot reach buttons at the far end of the screen. To compensate, the Note 2 has “one-handed mode” which pulls keypads to one side (to the right for right-handers and to the left for left-handers).

The innovation of the stylus, or “S Pen” also contributed to the popularity. It is flatter and longer, making it easier to hold and pull out and reattach. Also, it improves user experience (UX). In particular, its functions such as Air View, Easy Clip, Handwriting and Photo Note changed the perception of skeptical consumers.

Lastly, the battery life was extended. A phablet consumes more power than other smartphones. The Galaxy Note’s short battery life was another major weakness that had to be resolved. The capacity for Note 2 was increased to 3,100mAh from its previous model of 2,500mAh. Based on the 4G communications devices of AT&T, standby time is up to 300 hours and Internet use time is up to 9.5 hours. This is enough for typical usage in a day.

Figure 3 One-handed Mode on the Note II (for right-handers)





RESUSCITATING A CATEGORY

Blurring the boundaries of smartphones, tablets and smart televisions, the phablet is loosely regarded as a device with a diagonal width of five to seven inches and best defined as “a mobile device with the largest screen among those that can be carried in a pants pocket.”

The unexpected popularity of Galaxy Note not only upended doomsday predictions about large-screen phones, it elevated the phablet as a serious alternative to a standard-size smartphone or tablet. Entering 2013, market research firms such as ABI Research, Barclays Capital and Strategic Analytics predicted that phablets would significantly reshape the market. Analysts’ sales estimates of phablets vary because they do not agree on which devices belong in the phablet category. However, they all agree that phablets will be

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Table 2 Phablet Estimates (Millions of Units)			
	Definition	2012	2015
ABI Research	4.6-5.5 inches	10x more than 2011	208
Barclays Capital	All crossover mobile devices (4-8 inches).	84	402
IHS iSuppli	5 inches or larger	25.6	146 (in 2016)
Strategic Analysis	5-7 inches	17	53

Source: Engadget <<http://www.engadget.com/2012/05/23/phablets-shipments-to-hit-208-million-a-year-in-2015/>>; BARRON'S <<http://blogs.barrons.com/techtraderdaily/2013/01/02/samsung-apple-to-battle-for-phablet-market-says-barclays/>>; Los Angeles Times <<http://www.latimes.com/business/technology/la-fi-tn-phablet-shipments-double-2013-20130116,0,6706144.story>>; Digieco <http://www.digieco.co.kr/KTFront/dataroom/dataroom_weekly_view.action?board_id=weekly&board_seq=7502&gubun=aa>

firmly entrenched among smartphone and tablet categories. At a time when turbo charged growth of smartphones is slowing in many nations, tablets can become a catalyst that ignites another spurt.

SUCCESS FORMULA

Technological advancement, Samsung's global branding and operations and unique marketing led to the resuscitation of the phablet. The success factors addressed consumer behavior, product strategy, industry dynamics and external content of the phablet market. (See Figure 5)

Success Factor #1: Diffusing Mobile Media Use

When the use of mobile phones was limited to calls and short text messages, users thought the smaller the better. This held true for 2G mobile phones and the early models of 3G mobile phones. That changed completely with data communication technology developments and digital content. According to a recent sur-

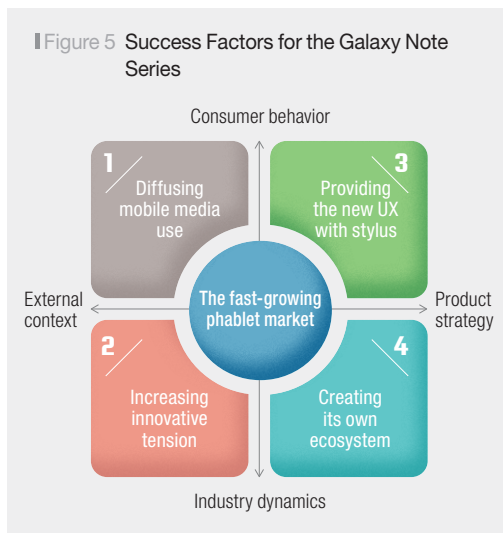
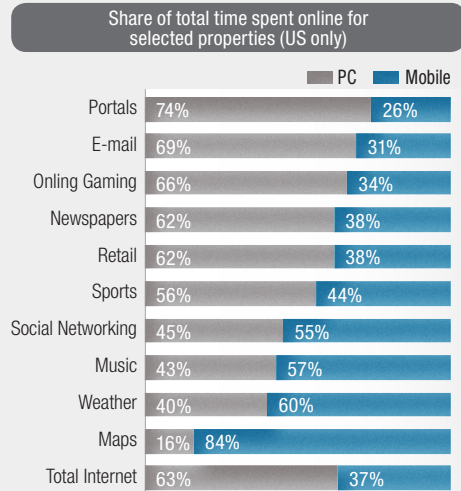


Figure 6 Typical Activity of Mobile Device Owners



Source: comScore (2013). "2013 Mobile Future in Focus"; Cisco (2013). "Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2012-2017"

vey, mobile devices are replacing computers as a platform for online activities (see Figure 6). Moreover, the amount of video content, which accounts for a large share of mobile content, will soar even more to 7,418 petabytes by 2017, 16 times of that of 2012. Increasingly, mobile phones are used for reading, watching media channels and controlling, instead of just listening and speaking. Accordingly, a large screen is easier to navigate and helps boost concentration and enjoyment when playing games or watching videos all the while causing less eye strain.

Success Factor #2: Increasing Innovative Tension

Since 2010, the smartphone industry has expanded at breakneck speed, raising doubts whether Moore's Law, which predicts a doubling of computer hardware every 18 months, is applicable in this decade. Smartphones now are equipped with central processing units and semiconduc-

tors that were never considered outside of computers until recently. The quest for hardware improvements is unceasing as manufacturers look for an edge over rivals in offering users the most powerful and efficient system at their price levels.

However, incremental innovation of hardware does not always guarantee market success. In the initial stage of the smartphone market, hardware was enough to attract consumers. Early adopters admired and were intrigued at how smartphones compared to computers. Now, smartphones are more commoditized and sales growth is not as spectacular. Hardware performance exceeds the level needed by average consumers, so they are less impressed by hardware improvements, which are more and more incremental. In other words, while the cost to develop hardware does not decline, consumers have become more insensitive to differences among smartphone models. Thus, the market is seeing decreasing returns to scale.

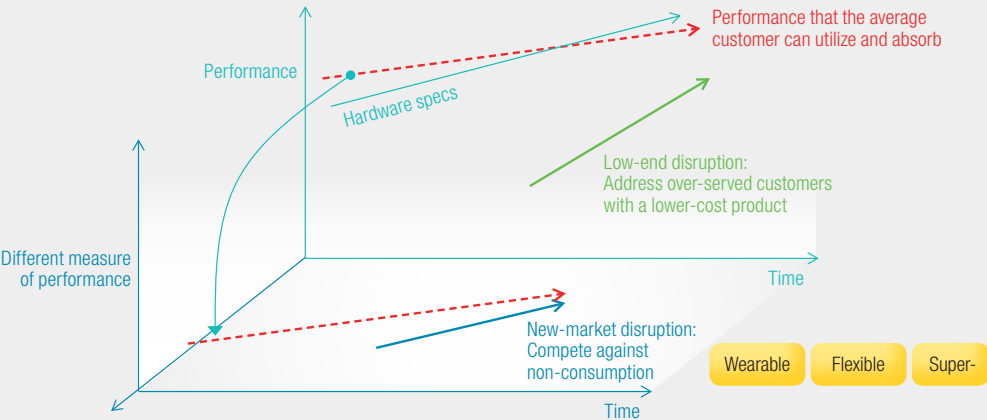
Against this backdrop, innovative tension is rising. Instead of incremental hardware improvements, “disruptive innovation” will more likely

dictate sales. For example, low-end disruption may target customers who do not need sophisticated performance. This is seen in Chinese vendors peddling low-priced smartphones. A more serious threat comes from “new-market disruption” which takes over customers with brand new features. The keywords of new-market disruption recently cited in the smartphone industry are “flexible,” “wearable” and “super- (phone/ tablet).” The competition becomes entirely different. It is not about hardware anymore, but it is about new UX. Among the three keywords, “super-phone” or “super-tablet” is relatively easier to realize. At a time when customers want something new, the Galaxy Note Series effectively represented a new category of tablet.

Success Factor #3:
Providing the New UX with Stylus

Around the release of Galaxy Note, consumers regarded a stylus to be an unnecessary and old-fashioned peripheral. Indeed, devices equipped with a stylus such as personal digital assistants and por-

Figure 7 Increasing Innovation Tension in the Smartphone Industry



Note: This graph is adapted from the “Christensen Path.”
Source: Magnus Lindqvist & Shuan Sadre Ghazi (2005). “DISRUPT OR BECOME DISRUPTED: A Framework to Identify and Evaluate Disruptive Innovations.”

table game consoles did not offer special UX. The stylus seemed to be on the path to extinction after the multi-touch interface was commercialized. However, S Pen broke out of the mode. Instead of

just playing the role of fingers, it offered new UX. In particular, built-in functions of Note such as Air View, Easy Clip and Photo Note changed the skeptical customer perception of a stylus. Note 2 responds immediately with a Pop-up Note when the pen is pulled out, so that users can take notes easily. “The stylus was a feature that people never knew they needed so much,” Bernstein Research analyst Mark Newman said. “Moreover, the company’s ability to resurrect a long-forgotten technology and revamp it to appeal to modern smartphone consumers indicates a willingness to embrace new input methods and paradigms.”¹

Figure 8 Built-in Functions for the Galaxy Note S Pen

Air View

The Note II recognizes when an S Pen is hovering over the screen. A pop-up window then appears to allow content to be previewed.



Easy Clip

Users can easily outline and crop any content on the screen in any shape to save, share or paste.



Photo Note

Users can write information on the back of photos.



Hand Writing

Writing a note or email can be done by hand, giving messages a more personal feel.



Quick Command

Commands can be accessed by holding down the button of the S Pen and swiping upward.



S Memo with Various Functions

Pop-up note, audio recording, formula recognition, etc.



Source: Website of Samsung Electronics; Brian Klug (2012). <<http://www.anandtech.com/print/6386>>

Success Factor #4: Creating Its Own Ecosystem

The Galaxy Note Series also became a best seller through an ecosystem that Samsung Electronics created for the S Pen. While other vendors had defined the stylus simply as an additional factor, Samsung started distributing its S Pen Software Development Kit (SDK) in November 2011. The goal was to encourage third party developers to register their apps for S Pen in the marketplace and customers to download and use them. Instead of seeking ways to use the S Pen alone, Samsung turned to its partners and customers. In this environment, more creative ideas were produced, which ultimately boosted sales.

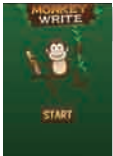
In February 2012, Samsung hosted the Galaxy Note S Pen App Challenge to encourage participation of individual developers in the ecosystem. With prize money totaling \$200,000, the contest generated enthusiastic participation. The strategy is increasingly popular in the market. Not only individual developers, but also large software developers started using the S Pen SDK. InformationWeek also waded in, selecting 10 apps, in-

¹ MarketWatch (May 4, 2012). “Why Samsung’s big phone is a big seller” <<http://blogs.marketwatch.com/thetell/2012/05/04/why-samsung%E2%80%99s-big-phone-is-a-big-seller/>>

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cluding Flipboard and Adobe Reader,² which are more convenient to use with the S Pen.

Figure 9 Galaxy Note S Pen App Challenge Winners

	Monkey Write Best Overall App: Grand Prize \$100,000 A game that makes Chinese fun to learn
	Maze Racer Best Overall App: Second Prize \$50,000 A simple maze inspired game where people draw a line from start to finish
	Drawing Pad Best Overall App: Third Prize \$25,000 A mobile art studio with a unique user interface that puts the fun into creating art
	SignDoc Mobile Popular Choice \$2,000 + a Galaxy Note A professional app for capturing user handwritten signatures using pressure sensitivity of the S Pen
Honorable Mention \$2,000 + a Galaxy Note bConnected @ Ball State for Galaxy Note (Other) Authograph (Social) iAnatomy (Education) Colors For Galaxy Note (Entertainment) Makeup Paint (Lifestyle) Speed Draw (Games) Papyrus (Productivity) PlayCall (Sports) Map Note (Travel) FlipaClip (Media)	

Source: <http://galaxynotespenchallenge.com/>

² InformationWeek (August 30, 2012). “10 Best Apps for Samsung Galaxy Notes” < <http://www.informationweek.com/hardware/handheld/10-best-apps-for-samsung-galaxy-notes/240006481?pgno=1>>

Table 3 Specifications of Major Vendors' Phablets (5-inch +) Released in 2013

Vendor	Model	Screen size	Processor	OS
Samsung	Galaxy Note III	5.9"	1.6GHz quad-core	Jelly Bean
Huawei	Ascend Mate	6.1"	1.5GHz quad-core	Jelly Bean
LG	Optimus G Pro	5.5"	1.7GHz quad-core	Jelly Bean
ZTE	Grand S	5.0"	1.7GHz quad-core	Jelly Bean
Sony	Experia Z	5.0"	1.5GHz quad-core	Jelly Bean
Pantech	Vega N06	5.9"	1.5GHz quad-core	Jelly Bean
Lenovo	Idea Phone K900	5.5"	2.0GHz dual-core	Jelly Bean

Note: Specifications of the Galaxy Note III are forecasts of SamMobile.com.
Source: Strabase (2013). "The phablet market heralds rapid growth: What does the expansion of smartphones mean and where is the competition headed?"; IT Today (February 19, 2013). "Forecast for MWC 2013: What mobile devices are set to be released?"; Sisa Focus (March 2, 2013). "Lenovo volunteers to lead promotion of Intel's Atom with its IdeaPhone K900"; The Korea Times (January 31, 2013). "Pantech wide opens the market for 'mobile phones for visual effects'."

CUTTHROAT COMPETITION IN 2013

Since most mobile phone makers have jumped into the phablet market, competition is expected to intensify further. Strategy Analytics executive director Neil Mawston expects 2013 to be “the Year of the Phablet.”³ Chinese mobile phone makers especially are expected to step up with a slew of phablets, some of which were displayed at the Consumer Electronic Show and Mobile World Congress early in the year. If the Chinese producers release high quality phablets at low prices, competition will ratchet up to extreme levels. In fact, production costs for high-end models are expected to steadily fall. Barclays Analyst Dale Gai predicted that the total cost of an upper-end phablet, its bill of materials, will likely fall to \$323 in 2013 and will halve within two years.

Still, despite all the optimism over phablets, there are lingering questions about their longevity as a sustainable mobile device category. Certainly the many types of phablets will slice into the demand for 4 to 5-inch smartphones and 7- to 8-inch tab-

lets. But smartphone screens themselves are getting bigger and packing more resolution. Will those trends eventually crowd out phablets?

Unless they offer innovative UX, phablets will likely end up being one of many smartphones that simply have a large screen. Therefore, there is mounting pressure on Samsung Electronics. The conventional view is that the company has proved its ability to transform itself from a fast follower into a market creator with its phablets. Now that it has proven the possibilities of large screens and a stylus, it must show even more attractive “things to enjoy.” 

Translation: Yi Chiwon

Keywords

Phablet, smartphone, tablet PC, Galaxy Note II, Samsung Electronics, S-Pen, “innovative tension”

³ BGR Media (January 7, 2013). “Why 2013 could be the Year of the Phablet” <<http://bgr.com/2013/01/07/2013-phablet-market-growth-284509/>>

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