



UNDERSTANDING EBOOK'S TYPES AND POSSIBILITIES



Welcome to today's session on Understanding eBooks Types and Possibilities.

My name is Rameez Alam, and I am Senior Technical Consultant in CIET - NCERT.

I'll be guiding you through this presentation on Understanding eBooks Types and Possibilities.

Agenda

In this session, we will explore the various types of eBooks and the opportunities they present for learning and engagement.

- What are eBooks ?
- Benefits of an eBooks
- How many types of eBooks ?
- NCERT's Uses of eBooks
- What is Digitization of Textbooks ?
- PDF and Why PDF are Useful?
- Flipbooks and Why Flipbooks are Useful?
- What is EPUB and why do we need EPUB?
- Key difference between EPUB AND PDF
- Learn How to develop EPUB
- Energized Textbook
- QR Code- quick response code
- Learn How to generate QR Code

What are eBooks?

Ebooks are digital versions of printed books that can be read on various electronic devices like computers, tablets, e-readers, and smartphones. They replicate the traditional reading experience while offering advantages such as portability, convenience, and accessibility. Available in formats like PDF, EPUB, and MOBI, ebooks can contain text, images, and interactive elements. Their popularity stems from easy access, the ability to carry entire libraries, and customizable reading preferences, revolutionizing the way people access literature and educational content.



Benefits of an eBook

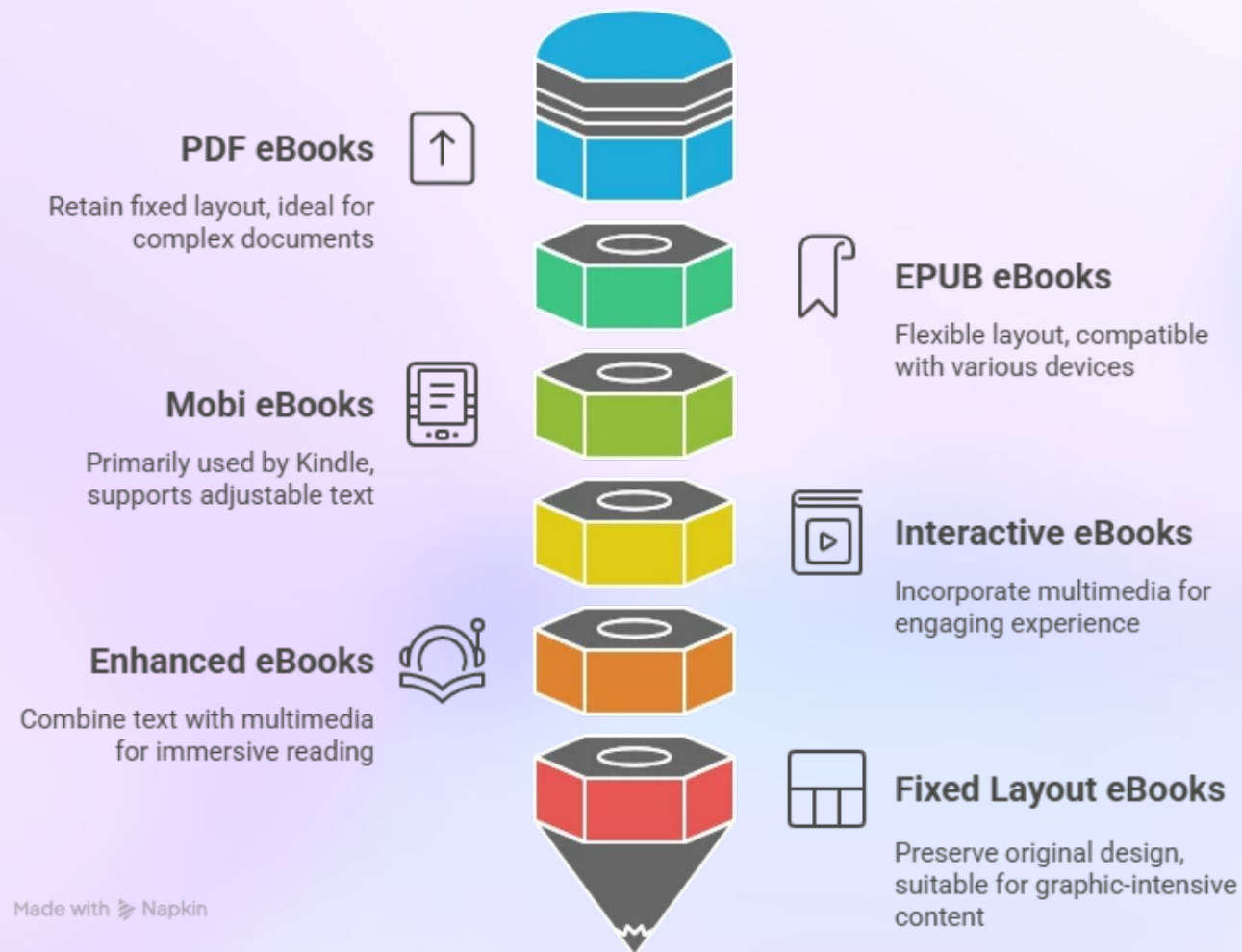
- **Portability:** Access e-books on any device, carrying an entire library anywhere.
- **Accessibility:** Offers a wide range of books, adjustable fonts, and support for diverse readers.
- **Cost-Effective:** Cheaper than print, with no printing or distribution costs.
- **Search & Interactivity:** Includes search tools, hyperlinks, and multimedia for a richer experience.
- **Eco-Friendly:** Saves paper and reduces environmental impact.
- **Convenience:** Instant purchase and download, no shipping needed.
- **Space-Saving:** No physical storage required, reducing clutter.
- **Customizable:** Adjustable fonts, highlighting, and personalized settings.

The Multifaceted Benefits of E-books



How many types of eBooks?

Exploring eBook Formats



- **PDF eBooks:** Portable Document Format (PDF) e-books closely resemble the layout of a printed book and are commonly used for documents, manuals, and materials that require a fixed layout.
- **Electronic Publication (EPUB)** is one of the most common e-book formats. EPUBs are highly flexible and can adjust their layout to fit different screen sizes.
- **Mobipocket (Mobi)** e-books are primarily used by Amazon's Kindle devices and support features similar to EPUBs.
- **Interactive eBooks:** These e-books offer a more engaging reading experience by incorporating multimedia elements such as audio, video, and interactive graphics.
- **Enhanced eBooks:** They combine traditional text with multimedia elements, creating a more immersive reading experience.
- **fixed Layout:** Similar to PDF e-books in preserving the exact layout, they are commonly used for graphic-intensive publications.

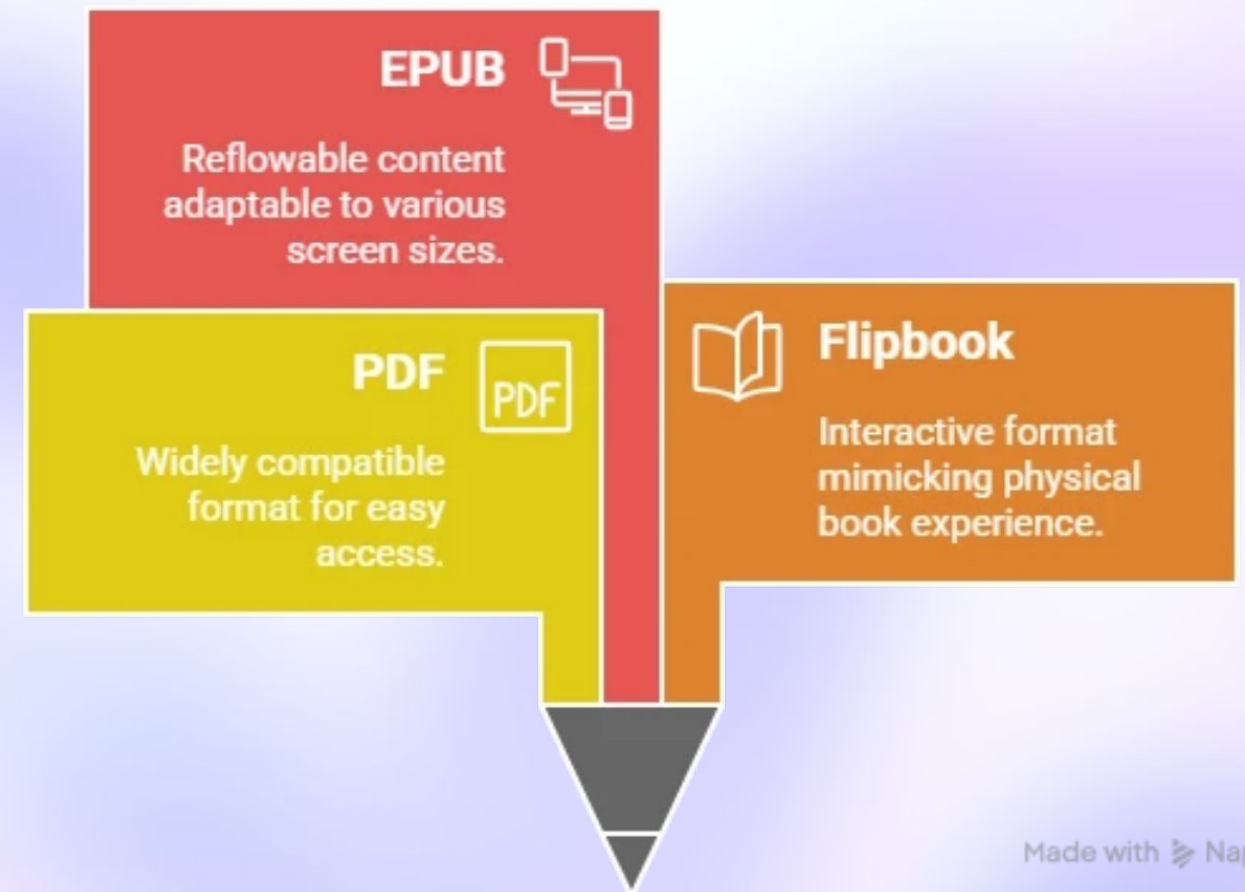
NCERT uses of eBooks.

NCERT uses three types of ebooks.

- **PDF (Portable Document Format)**
- **Flipbook**
- **EPUB (Electronic Publication)**

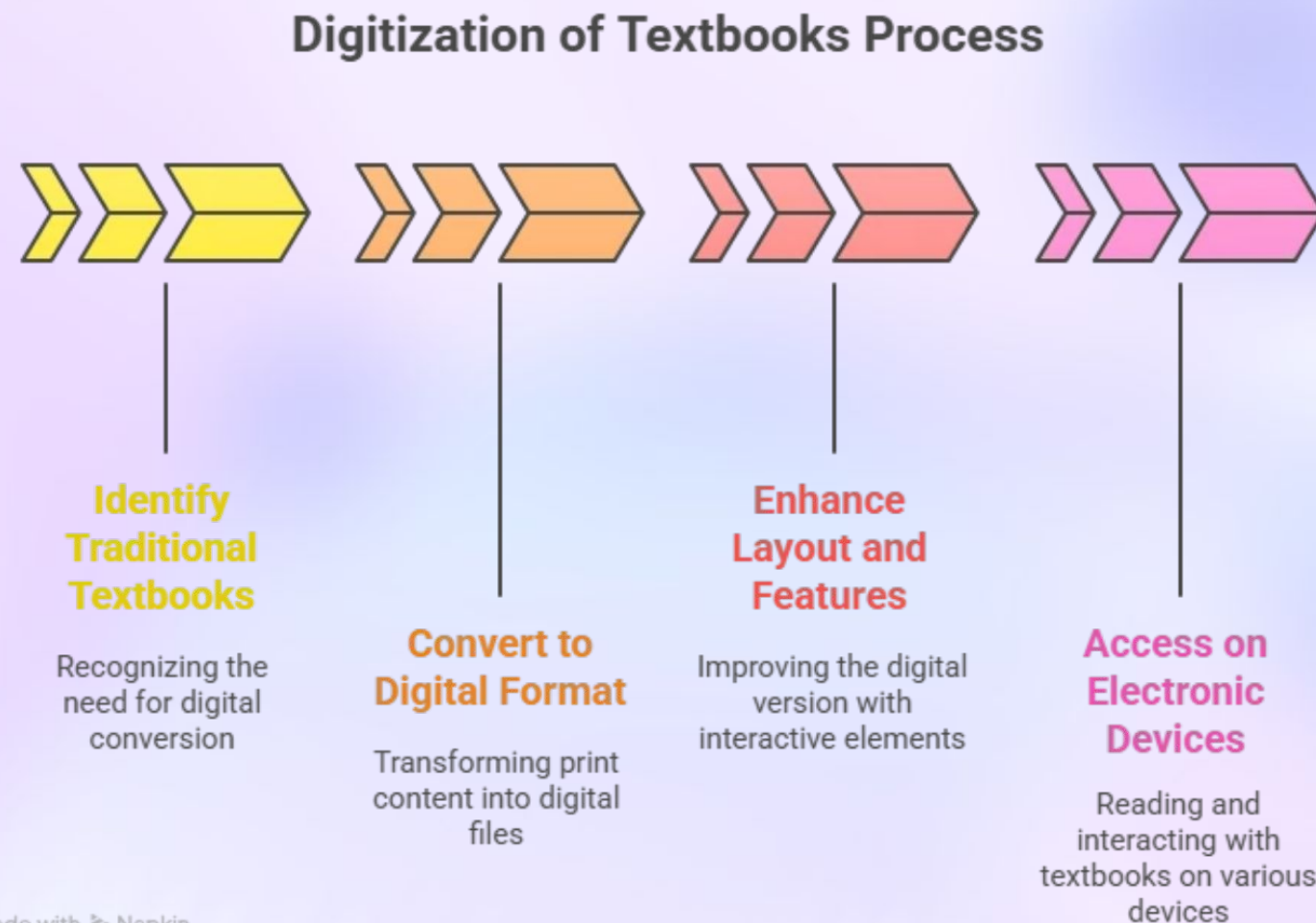
NCERT (National Council of Educational Research and Training) uses e-books as part of its educational resources. These e-books are available through various platforms, including the DIKSHA portal, ePathshala portal, and the ePathshala app. The e-books cover a wide range of subjects and are available in multiple languages, making it easier for students and teachers to access textbooks and other learning materials digitally.

NCERT's Digital Reading Formats



What is Digitization of Textbooks?

Digitization of textbooks refers to the process of converting traditional print textbooks into digital formats that can be accessed and read on electronic devices. It involves transforming the content, layout, and features of the printed textbook into a digital version that can be viewed and interacted with electronically.



PDF and Why PDFs are Useful?

A PDF (Portable Document Format) is a file format developed by Adobe that preserves the layout, fonts, images, and formatting of a document, making it look the same on any device.

Advantages of PDF Format

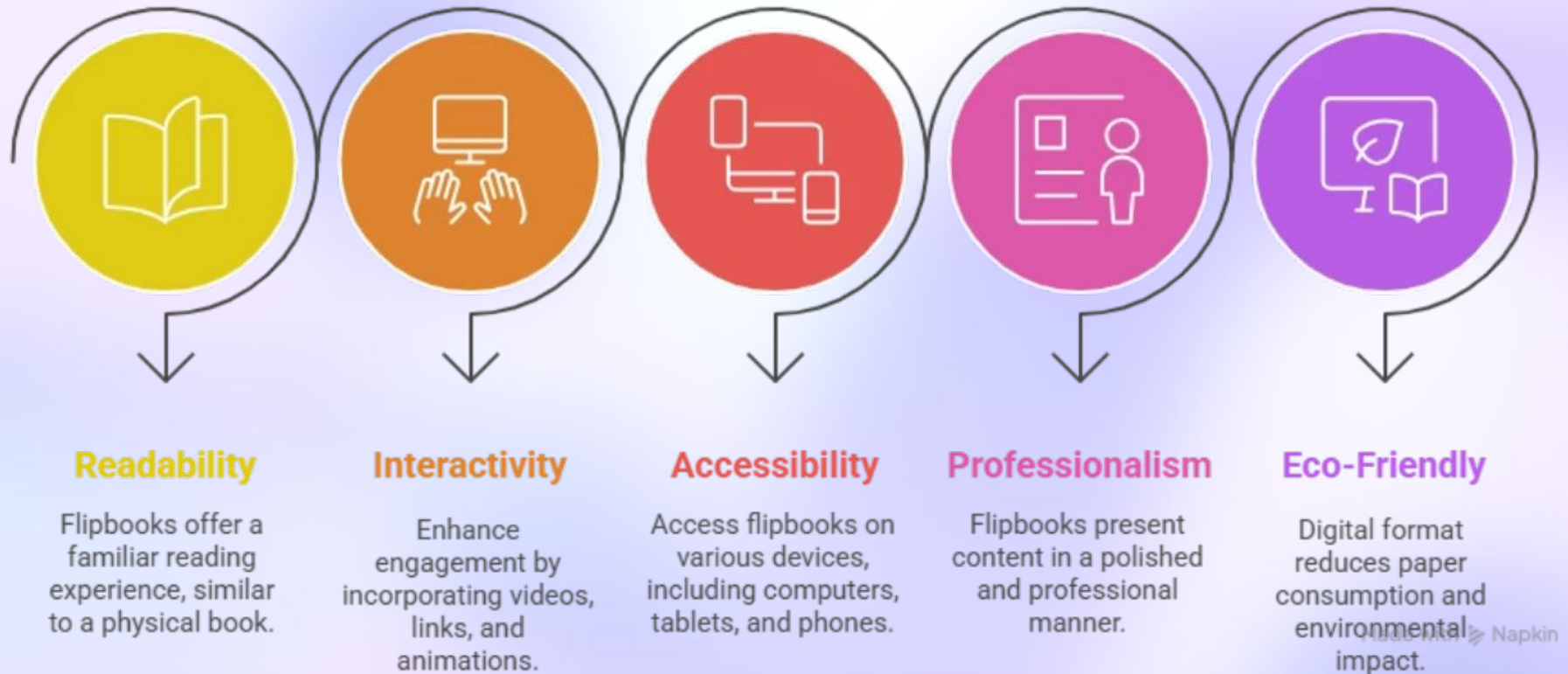


Flipbooks and Why Flipbooks are Useful?

A flipbook is a digital version of a traditional book, where the pages can be flipped or turned as if you're reading a physical book. It often simulates the experience of paging through a real book, with animated page-turning effects. Flipbooks are commonly used to present documents, brochures, catalogs, magazines, and eBooks in an engaging, interactive format online.

- **Easy to Read:** Flipbooks give a familiar feel, making it easy for people to read, just like flipping through a physical book.
- **Interactive:** You can add videos, links, and animations, making the reading experience more engaging.
- **Accessible Anywhere:** Flipbooks work on computers, tablets, and phones, so you can read them anywhere.
- **Professional Look:** They present content in a clean and polished way, perfect for sharing documents or presentations.
- **Environmentally Friendly:** Since they're digital, they save paper and reduce waste.

Flipbook Advantages

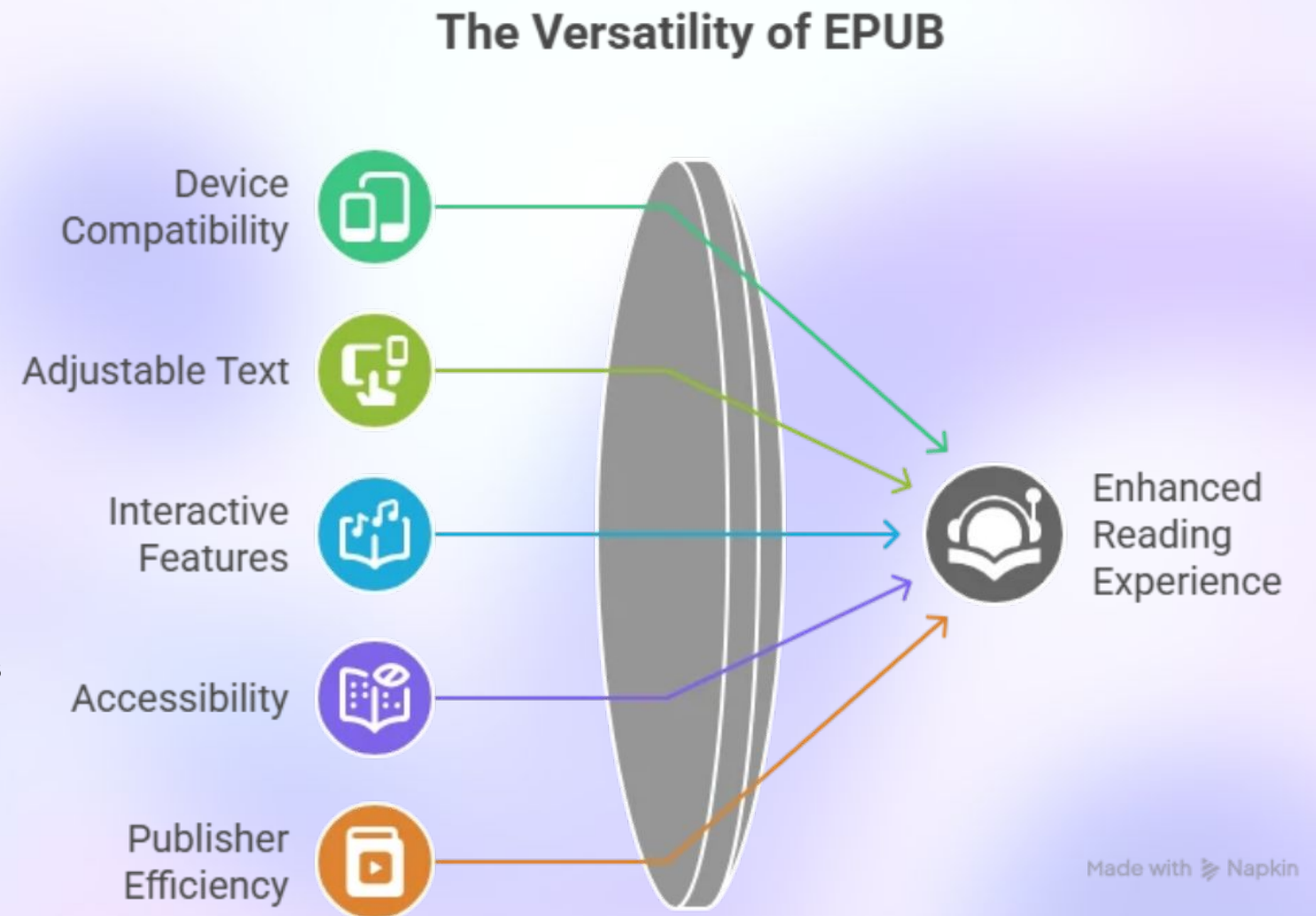


What is EPUB?

EPUB (Electronic Publication) is a widely used open standard format for digital books and publications. It allows e-books to be read on various devices, including e-readers, tablets, smartphones, and computers. The format is designed to be flexible and reflowable, meaning the text can adjust to fit different screen sizes and orientations, providing an optimal reading experience.

EPUB is essential for several reasons:

- **Works on Many Devices:** EPUB files can be read on different devices like e-readers, tablets, phones, and computers. This makes it easy for people to access the same book on whatever device they prefer.
- **Adjustable Text:** Unlike a PDF, where the layout stays the same, EPUB lets the text adjust to fit the screen. Whether you're reading on a big tablet or a small phone, the text will resize to make reading easier.
- **Interactive Features:** EPUB can include things like videos, audio, and links, making it more than just plain text. This is especially useful for educational books or interactive stories.
- **Accessible for Everyone:** EPUB supports features that help people with disabilities, like screen readers and text that can be read aloud, making books available to a wider audience.
- **Easy for Publishers:** Publishers can create one EPUB file that works on all kinds of devices, so they don't have to make different versions for each platform.

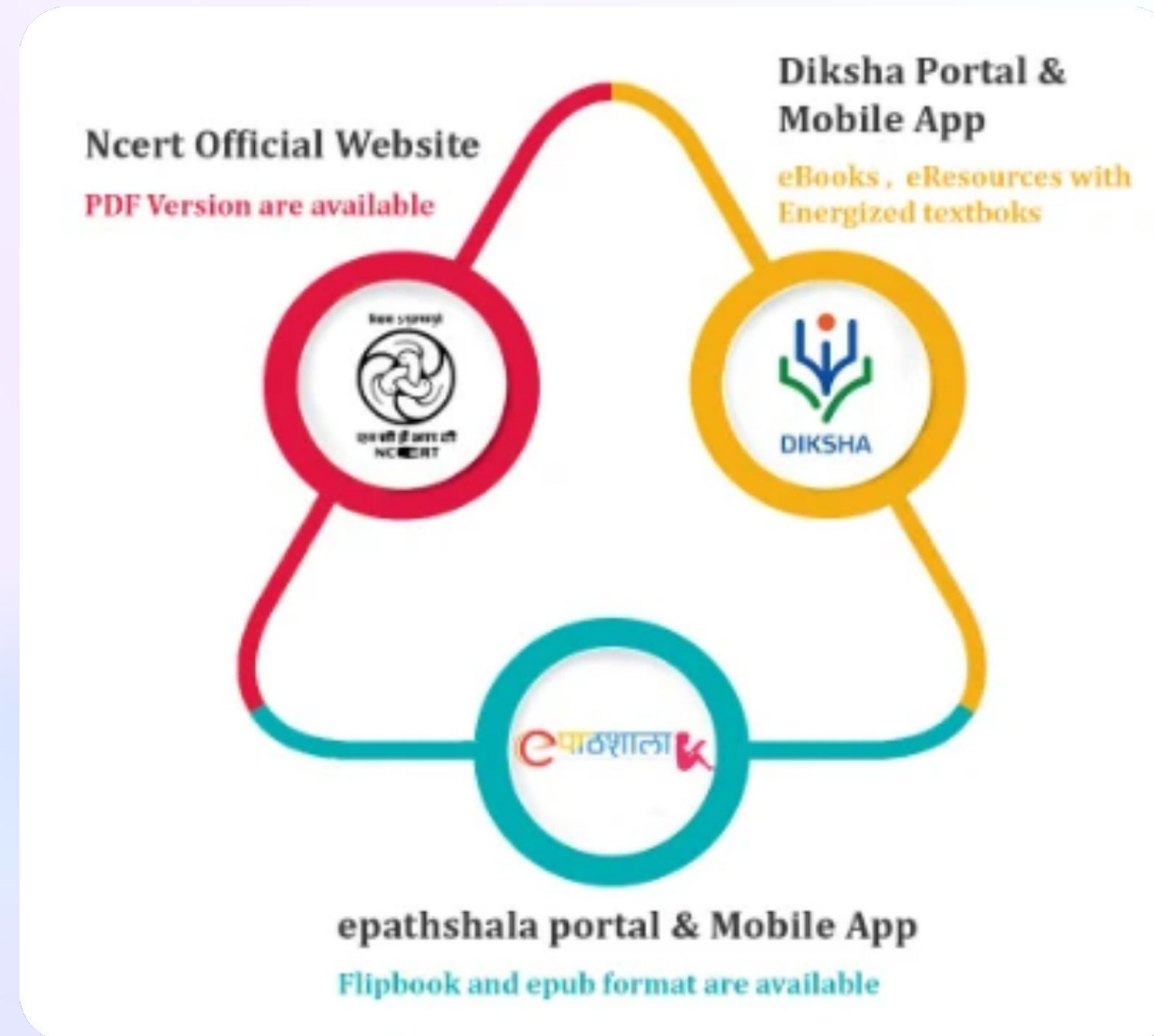


Key difference between EPUB and PDF

| | EPUB | PDF |
|-----------------------------|---|---|
| Layout Flexibility | Reflowable layout, adjusts to screen size | Fixed layout, retains original format |
| Device Compatibility | Works on e-readers, tablets, mobile devices | Can be viewed on most devices but has limitations |
| Interactivity | Supports multimedia and links | Limited interactivity |
| File Size | Generally smaller due to reflowable content | Often larger due to fixed layout |
| Accessibility | Better accessibility options | Less accessible, fixed layout can be difficult |
| Editing and Printing | More difficult to print | Ideal for printing in consistent format |



NCERT eBooks Available on the Following Places





How to Develop EPUB

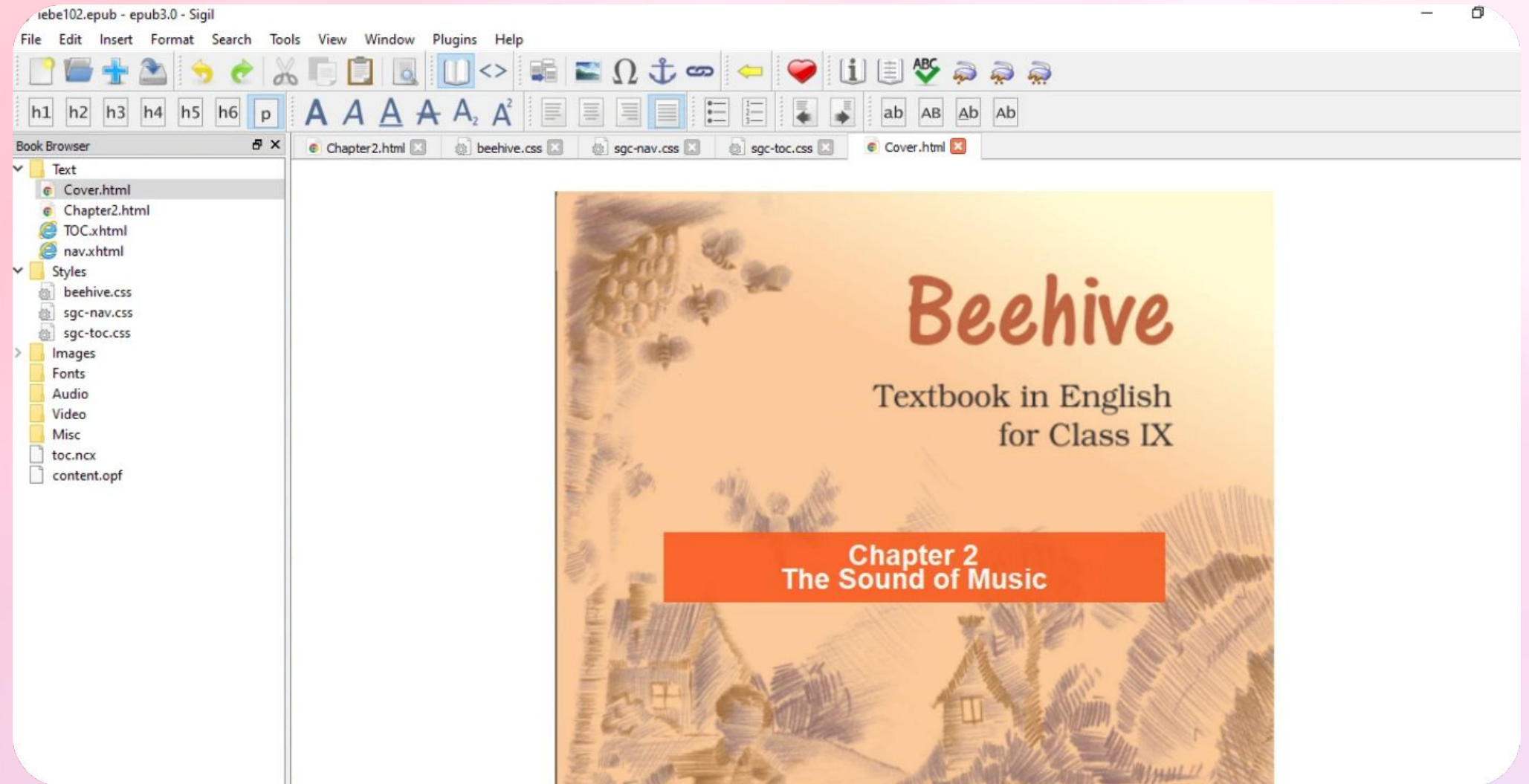
Develop an EPUB involves several steps, depending on your content and the tools you choose to use. Here's a simple guide:

1. Prepare Your Content: Text, images
2. Install an EPUB Creation Tool:
3. Sigil: A free, open-source EPUB editor that allows you to create and edit EPUB files.
4. Sigil: A free, open-source EPUB editor that allows you to create and edit EPUB files.
5. Using Sigil:
 - Install and open Sigil.
 - Create a new EPUB file.
 - Import your text and images, and format them using Sigil's interface.
 - Save the file as an EPUB.



Source: <https://sigil-ebook.com/sigil/download/>

USER
INTERFACE of
SIGIL EDITOR
WINDOWS, MENUS AND
TOOLBARS





Energized Textbook

An Energized Textbook is a digital textbook enhanced with interactive elements, multimedia content, and additional resources to make learning engaging.

NCERT Energized Textbooks: These are digital versions of the textbooks provided by the National Council of Educational Research and Training (NCERT). They include QR codes that link to additional digital content like videos, animations, and practice exercises available on platforms like the DIKSHA portal and ePathshala Portal.

QR Code - Quick Response Code

A QR code (Quick Response code) is a type of barcode that can be scanned using a smartphone or other devices with a camera. It contains information like text, URLs, or other data, which the device can quickly read and interpret.

A QR Code is a two-dimensional barcode that is readable by smartphones.

Example:



Why QR Codes are Useful?

QR Code Advantages

Safe and Contactless

QR codes are useful for contactless interactions. This is helpful for menus or payments.

Easily Trackable

Businesses can track the number of QR code scans. This provides insights into engagement.

Space-Saving

Instead of printing long URLs, use a small square QR code. It stores all the information.



Quick Access

Instantly access information by scanning the code. No typing is required.

Simple to Use

Anyone with a smartphone can scan QR codes. This makes sharing information effective.

Highly Versatile

QR codes can be used for many purposes. Examples include linking websites or downloading apps.

How to generate QR Code

Steps to Generate a QR Code by Google Sheet

Explanation:

1. Open Google Sheets: Start by opening a new or existing Google Sheet.
2. Enter Data: Create column and enter data.
3. Fill the columns as following:
 - Chapter No
 - Chapter Title :
 - Domain URL : We have to write domain name (**<https://epathshala.nic.in/QR/?id=>**)
 - Code : We have to write code of the title like (0123CH01)
 - Complete URL : We have to concat this by the Formula **"=CONCAT(C2,D2)"**
 - QR Code: In this column we have to apply qr code API to create qr code

- =image("https://qrckit.com/api/qr.php?addtext="&D2&"&qrcode=150&t=p&e=m&d="&E2)
- API source url: https://qrckit.com/qrckit_apps/qrckit_api.php
- OR just go to Google and type "qrckit api" and open first link
- Then copy the API and apply on the QR Code column.

SRG QR Code

File Edit View Insert Format Data Tools Extensions Help





100% | 123 | Defaul... | 10 | B I A

F2 | fx =image("https://qrckit.com/api/qr.php?addtext="&D2&"&qrcode=150&t=p&e=m&d="&E2)

| | A | B | C | D | E | F | G | H |
|----|-------------|--------------------------------|---|----------|---|---|---|---|
| 1 | Chapter No. | Chapter Title | Domain URL | Code | Complete URL | QR Code | | |
| 2 | 1 | Two Little Hands | https://epathshala.nic.in/QR/?id=0123CH01 | 0123CH01 | https://epathshala.nic.in/QR/?id=0123CH01 | =image("https://qrckit.com/api/qr.php?addtext="&D2&"&qrcode=150&t=p&e=m&d="&E2) | | |
| 3 | 2 | Greetings | https://epathshala.nic.in/QR/?id=0123CH02 | 0123CH02 | https://epathshala.nic.in/QR/?id=0123CH02 | | | |
| 4 | 3 | Picture Time | https://epathshala.nic.in/QR/?id=0123CH03 | 0123CH03 | https://epathshala.nic.in/QR/?id=0123CH03 | | | |
| 5 | 4 | The Cap-seller and the Monkeys | https://epathshala.nic.in/QR/?id=0123CH04 | 0123CH04 | https://epathshala.nic.in/QR/?id=0123CH04 | | | |
| 6 | 5 | A Farm | https://epathshala.nic.in/QR/?id=0123CH05 | 0123CH05 | https://epathshala.nic.in/QR/?id=0123CH05 | | | |
| 7 | 6 | Fun with Pictures | https://epathshala.nic.in/QR/?id=0123CH06 | 0123CH06 | https://epathshala.nic.in/QR/?id=0123CH06 | | | |
| 8 | 7 | The Food we Eat | https://epathshala.nic.in/QR/?id=0123CH07 | 0123CH07 | https://epathshala.nic.in/QR/?id=0123CH07 | | | |
| 9 | 8 | The Four Seasons | https://epathshala.nic.in/QR/?id=0123CH08 | 0123CH08 | https://epathshala.nic.in/QR/?id=0123CH08 | | | |
| 10 | 9 | Anandi's Rainbow | https://epathshala.nic.in/QR/?id=0123CH09 | 0123CH09 | https://epathshala.nic.in/QR/?id=0123CH09 | | | |

- Generate the QR Code: A QR code will appear in the cell, and you can download it by right-clicking on the image.

`fx =image("https://qrckit.com/api/qr.php?addtext="&D2&"&qrsize=150&t=p&e=m&d="&E2)`

| A | B | C | D | E | F |
|-------------|--------------------------------|---|----------|---|---|
| Chapter No. | Chapter Title | Domain URL | Code | Complete URL | QR Code |
| 1 | Two Little Hands | https://epathshala.nic.in/QR/?id=0123CH01 | 0123CH01 | https://epathshala.nic.in/QR/?id=0123CH01 |  |
| 2 | Greetings | https://epathshala.nic.in/QR/?id=0123CH02 | 0123CH02 | https://epathshala.nic.in/QR/?id=0123CH02 |  |
| 3 | Picture Time | https://epathshala.nic.in/QR/?id=0123CH03 | 0123CH03 | https://epathshala.nic.in/QR/?id=0123CH03 |  |
| 4 | The Cap-seller and the Monkeys | https://epathshala.nic.in/QR/?id=0123CH04 | 0123CH04 | https://epathshala.nic.in/QR/?id=0123CH04 |  |

Thank You for Your Attention!

Doubts and Questions

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