

## **WSSFC 2022**

# **Technology Track – Session 8**

# **Digital Notetaking**

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## About the Presenter...

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## Why digital note taking:

Taking notes is an integral part of an attorney's job, whether taking notes in a meeting, consultation with a client or for research. Depending on the situation, typing notes on a keyboard may be the better method, while in other situations, handwriting notes is less intrusive and may result in more retention. However, when interacting with others, handwriting notes is generally less obtrusive than typing. Think about using your notebook computer or tablet during a meeting, the screen is upright in front of you and your hands are using the keypad. Anyone speaking to you is watching you with the screen in front of you like a shield and may also hear the constant typing of the keys. This can be distracting. It can also raise the appearance that you are more focused on your typing than what the other person is saying.

If you are working alone, this is not an issue and if you are doing research, the ability to copy and paste images and text into your notes can be a huge benefit. But handwriting your notes can also have issues: using a pen and paper, your notes are not immediately useable in any software program, cannot be shared without making photocopies and cannot be easily backed up.

Various studies and articles (discussed below) make the arguments that handwriting is natural for most of us and many people claim to focus better and have better retention when writing than typing. According to Handwriting vs. Typing: How to Choose the Best Method to Take Notes<sup>1</sup> from the Effectivology website

> In the case of taking notes during lectures, the main issue with typing is that people are more predisposed to engage in verbatim note-taking when they type, in comparison with when they write their notes by hand.

Several studies also claim that handwriting notes is more effective than typing and is better for memory retrieval. From the Frontiers in Behavioral Neuroscience website comes a research article titled: Paper Notebooks vs. Mobile Devices: Brain Activation Differences During Memory Retrieval<sup>2</sup>. The researchers concluded that writing resulted in better memory retention than typing. The Fast Company

<sup>1</sup> https://effectiviology.com/handwriting-vs-typing-how-to-take-notes/

<sup>&</sup>lt;sup>2</sup> https://www.frontiersin.org/articles/10.3389/fnbeh.2021.634158/full

& Inc. website provides a synopsis of the findings of this research article in its post: <u>Ditch the digital</u> notes: <u>Handwriting is way better for memorization and speed.</u><sup>3</sup>

A new study from the University of Tokyo concludes that writing with a stylus or typing on a touchscreen keyboard just isn't the same as handwriting. "Our take-home message is to use paper notebooks for information you need to learn or memorize," noted coauthor Kuniyoshi Sakai, a neuroscientist at the University of Tokyo.

Further research that handwriting is more effective than typing for note taking can be found in the study titled: The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking.<sup>4</sup> They key take away from the abstract for this study is:

We show that whereas taking more notes can be beneficial, laptop note takers' tendency to transcribe lectures verbatim rather than processing information and reframing it in their own words is detrimental to learning.

However, there is at least one study that finds to the contrary of these: <u>Don't Ditch the Laptop Just Yet:</u>

<u>A Direct Replication of Mueller and Oppenheimer's (2014) Study 1 Plus Mini Meta-Analyses Across Similar Studies.</u>

<u>5 According to this study's abstract, "Overall, results do not support the idea that longhand note taking improves immediate learning via better encoding of information."</u>

But an article on the Association for Psychological Science website, titled: <u>Don't Ditch the Laptop Just Yet: Replication Finds No Immediate Advantage to Writing Notes by Hand</u>. 6 points out that:

As in the original study, the researchers noted, students were not permitted to review their notes before taking the quiz. It is possible, therefore, that typing versus writing notes by hand could influence performance when students have time to study the notes they have taken, Urry and colleagues added.

<sup>&</sup>lt;sup>3</sup> https://www.fastcompany.com/90618464/ditch-the-digital-notes-handwriting-is-way-better-for-memorization-and-speed

<sup>&</sup>lt;sup>4</sup> https://journals.sagepub.com/doi/10.1177/0956797614524581

<sup>&</sup>lt;sup>5</sup> https://journals.sagepub.com/doi/10.1177/0956797620965541

<sup>&</sup>lt;sup>6</sup> https://www.psychologicalscience.org/observer/writing-notes

What this all means is that it is a personal choice; from a practical perspective, it is less obtrusive and less annoying to take handwritten notes during meetings and interviews than typing. So, what are your options for capturing your handwritten notes in a digital format today?

### Handwritten notes in the Digital Age

Until recently (think the last 5-10 years), there were not many good options for capturing your notes digitally so they could be put into other applications, easily backed up or shared. Between Y2K and approximately 2015, several companies created hybrid solutions that have managed to survive to today with varying levels of acceptance. The first of these were Smartpens.

#### SmartPens (and smart notebooks)

Smartpens are products that try to bridge the gap between the analog (paper) and digital (computer) worlds. Depending on the Smartpen selected, in addition to capturing your handwritten notes, they may also allow you to record audio along with your notes and then synchronize the two providing you with dual technologies. This allows you to easily find that snippet of audio that was actually said at the exact time you made a specific note. One example of a dual technology Smartpen is the Livescribe Echo 2 Smartpen and notebook (Image 1).

U



- Take notes and record audio using echo 2 & Livescribe smartpaper
- Capture your meetings or lectures with crisp clear sound



Image 1

Another dual technology smartpen is the Newyes SyncPen 2 (Image2). While Newyes sells you notebooks or notepads like Livescribe, Neweyes claims that there notebooks can be erased 500 times, so they can be reused.



Image 2



Image 3

The Neo Smartpen N2 (Image 3), does not capture audio, instead focusing on just taking notes. The Neo Smartpen N2 is the only one of these Smartpens that that gives you the choice to either a) purchase their notebooks, or b) print your own paper using templates they freely provide.

These Smartpens do require some compromise: they require special paper (usually in the form of notebooks) that for the most part have to be

purchased when it is full or no longer can be erased, a Smartpen to capture your text (and sometimes audio) that rely on the special paper, and the need to transfer from the note taking device to the computer, smartphone or tablet.

RocketBook takes a different approach by not using a Smartpen, instead, Rocket Book uses erasable notepads (Image 4) and planners that use Pilot Frixion pens and ink. You then scan the page using an app with your smartphone or tablet (Android or iOS) to convert it to digital format. Originally, you had to microwave the Rocket Book to erase it, but with the use of the Frixion ink, you can wipe it with a cloth and water and erase the page.

The RocketBook App integrates with other applications such as Evernote and Drobox to name a couple.



Image 4

RocketBook does provide free downloadable page templates that you can print and use, but they are not erasable <a href="https://bit.ly/3ATW0tC">https://bit.ly/3ATW0tC</a>).

The one thing that all of the above provide is the feel of writing with an actual pen on real paper. Unfortunately, getting all off that tech into a pen sized device results in a tradeoff: the Smarpens are largen than most standard pens and pencils, a lot larger. Many people find long term use of these larger Smartpens to be problematic due to comfort. Also, depending on your writing style, one Smartpen may be better at capturing your writing angle than another.

Unfortunately, with either a Smartpen or a RocketBook, you are still carrying multiple devices and getting your notes into a shareable, digital file still requires apps and integrations with other third-party products such as Dropbox, OneDrive, Evernote, etc.

The goal was and is to ditch all the paper notebooks, different devices and put all of them on one device that captures your notes in digital form while you are writing and are immediately available.

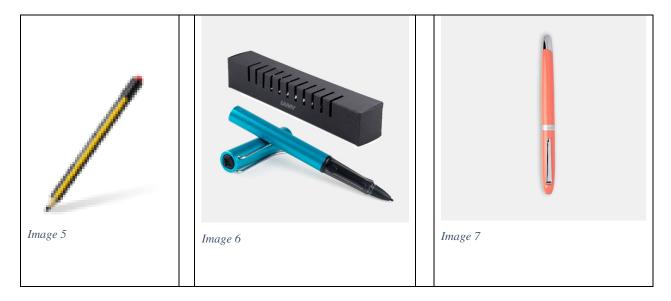
#### 2-in-1 notebooks, iPads and Android tablets

With the advent of products such as the iPad and Apple Pencil, Samsung Smartphones and tablets with their S Pens, 2-in-1 notebook computers that include a stylus or that can use a third-party stylus, with the ability to take handwritten notes (to at least some small degree) brought this goal closer to reality. While these devices and their smooth screens do not actually feel like you are writing on paper, they allow you to capture your handwritten notes on a device that you use all of the time, organize them, have them instantly available, and even share them.

Using apps like Good Notes and Notability on the iPad allow you to capture handwritten (as well as typed) notes and drawings and recognize your handwriting as text (with varying degrees of

success). You can annotate PDFs using products like Good Reader or PDF Expert. Use Penultimate to get handwritten notes into Evernote. Use Microsoft OneNote to capture your handwritten notes cross platforms on Windows, Android and iOS devices and switch between them without issue However, while these devices and apps make capturing handwritten notes better, it is still not like using a pen or pencil on paper.

To create a better handwriting note experience, third parties developed screen protectors that mimic the feel of paper when using a stylus on both iPads and Android devices. You can see a selection of these screen protectors using this link (<a href="https://amzn.to/3qdGvGW">https://amzn.to/3qdGvGW</a>) to an Amazon search. In conjunction with these paper feel screen protectors, better electronic pens were created such as the STAEDTLER Noris digital jumbo (Image 4); Lamy Al-Star EMR (Image 5); and the Ratta Heart of Metal (Image 6)



Users now have writing instruments that feel more like the writing instruments they use daily on paper. Others 3<sup>rd</sup> parties developed new nibs for the Apple Pencil to use in conjunction with the paper feel screen protectors (examples can be viewed at Amazon using this link: <a href="https://amzn.to/3q97fbp">https://amzn.to/3q97fbp</a>)<sup>7</sup>. With these tools, you now have the same or at least to a greater degree, the actual feel of writing on actual

<sup>&</sup>lt;sup>7</sup> None of the links in this paper takes you ta a page where the author earns a commission or referral fee.

paper with a pen or pencil. But even so, these devices still did not provide the simplicity of a legal pad and pen. Enter E-Ink and recent improvements.

I will not spend any time on 2-in-1 notebooks: they are larger and heavier and do not have the same 3<sup>rd</sup> party accessories to make the handwriting experience more like using pen on paper. They do not easily lend themselves to taking handwritten notes Due to their size and weight, you need to generally place these flat on a table or lean them against the edge of a table or desk (or your knee). Even then, with their keyboards folded under them they are more awkward and thicker than an tablet device. However, many people using E-Ink tablets carry them along with their notebook computer.

#### What is E-Ink?

According to the Google Dictionary:

e-ink8

/'ēiNGk/

noun: e-ink; plural noun: e-inks

1. a type of electronic display for text that is intended to imitate the appearance of printed ink, typically used in e-readers.

According to Make UseOf.com ("MUO"):

"E-Ink is a display technology that aims to replicate the appearance of ink printed on paper. As such, the vast majority of these displays are only capable of displaying black and white."

As the MUO definition above states, "...they are designed to replicate the appearance of ink on paper" and they do a terrific job of doing so. E-Ink screens are easier to read in bright light than color screens such as the iPad, and work differently than a traditional color display. E-Ink are black and white screens that use a different a technology than your iPad or Notebook computer, and the MUO article (found in footnote 8) provides a good overview of these differences. While the E-ink screens have been around for more than 15 years, even today, E-Ink screens are not produced in similar quantities as color screens, making them more expensive, especially for the larger size E-Ink screens. Think about most E-

<sup>&</sup>lt;sup>8</sup> Google online Dictionary

<sup>&</sup>lt;sup>9</sup> What Is E-Ink? How It Works & Why Every Ebook Fan Needs It Make Use Of <a href="https://www.makeuseof.com/tag/e-ink-works-every-ebook-fan-needs/">https://www.makeuseof.com/tag/e-ink-works-every-ebook-fan-needs/</a>

Ink devices you have seen and most likely it will be a Kindle Paperwhite or other tablets with 7 inch or smaller screen sizes. This is changing, and larger screens up to 13 inches are now available, but the larger screen size does increase the cost of the E-Ink device.

For many E-Ink tablet users, the readability and more paper like experience for handwritten notes offsets the higher costs. Check any E-Ink user forum or online video or review, and you will quickly see that the E-Ink tablet offers a superior experience to using an iPad or other multi-function device in the opinion of many of its users.

Combine this new technology of electronic pens discussed earlier in this paper, battery size and power advances, along with solid state storage technology, and it is a game changing technology for many. You now have a device that may be as light as a legal pad, that writes like you are using a pen or pencil with paper, and is directly tied into the digital ecosystems you use daily. One of the big differentiators between these new E-Ink devices and an iPad is the technology used for the Electronic pens.

#### Electric Pens (think stylus)

There are two primary technologies for the Electric pens used: 1) Active Electrostatic (AES) ,and 2)Electro-magnetic Resonance (EMR). The Microsoft Surface Tablet, and Notebook HP Spectre X360 2-in-1 and other Windows based devices use AES technology. The Apple Pencil uses technology very similar to AES. AES pens and the Apple Pencil have one thing in common: they each require an internal battery to work. Whereas EMR E-Ink pens (including the electronic pens mentioned earlier) do not require an internal battery for use. So then, what is EMR?

#### EMR (Electro-magnetic Resonance) Pens

Wacom's patented electromagnetic resonance (EMR) technology consists of a layer of sensors that sits behind the device's Liquid Crystal Display (LCD) screen and a layer of hardened glass. The sensors are arranged in an alternating vertical/horizontal grid pattern. Each sensor is precisely calibrated and emits a weak electromagnetic signal. Together, these signals create a magnetic field that extends about 5mm beyond the glass surface of the device. <sup>10</sup>

<sup>&</sup>lt;sup>10</sup> WACOM Wacom.com <a href="https://www.wacom.com/en-us/for-business/technologies/emr">https://www.wacom.com/en-us/for-business/technologies/emr</a>

In other words, the device provides the power for the stylus vs the stylus providing the power with a battery. At one time, AES pens were more accurate, but that difference has almost entirely disappeared. EMR based pens also have the benefit of you being able to pick it up and start writing without having to worry if it is charged or if the battery is dead. It also allows for third parties to more easily create pens that work across devices.

Depending on the EMR pen, it may or may not have a built-in eraser, if not, you tap on the eraser icon and the nib becomes the eraser. Other than that, EMR pens all work the same. When it comes to AES pens, the cross-device compatibility is not as good.

#### Which device should I Choose?

Handwritten note taking is no longer just a dream, but is a reality with these new devices as well as for existing tablets. At this juncture, you need to ask yourself this:

A) Do you want a multifunction device that can do more than just simply take handwritten notes?

Or

B) Do you want a purpose-built device that limits distractions and provides you with the best experience for handwritten notes out of the box?

There are pros and cons to each.

The iPad, with or without a paper feel screen protector, with an iPencil with a handwriting nib is an example of a multipurpose device. Not only can you use it to consume information e.g. web surfing, emailing, watching videos or listening to podcasts, etc.), you can also use it to produce information using word processing and spreadsheet apps as well as note taking apps and PDF tools. You can use a keyboard and an Apple Pencil with the iPad to create content: several notetaking apps include the ability to capture handwriting and also typed text with different capabilities. However, all of these capabilities make it very easy to become distracted with its other features. Weight is another issue for some people due to the iPads weight: an iPad pro 12 inch weighs in at almost 1.5 pounds.

The alternative is an E ink screen device with digital paper that either provides only the ability to apture handwritten notes (and mark up PDFs) or additional abilities, such as reading e-books and accessing online resources. While these device can also draw your attention to other things, the fact that they are

black-and-white screen with less performance and capabilities than an iPad reduces the potential for distraction. It is s time to take a look at the competing technologies along with its pros and cons.

#### Which device is right for you?

As you consider moving to handwritten digital notes, you need to decide what type of device you want to use: Do you want one that can do a lot of different things such as web surfing, watch videos, use apps for word processing, note taking, etc. that can serve multiple purposes? In effect do you want a notebook lite type device? If so, then the E-Ink devices are probably not a good choice for you.

However, if you want a device that is an adjunct to your notebook, to take handwritten notes and markup PDF files without all of the other bells and whistles with an easy to read black and white screen, then an E-Ink device may be right for you. Even if you want a device that falls in between, an E-Ink device may still be an option depending on the one you select. Just be prepared for its limitations.

#### E-Ink front runners.

There are numerous E-Ink note taking devices available, but there are three primary front runners that consistently are selected by users. They are:

reMarkable 2 <a href="https://remarkable.com/">https://remarkable.com/</a> (Image 7 below)

SuperNote <a href="https://supernote.com/">https://supernote.com/</a> (Image 8 below)

Onyx Boox https://onyxboox.com/ (Image 9 below)



All three of these take handwritten digital notes with the experience of writing with pen and paper. It is how each one of them does that task, and the additional features and capabilities, that differentiate between these 3 competitors. To insure lack of bias, I purchased a reMarkable 2, Boox Note 5 and Supernote A5 x with personal funds so there is no influence exerted by any manufacturer. I also own both an iPad Pro and iPad Pro 12 inch, as well as several Android tablets and Windows computers.

#### ReMarkable 2

reMarkable 2 uses a proprietary operating system without a lot of bells and whistles. The remarkable 2, like the Boox Note Air, uses a glass screen and soft nib electronic pen. It has excellent note taking capabilities. Out of the box, the remarkable 2 provides for sync with the reMarkable cloud for files in the last 50 days. reMarkable provides the ability to create folders and notes, the ability to read DRM free EPUB files (Kindle and DRM e-books are not supported) and PDF files. If you have a Microsoft 365 account, you can also transfer Word and PowerPoint files and read them with the Read on reMarkable feature as well as with its iPhone, Android, Mac and PC apps. Using Tags, you can attach keywords to your Folders and Notes to search and filter. Of the 3 E-Ink tablets covered, reMarkable appears to be the best for drawing.

However, to get unlimited cloud storage and to add Google Drive, Drobox and OneDrive integrations, handwriting recognition, screen share, send by email, and several other features, you will need to purchase a monthly Connect subscription for \$7.99 per month. Without Connect, you can sync with your computer using a cable, the remarkable app and 50 days in the reMarkable Cloud. There is also a Connect Lite subscription for \$4.99 per month, but that only provides you with unlimited reMarkable Cloud storage. There are really no accessories for the reMarkable 2 nor can you use a Bluetooth keyboard with it.<sup>11</sup>

While a new remarkable 2 tablet sells for \$299.00, it does not include does not include an electronic pen or a folio so those will be additional costs. The remarkable Marker costs \$79.00 or the Marker Plus costs \$129.00 and provides a built-in eraser. A slip cover Folio adds another \$79.00, while a Book Folio adds another \$129.00. Replacement tips for the Marker start at \$14.00 for 9 tips. A remarkable data cable costs \$19.00. So you are looking at spending \$457.00 or more.

#### Boox

Boox from Onyx International sells numerous different E-Ink tablets, with several of the most popular models being the Note Air 2 and Note 5. The Boox line includes sizes from 6 inches up to 13 inches and sizes in between. I have the Boox Note 5 which, unlike the Note 2 Air, has 2 speakers and a mic and a fingerprint reader in the power button. It has 10.3-inch Mobius plastic back screen for durability (the Note Air 2 uses glass like the reMarkable), front lights for easier reading in low light situations. Out of the box, the Note 5 provides you with 5GB of Onyx Cloud storage for your notes.

The Note 5 uses an unlocked version of Android 11 as its operating system, so you can install 3<sup>rd</sup> party apps from the Google Play app store to the tablet. This means that you can use a variety of apps other than just what is provided with your Boox. Boox supports 17 different file formats natively including reflowable PDF, HTML, DOC, EPUB, TXT, PPT, PNG, JPG, TIFF, WAV and MP3 and more. You can also use the Kindle app on the Boox, so you are not limited to non-DRM e-books.

While the Boox doesn't include the ability to add Tags like the reMarkable 2 does, you can use written words such as "Note", "Important" "Tag" or use one of two symbols: a triangle  $\triangle$  or an asterisk  $\star$ . Like many others, I have not had any luck using the triangle as a search tool as it never recognizes what

<sup>11</sup> As with many tablet devices, someone figured out how to hack the reMarkable and add additional features and functions to it. You can learn more at <a href="https://bit.ly/3U3qqBi">https://bit.ly/3U3qqBi</a>. Be aware that hacking your reMarkable may void the warranty or brick the device. You also need to turn off automatic updates as updating gets rid of the hacks. DO THIS AT YOUR OWN RISK.

I draw as a triangle. Because of its integrated handwriting recognition, you can also use key words in your notes such as "Note", Important", "Tag" and the Boox search function will find those words or make vour own.<sup>12</sup>. You can select from a number of note taking templates including Cornell style, blank, lined and others. You can also access templates from the Cloud including a To Do list, SWOT Analysis and others. Just as with the Supernote, the templates are a treated as a Base Layer in the note. 13

Boox comes with Dropbox and Google Drive integration out of the box, and you can add Microsoft OneDrive via app download. You can connect to all of these storage services via WiFi.

The Boox Note 5 includes the Note 5, cable, and Boox Pen. However, Boox usually runs package deals and at the time of writing, you could purchase a Note 5 with a folio sleeve and extra nibs or a magnetic case and Boox Pen2 Pro stylus for \$549.99. Similar kits for the Note Air 2 are priced at \$479.99 and the Note Air 2 Plus at \$499.99.

While the Boox is more like a traditional tablet such as an iPad, even full Android doesn't mean it will work like or as well as an iPad. Due to the limitations of processor, weight, and grayscale screen, it will work better for specific tasks and not as well as an iPad on others. Also, much like an iPad, the Boox is a multi-purpose device so you can become distracted due to the range of features it makes available to you.

#### Supernote

There are two sizes in the Ratta Supernote line: the A5X at 10.3 inches and the A6X at 7.8 inches. Both use a modified and optimized version of Android that is locked down. Of all the 3 E-Ink devices, the Supernote seems to roll out updates the quickest and provides a software roadmap to see upcoming additions to the device. 14 You get 32GB of storage via Supernote Cloud and that can be accessed via a web client with any modern web browser. You can also connect to Dropbox 15 (although not as easily as with the Note 5), but to get your Note files into Dropbox you must first export to PDF or PNG formats. Google Drive and OneDrive access is on the 2022 Software Roadmap and is reported to be in progress

<sup>&</sup>lt;sup>12</sup> See the Resources page for links to information on how to create your own templates for any of these E-Ink tablets.

<sup>&</sup>lt;sup>13</sup> Learn more about Boox templates at https://bit.ly/3U3ONhY.

<sup>&</sup>lt;sup>14</sup> https://bit.ly/3DhnElK

<sup>&</sup>lt;sup>15</sup> For Dropbox sync instructions, go to <a href="https://bit.ly/3qwxEjK">https://bit.ly/3qwxEjK</a> .

and hopefully available soon. The A5X supports PDF, EPUB (DRM FREE) PNG, JP, Word and Mobi (Kindle) along with several other file types.

You can circle handwritten text and then set it as a keyword. This will be saved in the keyword list so you can quickly search for pages that relate to that keyword. Much like the Boox uses an asterisk to identify key locations, if you draw a star  $\stackrel{1}{\Rightarrow}$  on the SuperNote you can use the star mark search to locate and identify what you marked. The Supernote takes this one step further by being able to create a Table of Contents with this information.

As with the reMarkable 2 and Boox, you get multiple layers in each note as well as several templates for your page. The templates are selected in the layers by clicking on the Base Layer. Templates include note taking layouts, grids, Task Lists and Calendar formats. Currently there is one app in the Supernote app section of the A5 X and that is the Kindle Reader app. Unlike the Boox Note 5, the A5 X does not include any front lighting making it more difficult to use in low light situations. You can sync your Google and Outlook Calendars and Email <sup>16</sup>, but this is not an overly intuitive process. The A5 X includes both Wi-Fi and Bluetooth as does the Boox.

Two additional items of interest is setting the SuperNote to use 2 fingers to turn the page, eliminating accidental page turns because of your palm on the screen, and also the ability to share your tool preferences between notebooks. In the remarkable 2 and the Note 5, your tool preferences are tied to each notebook so you have to change the preferences you prefer each time you create a new notebook.

You can use Bluetooth and wired keyboards with the Supernote. The Supernote uses a OTG (On The Go) USB-Type C port that allows you to plug USB equipped flash drives and keyboards directly into the port or use an OTG adapter to plug in a flash drive and connect to other devices. You also have a choice of pens including their Standard pen, the LAMY AL-Star and the top-of-the-line Heart of Meal pen, all with hard or ceramic nibs.

While you do get the benefit of Android as its operating system, Ratta locks it down so you cannot simply download apps from the Google Play app store. It also has a more limited number of file types it will work with.

<sup>&</sup>lt;sup>16</sup> For Email and calendar sync, go to <a href="https://bit.ly/3d9FoF1">https://bit.ly/3d9FoF1</a>.

The A5X Standard set gives you the A5 X tablet, a Standard pen and a Canvas Folio for \$514.00. For \$589.00, the Premium set gives you a Heart of Metal pen (in your choice of colors) and a cowhide portfolio.

#### iPad vs F-Ink Tablet

#### iPad

The iPad is a device that has been with us for many years and depending on the model, has an Apple Pencil available. With its huge app ecosystem, there are any number of note taking and PDF apps as well as apps for working with MS Office documents. It has a more powerful processor than any E-Ink tablet, more memory, and accessories. You can consume video and music, check your email, draft Word and other documents with the correct App and much, much more. It is a true multi-purpose device, with which you can easily get distracted. Furthermore, most people do not find writing on the iPad with the Apple Pencil to be anything like writing on paper – it feels slick and the Apple Pencil moves too fast across the surface of the screen. To make the iPad a better handwritten note taking device, you need to use a 3<sup>rd</sup> party screen protector along with the proper Apple Pencil nib, providing more of the feel of writing on paper. For me, I find that using a paper feel screen protector along with a metal nib in the Apple Pencil gives me a more paper like writing experience although still not quite as good as one of the E-Ink devices above. The paper like screen protector also dulls the view of the iPad screen.

For note taking, there are a number of notetaking apps with some of the better ones being: Notability (in 2021 Notability moved from a one time purchase model to a subscription model); Good Notes (which allows you to create and keep your notes in notebooks unlike Notability); Apple Notes; Microsoft OneNote; Noteshelf and others. Below are two tables detailing many of the Pros and Cons of iPads and E-ink tablets for taking handwritten notes.

## iPad

Pros	Cons	
Multipurpose device Consume and produce	No paper like writing experience without a paper feel	
information.	screen protector.	
Choice of Note taking tools/apps	Standard Apple Pencil nib does not feel like you are	
	writing with a pen or pencil without purchasing	
	additional nibs	
Color screen	Apple Pencil 2 not backwards compatible with older	
	iPads and iPad Pros	
Availability of third-party accessories e.g.: keyboards,	Heavier than an E-Ink tablet	
screen protectors, covers, cables, etc.		
Apple Pencil with changeable nibs	Provides more distractions with all its apps and	
	capabilities.	
Numerous cloud sync options	Apple Pencil not compatible with standard iPads	
	earlier than 2018.	
No Backlight needed in low light		
Multi-media capable		

#### E-Ink device

Pros	Cons
Design primarily to take handwritten notes that	Front light needed for low light situations.
feels like writing with pen and paper	
E-Ink technology is easier to read in bright light.	Limited apps
Can be less distracting than a multi-purpose tablet	Black and white only
Sync to the desktop and cloud depending on	Fewer third-party accessories. Some E-Ink device
device.	may not be able to use an external keyboard.
Lightweight	Expensive for what features and capabilities you
	get compared to an iPad or Samsung tablet for the
	same or a bit more money.
Numerous EMR pens to choose from.	
Buy or create your own templates	

#### So which device should I select?

It really comes down to personal choice: do you prefer to take handwritten notes and if so, what works best for you. If you have an iPad, you can try a paper like screen protector and different nibs for your Apple Pencil without spending a lot of money. This provides you a way to try taking handwritten notes and determine if you like the feel of the iPad. Generally, you must buy the reMarkable, Boox and Supernote directly from their makers, so there are return costs associated with them. Always read the return policies carefully. <sup>17</sup>

If you know someone that has one of the E-Ink tablets, see if you can borrow it and try it for yourself. You can also look for used E-Ink tablets on places such as Facebook Marketplace that may save you some money. Some of the makers also provide refurbished devices at a lower cost.

<sup>&</sup>lt;sup>17</sup> Boox now has an Amazon store that may provide for free returns. If so, this would be a good way to try one of the premiere E-Ink tablets with little risk. <a href="https://amzn.to/3BbmKoa">https://amzn.to/3BbmKoa</a>

#### Resources

#### General Links

remarkable 2 FAQs: <a href="https://bit.ly/3cKCaYq">https://bit.ly/3cKCaYq</a>

SuperNote Roadmap <a href="https://bit.ly/3BgeWTK">https://bit.ly/3BgeWTK</a>

Lifewire What iPads Are Compatible With the Apple Pencil? <a href="https://bit.ly/3cMYKzC">https://bit.ly/3cMYKzC</a>

The Remarkable 2, Supernote A5 X and iPad: War of the E-Tablets! From Attorney at Work <a href="https://bit.ly/3evVadI">https://bit.ly/3evVadI</a>

REMARKABLE 2 VS ONYX BOOX NOTE AIR 2 PLUS <a href="https://bit.ly/3B6lXVG">https://bit.ly/3B6lXVG</a>

Here's Why an E-ink Notebook Is Better Than an iPad from Lifewire https://bit.ly/3RIa2ok

#### Templates:

The Way to Make Note Templates Yourself <a href="https://bit.ly/3RTyvGS">https://bit.ly/3RTyvGS</a>

BOOX Note Air Templates, Meeting Book, Instant Download <a href="https://etsy.me/3qNPgI5">https://etsy.me/3qNPgI5</a>

BOOX Note Air Planner Templates <a href="https://bit.ly/3U5JizI">https://bit.ly/3U5JizI</a>

eInkPads reMarkable Templates <a href="https://bit.ly/3TZzJ53">https://bit.ly/3TZzJ53</a>

rM2 Template Helper & Custom Screens https://bit.ly/3L9IvcH

How I create my templates https://bit.ly/3Qzh51c

Hundreds of new templates available for Supernote A5X and A6X https://bit.ly/3DhxkwA

#### **End User Forums**

#### Reddit

reMarkable	SuperNote	Boox
r/Remarkable Tablet r?Remarkable	r/Supernote r/Supernote_beta u?Supernote_official	r/Onyx_Boox