From Paper to Digital Music

This is the story of my migration from paper to digital music. No internet links herein are sponsored.

The purpose of my detailing this is to help get people started with this process who neither want to break the bank, nor have a clear handle on the hard- and software out there to accomplish this.

By no means is this necessarily the best approach: just mine, warts and all.

Background

I remember the moment when I decided that it was time to start investigating this. I was playing an outdoor concert in the Summer of 2021 that was rescheduled from our usual Thursday night to Friday because of weather. While that Friday night was beautifully clear and dry: far more the exception for Northeast Summers, the improved weather also brought extremely windy conditions.

Despite use of music wind clips, clothespins and Lucite sheets: common tools of the outside music reading musician to keep scores from blowing away, the wind managed to overcome some of these devices. Still more I was tired of having to manage such items during page turns, difficulty in doing so only made that much harder by wind.

One of the basic principles of playing in a relatively large wind ensemble is that the notes you might miss are often covered by your fellow player and vice versa to make for an overall cohesive ensemble sound. But such is often not the case at page turns. Sections of players tend to drop out for a moment, even in indoor concerts, as pages with identical content are flipped: a process only exacerbated by the need to detach and reattach the aforementioned wind securing devices outdoors, again, only slowed down itself by wind.

Further incentive to move to digital music was the back lit nature of the music on such digital devices and the need for my ever weakening eyes to no longer have to use stand lights.

Finally, the idea that I could store, in the weight and size of a magazine, every piece of music I've ever played or will play, and know that it was backed up and available for me to read on multiple digital platforms, made my decision to migrate to digital certain, if not which technologies I would use.

Choosing the Platform

I'm a huge fan of Apple products. Even their competitors are forced to recognize how well thought out and integrated they are. Still more, the larger size iPad offerings permit an entire page of music to be seen on the screen. Adding to their appeal is the large base of applications, Apple and third party, that have been written for their devices. Their downside, known to most, is their cost.

Having worked in technology one learns to appreciate the importance of market share. Having it, and keeping that customer base reasonably happy is the best indicator of keeping and expanding sales. And with market share comes the greater likelihood that 3rd party vendors will make products for popular hardware, as these ancillary businesses seek a return on their investments across a wider audience of potential buyers.

In my opinion, for piano players and other musicians reading more than one staff at a time, such large screen devices as offered by Apple are pretty much a necessity. Smaller devices, Apple or not, will necessitate their being placed in landscape mode to make the music reasonably readable. In so doing, only a few lines of music can appear visible at any one time given the large amount of vertical space each multi-musical staff section of musical measures occupies.

This situation is only aggravated by the difficulty of piano players and other musical foot pedal operating musicians to advance the music across the screen: those feet needed to make music rather than advance digitized sheet music via foot pedals.

Within the Apple world, when it comes to reading music, the software application **forScore** is king. It enjoys the widest user base and features, and with the revenues from licensing it stands the greatest chance of being upgraded and least chance of its developers running out of funds, and it being decommissioned. This is important to those who've invested the time to learn it, not to mention the cost of the Apple hardware to run it. At around $20, the **forScore** application's cost is itself not a huge factor in whether a musician moves to digital sheet music, and if so, adopts forScore over other music reading software.

At least of this writing, **forScore** is also **only** available on Apple platforms.

Originally I investigated the Apple iPad/**forScore** route. I did so with intentions that may differ from yours and make it more cost justifiable for you than me. Whatever device I purchased for digital sheet music was not product that I had great aspirations about performing other computing tasks on.

For some, an iPad **is** there computer for all or many things. For me, if the device I purchased did anything more than handle digital sheet music, such as providing web surfing, it was a plus.

The 12.9" (measured diagonally) iPad is currently Apple's largest. So expensive and in demand relative to the competition are these devices that Apple makes its own market (in addition to private sales) for people to buy used and reconditioned versions of the product that are varying generations behind the most current offering. At close to $900 as of this writing, for an Apple offered reconditioned model that is two generations behind current, for my purposes of displaying digital sheet music only, this was too much money to spend. This price of course only increases for the model one generation off from current, or the leading edge model.

Attention then shifted to the Amazon Kindle platform. As a musician reading only one staff of music at a time, whose feet don't participate in generating musical sound and can be used on a foot pedal to turn pages, I am content to use a device with a smaller screen, turned sideways to make the image bigger, even if it only displays slightly less than half a page of music at at time.

The Kindle Fire 10 HD, brand new, with 32GB, was on sale at Best Buy for slightly over $100 when I bought it a few months ago. While the on screen advertisements it forces its users to read were hardly cumbersome, for a $15 purchase on Amazon's website I deactivated such content. 32GB holds more music than I could probably ever learn, and the device's ability to add an SD card to bring the total memory to the Fire's 512GB limit meant that storage would likely never prove a limiting factor.

I would consider the cost of an SD card in the device's purchase. Such a card will facilitate the migration of music on and off the Kindle Fire, discussed below. By no means need an SD card as large as 256GB be purchased, but for reference, cards of such large size are currently going for about $60.

Within the world of Windows and Android users, (and the Kindle Fire is considered an Android device,) the digital sheet music reading software of choice is MobileSheets. The cost to license this software is $13. I happened to buy two licenses, the second for my desktop PC, so I could run MobileSheets Pro on either my Kindle or desktop, but this is optional of PC computer users.

While the Kindle's content can be regularly backed up through, among other routes, Amazon's cloud services, I regularly use the aforementioned SD card to copy my entire sheet music library off the Kindle and on to my PC, for both backup purposes and to load the PC version of MobileSheets I license, with changes I've made to the library on my Kindle.

The MobileSheets version for PC and Kindle run virtually identically. Perhaps the only difference is my additioanl use of a foot pedal to scroll pages on the Kindle.

And as it regards foot pedals, which I think are necessary, I went with the AirTurn Duo 500. for about $100. The slightly less expensive ($90) Airturn BT500S-2 will do the job just as effectively, but the former is silent, while the latter's scroll foot buttons make a very quiet clicking sound when pressed.

Either of these foot pedals, and many others (from other vendors) are compatible with the Amazon Fire/MobileSheets.

The only other purchase I made for reading music that I'd recommend was for a $20 digital pen (e.g. https://www.amazon.com/gp/product/B0928BTHW3/ref=ppx_od_dt_b_asin_title_s00? ie=UTF8&psc=1). This device makes writing notes on the digital music easier than using one's fingertip to do so.

The MobileSheets Pro software will likely provide more features than the average musician can ever use. The few times I've needed support I received under 4 hour response time from its developer with definitive answers to my questions. It is a pretty easy interface to learn, and includes something for nearly every musician. Every piece of sheet music loaded can have a sound accompaniment associated with it (should you have the music in digital form to upload into the software.) The software includes a metronome, Coda music quick link capabilities, auto-scrolling, and methods for organizing and cataloging works in many ways. Notations made by the user on the music are stored with it permanently.

MobileSheets Pro is not a music composition piece of software like Finale.

Getting Music into MobileSheets

This is not mean to be a MobileSheets primer. That said, I feel need to mention mechanisms by which the software imports music because, at least for paper sheet music, the digitizing method I use involves additional hardware/expense.

One of the limitations of the Kindle Fire I own is its built in camera . I have found that the pictures it takes of music aren't of great enough resolution and clarity to be used while playing an instrument.

While an enormous amount of music can be found on the internet, much for free, including etude books, solos, and parts from ensemble selections, my personal needs require, at times, the digitization of paper music.

My iPhone's camera offers far greater resolution than does the Kindle Fire. Accordingly, when digitizing paper music I take a picture of each page with my iPhone.

Once stored in the iPhone there are two basic methods of placing that content on the Kindle; one wireless, the other not.

Moving content over the airwaves requires he latter's presence and speed. Sending pictures files in emails, or uploading them to the cloud, for retrieval via either method on the Kindle requires internet access on the Kindle. Instead, with my SD card I use a device that makes my iPhone see the SD card as a place or retrieve files from.

These devices are available from Apple and 3rd parties. I use the Apple one https://www.apple.com/shop/product/MJYT2AM/A/lightning-to-sd-card-camera-reader which is ($30) likely more expensive.

While this device requires no internet, it does require the electrical current of a charger: portable or wall.

With this device plugged into my iPhone I am able, using the phone's Files app, to copy pictures of music to the SD card. I then plug this SD card into the Kindle and import the pictures into MobileSheets pro, where it becomes digitized sheet music.

In my opinion it takes about a day to get use to using a foot petal. The first few times I used it I'd miss playing notes at the same time my foot was pressing one of its switches. Now, it happens with little thought.

When music is brought into MobileSheets pro from digital sources, be they JPG or PDF files, etc., the user has the ability to crop the pages, either manually, or via automatic software mechanism. Getting rid of white space on the margins helps to make the music appear as large as possible.