



## Digital Notebook: A replacement of notebooks for saving the natural resources

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**ABSTRACT:** Imagine a world, if there are no Trees, no Water and no Oxygen. For breathing you have to pay, water is more expensive than gold. This Scenario may seem unrealistic, but we have seen many such examples that indicates this imaginary world becomes true and this future is near. We want to do something and we have lesser time for this. For ex -: the air pollution in China touched such high levels that they have to issue red alert. The air of Delhi, India becomes unbeatable. Do you know how many trees cuts annually for just fulfill the demand of the papers? The answer is 900 million, yes this is the average no. of cuts trees in a year. We have to do some action upon it, as we discuss 900 million trees cut for the papers in a year and why we need papers?

We need papers for students from nursery to graduation, post-graduation or for any study. As per the research 1 tree makes 8333 approx. Sheets of paper if we see this amount of papers in one tree is just fulfill a single year paper demand of a student. Means if we count the number of trees cuts for a single student until his/her study completion the amount of the trees is 25-30 in just 18 years approx. now thinking how many student take admission in year, if we found the substitute for the notebook, books, pens, pencils, colors everything which is an important thing in a student life so we save trees many trees and the substitute for this we called **DIGITAL NOTEBOOK**.

### I. INTRODUCTION

As we discussed many trees cut for just only fulfill the demand of the papers. I know you thought about paper will be recycled but how many times 6 to 7 times may be. But it is enough for saving our nature. No, this is not enough if paper cannot be used than why the trees will be cut. We need to think about this. From the estimate of a research in 2011 the total no. of students in a year is 1.436 billion. If we calculate the average of the trees cuts for students worldwide in a year so may be this amount is approximate 0.800 billion. Which is very much amount in a year for cut the trees?

This is also saving to carry heavy bag to students. If we see the estimate budget expand in the stationary for a student in a year is around 5-6 K or more than this.

This is the estimate students worldwide in 2011.

Primary School	713.6 million people (49% of all students)
Secondary School	568.5 million people

	(39% of all students)
College	183 million people (13% of all students)
Total	1.436 billion

If we calculate the total budget of the student till his/her graduation so it will be approximate 3-4 M or more than this. E-notebook is one time investment and if we invest on time we don't need to invest second time, yeah, some cases are there where we can expand money twice but we discuss it later.

So, these things we can maintain by this substitution, technical specification is most important things in that we can discuss later but those are the basics for that we need to replace this and substitute this.

Everything in this world is not making for their advantages, if we are making a thing so that will be disadvantages also and that is also disadvantages but we discuss it later.

In the above table, we can see that Primary school students are more than other students like Secondary

and the college students. And they will also use more paper than others because they are the beginners in writing skills so they have waste more papers. In the today's world if we can see the estimated budget of stationary things so it is very large and we can buy a brand-new car in this budget as we discuss above.

As we can see in the below graph how much water is reduces and how much trees are cutting and increases yearly.

If this is regularly happened so may be our above sentence will be true in future.

So, for the technical specification of the digital notebook or we can say the substitute of the notebook we need to know some facts or some points like below - :

- How much trees are cut down to make 1ton of paper?
- How much paper is used daily worldwide?
- What are the main uses of the paper?
  1. Notebooks
  2. Books
  3. Sheets (A4, A3)

If we can replace these entire thing with a single substitute so how many trees and water will be save think about it.

Yes, we can save also water because not only trees will be cut down to make papers or sheets, we also need lots of waters and the process produce lots of air pollution so for the prevent our upcoming generation we want to do something we need to do action about this we need a substitution for it.

### Study

Have you ever heard about the Amazon kindle?

Amazon kindle is a e-reader for the books, newspapers, magazines etc.

So, Digital Notebook is something about that means it is like the kindle. In view this notebook is look like a kindle but it can do everything it can be replace everything like-

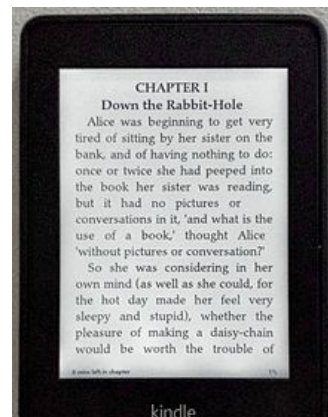
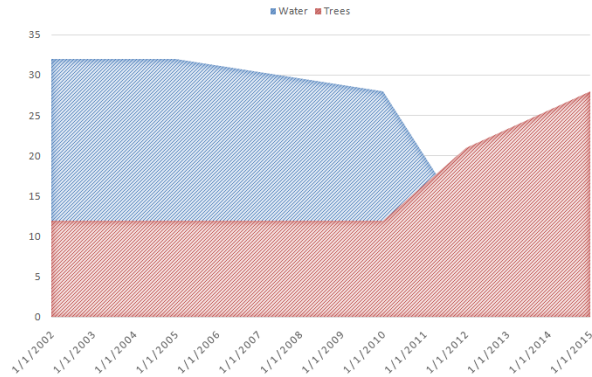
- Notebook
- Pencil
- Pen
- Geometry Box
- Colours
- Books etc.

### System requirement and specification

In the image, we can see the kindle. And we discuss about some introduction about the kindle what it is.

So, the Digital Notebook similar to the kindle but we can do everything in this. We need to purchase the digital notebook only once and it will be used lifetime.

WATER IS GETTING REDUCED AND TRESS CUTTED



AMAZON KINDLE

Yeah, I know what you are thinking how to provide so many storage for it. How to store those data?

So, there it is solution for that we also have a delete option in it and the notebook or the digital notebook is a iot(internet of thing). Means we cannot provide sim slot in this but we can make the thing iot how?

Here the answer for that we can provide a Wi-Fi connection option under the digital notebook and whenever it is the near to the open Wi-Fi connection place it is automatic connect to their Wi-Fi and we can save our notes in the cloud.

No, we cannot provide browser in it why?

Because if we can provide browser in this so may be students watching YouTube or something else during the class. We can provide only the option save to the cloud and whenever it is under the Wi-Fi connection or student click on it, it will be save in the cloud and user can access from anywhere and send to anyone by the cloud. This is basic working of the digital notebook now the turn of the technical specification of this.

For the technical specification, we need to use -:

- Microprocessor
- Touch Pen
- Display
- Touch
- Wi-Fi module
- Internal storage
- Etc.

This are the main things require for making this project. Yeah, I know what you are thinking why I am telling about this because of the calculating the budget of the digital notebook what you are thinking how much we can expand in this 10k or 20k I think we cannot need to expand more than this.

### Interface

Yeah, now come to interface, it is major field because if interface is not good then it is never getting success on market. And if users cannot trust on this device the also device never getting success in market. So, first thing we want to keep our mind is good interface and user can trust easily on it.

So, for that we need to deplete that. Many users have go with the good interface. So, we also need to manage the good interface means-

How it looks?

How it works?

How users attract with the device?

Why users can trust on this device?

Why is it still not in the market?

If we want to launch this product in market so we want to study this major point discussed above. So, there is a question why this is still not present in market? What you think why? I think the answer is users cannot trust on this type of devices. For that we want to give good features on the device and make it to user friendly so that user can easily trust on them.



### AipTek MyNote Premium II Digital Notepad

The above image taken from AipTek MyNote Premium II Digital Notepad and on it we can see that there is a notepad we called digital notepad and we can do work on that by their pen only we can say it the digital pen, similarly digital notebook works.

The size of the notebook is may be equivalent the size of the normal notebook or we can say that copy.

Size matters for the attraction of the users. Because if the device is very small or very large so users can attract with the device.

Whatever we write on the notebook it is automatically save in the memory in the specify format whenever we want and it is also a hand writing recognition product means whatever users write so device recognize his/her hand writing not by the system fonts. Why hand writing recognition is important for that from many reasons like attraction because hand writing is one of the major field of that if users can work on device in their hand writing so may be users more prefer that.

Reduced eye sight is the risk for it that effect on the product or device. Because for that reasons may be some parents does not prefer that so we can solve it by the blue light technology and one of the benefits is the easy sharing so there will be a question arises how?

Easy sharing because if in the classroom, we make some notes and our friend need that notes so we need to give our copy to her/him. But by this device we can easily share our notes by the e-mails or many things.

This also have some unique features like inbuilt quiz systems for students. And the interested think was that for the Computer Science Students we can give the basic inbuilt compile in the device like C, JAVA. These are platform independent so we can give that compilers inbuilt in the device.

We can also provide some extra features like student management system in it. Where the device has, a software pre-installed the student want to register himself in the software by their college name.

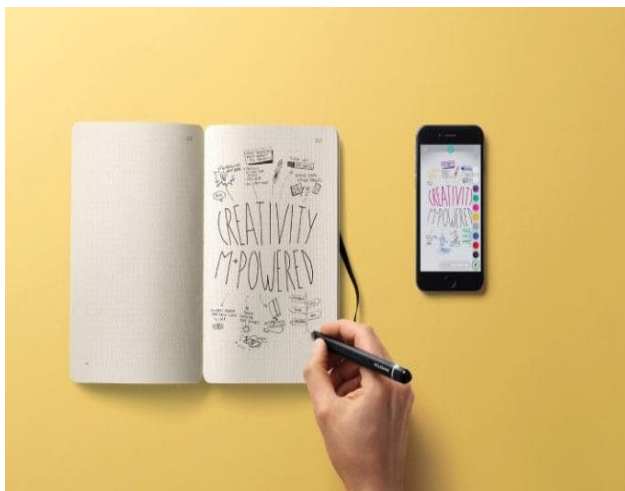
And the respective faculty download the app and add their class students filtered by the college name and take their attendance, give home work/assignments those thinks like a university management system. Many features their we can provide in it to make the attractive and the interested device.

Because from my study users always attract with those devices which one is unique and unique features or the latest technology. User does not want the same things or old technology.

Digital notebooks may be handled some tasks also like the deleting the page, creating the page, edit the page, switch the page, drawing page or many more.

When we plugged this device to computer it can transfer the notes between one device to another and also provide the chargeable batteries in the device.

And this is almost work as paper notebook or the copy because it will recognize the any type of handwriting so that will be the perfect substitute for the note book or the copy or diary and many more things can be used for the writing



### Moleskine Paper Tablet

Moleskine paper tablet creating by an Italian company in 2014. But it does not get more success. Moleskine is converts your handwriting into the digital text means whatever we write in the notebook it's also written in our device. But in this device, we need to use mobile phones or other device and the device we can use it is required to available within the range of the paper tablet means that in the paper tablet we want to use other device is required so that is not fair means why? Why use another device? User first buy the paper tablet and then buy another device just for store the notes.

Some more device is available in market like that like eLN but not similarly like that it is the mixture of various device.

### Why digital notebook?

We need to know why digital note book? When we get the answer then we can substitute this if we cannot identify the problem so digital notebook never substitute in the abstract we can discussed why we need the digital notebook it is necessary for us because if it cannot replace so nature effected regularly.

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And it is also effect on cost because it is a onetime investment tool. In the future, we realize that we definitely want this tool. I noticed that teachers teach the student no waste water, no cut trees and students note this things in the notebook or copy but for making a notebook and other things where we can write on paper those things also waste the water and trees cuts what an awful situation that is means it is like that download another web browser using internet explorer.

It was the best of times, it was the worst of times, it was the age of foolishness, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair we had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way - in short the period was so far like the present period that some of its noisiest authorities insisted on its being received for good or for evil, in the superlative degree of comparison only.

### Handwriting as it appears on the Digital Notebook

In the above image, we can see that the how to handwriting appears as we discussed above if handwriting will be recognizing than the users may be more attract with the device.

We also can use the translator in this device if we write anything in Hindi so it will be translated in English this is very good for student because if the students learn any language like English, Hindi, Spanish etc. so it will be helpful for the students for translate the sentence or a paragraph from one language to another language it's like the google translator tool. And device always have a dictionary where users can see the meaning of words, antonyms, synonyms etc. **Benefits**

1. No need for the children to carry heavy bags that affect their health (Supreme court question also why students carry heavy bags).
2. All notes at one place.

3. Easy Sharing.
4. Cost effective.
5. Environment Friendly.

**Risks**

1. Battery backup.
2. Reduced eye sight.
3. Device malfunction.
4. Storage.

**II. CONCLUSION**

So after all the conclusion is that this device is user friendly, nature friendly and ease to use so may be it can be substitute the our notebook because it is good for nature as well as student yeah some risks there like storage problem for that we can give the external storage option, cloud option and many more thinks the main two risks are device malfunction or the battery problem for the battery problem we can give the switch boards to colleges and schools whereby students charge their notebook if the battery will be down the only one risk will be left that is device malfunction but we can neglect that because it very less occurs.

And when it occurs we can use the normal notebook whenever the device will be ok. Yeah we use normal notebook but how many times? Whenever the device is malfunctioned and it is normally never will be happened.

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