



ChipServer LLC
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The Learning Ideas Conference 2025

BRIDGING THE DIGITAL DIVIDE

STREAMING AND BROADCASTING EDUCATIONAL AID DOCUMENTS
IN LOCATIONS WITHOUT OR WITH LIMITED INTERNET OR WIFI SERVICE AVAILABLE

PROBLEM STATEMENT

In today's tech-driven world, unreliable internet and WiFi connectivity disrupts file sharing, limits accessibility and poses security risks, preventing users from reaching their full potential

In disasters, outages or even in remote locations, it further hinders communication and data recovery, making a reliable offline solution essential for continuity and



How Students Receive Homework and Assignments



Google Classroom



Email



Online Document



Printed Handout





Learn Anywhere and Anytime

**Imagine being able to provide for everyone
to learn anywhere and anytime,
in a classroom, on vacation, at home,
or in a group sitting under a tree.**

MARKET ANALYSIS

More than 175 thousand schools/villages in the world are in remote locations where internet creates a barrier

Many thousands of schools in Urban areas, including the US, have poor or limited internet access.

Lets look at what areas this includes:



In the United States, while rural areas often face challenges with internet infrastructure, urban regions are not exempt from connectivity issues. Many urban communities, particularly those with lower-income populations, experience unreliable or unaffordable internet access, hindering educators' ability to assign and students' ability to complete homework and assignments online.

Urban Areas Facing Internet Access Challenges

1. **Memphis, Tennessee:** Significant portions of Memphis lack affordable high-speed internet, disproportionately affecting students in low-income neighborhoods. This digital divide has been highlighted as a barrier to equitable education access .
2. **Baltimore, Maryland:** In East Baltimore, students like Shemar have struggled with remote learning due to unstable internet connections and limited access to digital devices, exacerbating educational disparities . [newyorker.com](#)
3. **New York City, New York:** Despite being a major metropolitan area, certain neighborhoods in NYC experience broadband access issues, affecting students' ability to participate in online learning and complete digital assignments .
4. **Los Angeles, California:** During the COVID-19 pandemic, the Los Angeles school district reported that up to a third of their students were not logging into online classes, indicating significant connectivity and access issues . [en.wikipedia.org](#)
5. **Detroit, Michigan:** Detroit has faced longstanding challenges with internet affordability and access, impacting students' ability to engage in digital learning environments.



Regions with the Highest Offline Populations

1. Sub-Saharan Africa

- **Internet Penetration:** Approximately 38% .
- **Countries with Notable Offline Populations:**
 - **South Sudan:** Only about 12.1% of the population used the internet in 2024 .
 - **Burundi:** Approximately 90% of the population did not use the internet in 2023 .
 - **Ethiopia:** Around 80.6% of the population remained unconnected as of January 2024 . [arxiv.org](#)

[worldpopulationreview.com](#)

[reddit.com](#)

2. South Asia

- **India:** Despite significant growth, approximately 684 million people remained offline as of 2023. Factors include affordability, digital literacy, and rural infrastructure challenges .

3. Central Asia

- **Turkmenistan:** Internet penetration was about 38% as of 2023, with strict government controls limiting access . [arxiv.org](#)

4. Remote and Rural Areas Globally

- Even in developed countries, rural and remote regions often face connectivity challenges due to infrastructure limitations. For instance, in parts of rural New York, USA, broadband access remains a persistent issue . [timesunion.com](#)



Barriers to Internet Access

- **Infrastructure Limitations:** Lack of broadband networks, especially in rural and remote areas.
- **Affordability:** High costs of devices and data plans relative to income levels.
- **Digital Literacy:** Limited awareness and skills to use internet services.
- **Cultural and Political Factors:** Government restrictions and societal norms can impede access.

Efforts to Bridge the Digital Divide

- **International Initiatives:** Programs like the ITU's Partner2Connect aim to mobilize resources to expand connectivity .
- **Technological Solutions:** Deployment of satellite internet services and mobile broadband to reach underserved areas.
- **Policy Measures:** Governments are implementing strategies to improve infrastructure, affordability, and digital literacy. freethink.com

Addressing the digital divide requires coordinated efforts across sectors to ensure equitable access to the internet, which is increasingly essential for education, healthcare, and economic opportunities.

MARKET ANALYSIS SUMMARY:

ChipServer operates in the intersection of ed-tech, offline file-sharing solutions and digital inclusion technology, with primary focus on:

- 1. Rural Education (Africa, India, remote U.S. regions)**
- 2. Secure B2B file-sharing (e.g., conferences, offices)**
- 3. Environments with unreliable or no internet**

ChipServer took a step back to survey our industry's competitive landscape, in order to gain insights that would allow us to better serve our clients. We achieved that and also gained a deeper understanding of our place in the creative industry.



OUR MISSION

ChipServer's mission is to **Bridge the digital divide, one CHIP at a time!**

To provide digital equality for all, especially for people around the world without stable internet or computer access.

ChipServer believes that access to digital resources shouldn't be limited by internet or WiFi connectivity constraints.





SOLUTION : ChipServer

①

Streaming Storage & Broadcast

Streaming and broadcasting device built for secure, off-grid, and off-cloud data handling

②

Portable & Reliable

Combines portability, security, and accessibility for private file storage and sharing

③

Accessibility - Avoiding the Internet

Operates anywhere globally without internet and displays information directly on any device

④

Revolutionizing Data Storage

Convenient access to critical data from the office to remote locations like valleys and mountains

The Chipserver Journey



SPIRITUAL PILGRIMAGE where the Idea Sparked



Started with just 1 engineer

SAUL TROEN

2021-2024 Product Development

OUR STORY



2014 — The Spark

🔑 Problem Meets Inspiration

While teaching, Professor Saul Troen faced a simple but persistent issue: no internet at the university. This moment ignited the idea behind ChipServer.

2018 — Prototyping Success

🔧 R&D Pays Off

After years of research and development, the first working prototypes of ChipServer were completed.

2019 — Innovation Secured

📄 Patent Granted

ChipServer secured US Patent #1028946-B2 for wireless transmission of USB storage — a major milestone validating our unique technology.

2024 — Go to Market

🚀 Company Launch

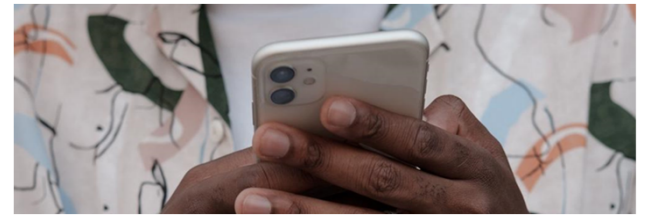
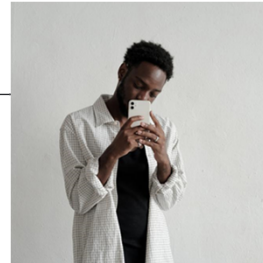
ChipServer LLC officially launched and began introducing our solution to the market to bridge the digital divide.

2025 — Scaling Impact

🌍 Future Forward

ChipServer is enhancing our tech, scaling operations, and expanding globally to empower more communities with offline access to digital content.

OUR GOAL



Serving **Educational Institutes**

Empowering schools and universities with reliable, offline access to digital content.

Simplifying **Technology**

Making advanced file-sharing user-friendly with a simple 3 step connection process — no tech expertise required.

Solving **Affordability**

Offering cost-effective solutions designed for underserved and resource-limited environments.

Scaling **Innovations**

Building customizable & adaptable systems that grow with our users' needs — from classrooms to global networks.



Reducing the Digital Divide one **CHIP** at a Time

1

Education

Securely share presentations, materials with students and create a portable classroom even in the most rural villages

2

Businesses/Conferences

Share your files with security in business meetings or at conferences without relying on an internet access.

3

HealthCare

Collaborate with colleagues and patients on their confidential healthcare documents.



Offline Accessibility

1

Cached Viewing

View previously accessed files without internet connection.

2

File Sync and Backup

File syncing for added data security.

3

Browser-Based

Access your files from any device, no app download needed.

4

USB Port*

Broadcast and store files directly from a USB drive.

* Only in ChipServer Plus and Pro

5

Responsive Design

Optimized for smartphones, tablets, and computers.





3 PRODUCT LINES

Essential

- ❖ 128 GB Internal Storage
- ❖ 15 + users simultaneously
- ❖ Range : 50ft +
- ❖ Direct file/Media upload –
No USB needed

Plus

- ❖ No Internal Storage
- ❖ 15 + users simultaneously
- ❖ Range : 50ft +
- ❖ Contains a USB port for
additional data requirements

Pro

- ❖ Largest & MOST powerful
- ❖ 1 TB Internal Storage
- ❖ 25 + users simultaneously
- ❖ Range : 80ft +
- ❖ Contains a USB port

CHIPSERVER ESSENTIAL

Perfect for personal use as a portable data storage drive, designed for users who want a simple, efficient and secure way to store and share files directly from their ChipServer to any device with a browser.

- 128GB internal storage
- Direct file upload to device
- Up to 400 Mbps upload speed
- **No External Storage Needed**
- Support for 15+ simultaneous users
- **Wireless Pocket Cloud**
- 50ft+ uninterrupted range
- Upload, Download, and share media



Compatible with any Wi-Fi smart device



CHIPSERVER PLUS

A versatile solution for both professional and personal environments, offering enhanced connectivity and external storage options. Compatible with any browser enabled smart device.

- 1 USB port included
- Compatible with USB type A/3.0 drives
- Support for 15+ simultaneous users
- View and present files within 50ft+ radius
- External SSD support
- 50ft+ uninterrupted range



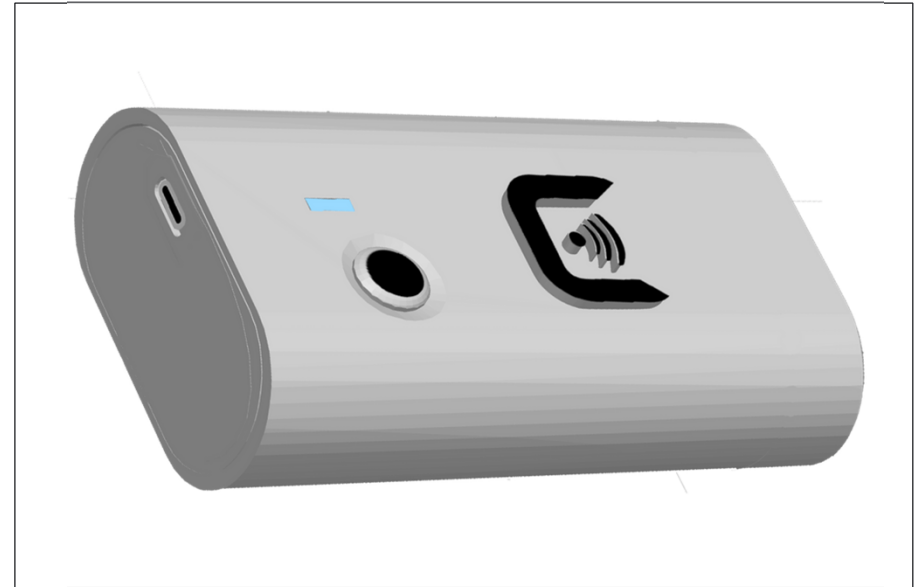
Compatible with any Wi-Fi smart device



CHIPSERVER PRO

Our most powerful model, designed for professional environments requiring maximum storage and connectivity capabilities.

- **256GB Internal Storage + USB port**
- Direct file upload capability
- Up to 400 Mbp/s upload speed
- Support for 25+ simultaneous users
- No connectivity drop-off
- **Wireless Pocket Cloud**
- 80ft+ uninterrupted range
- Upload, Download, and share media



Compatible with any Wi-Fi smart device



WHAT MAKES CHIPSERVER UNIQUE

Patent-Protected Tech	Utility patent (US-1028946-B2) for wireless USB transmission
No Internet Required	Works fully offline
Portable & Easy to Use	Plug-and-play; suitable for classrooms, conferences, and remote setups
Secure & Centralized	One server manages multiple USB devices wirelessly; better control and logging
Market Customization	Adaptable for different markets: education, enterprise, humanitarian use



ChipServer in Action

Plug & Play

Simply power on the ChipServer, and it will create its own secure Wi-Fi network. Wait for 10-15 seconds

Connect & Access

Connect to the ChipServer's network, and you can access the interface through any web browser from any device.

Let's see it Live...

Connecting to the
ChipServer Wi-Fi

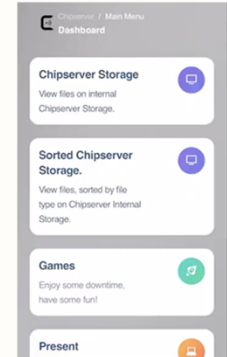
WiFi Name : Chips

STEP - 1



Connecting to the
ChipServer via any
browser. Type in
chips.edu

STEP - 2



Accessing the
Web Interface

STEP - 3



Powerful Hardware, Portable Design

Solid-State Drives

Fast, reliable, and durable storage for your files.

Battery Powered

Long-lasting battery for convenient portability.

Low-Power Processor

Energy-efficient performance for extended use.



Secure File Sharing

1 AES-256 Encryption

Protects your data with the highest level of encryption.

2 WPA2 & 3 Wifi

Securely connects to devices using the latest Wi-Fi standards.

3 Password Protection

Control who can access your files with secure passwords.

FUTURE INNOVATION

Partner with ISP

We are currently working with a major ISP who is interested in partnering with us to include SIM cards on the ChipServer. With this option, the ChipServer will automatically update with the latest software improvements whenever it is within range of connectivity. Plus, when the ChipServer is within range, the presenter who owns the ChipServer can download information and documents for streaming and broadcasting later when it is out of range.

Note Taking

One of target audiences for the ChipServer is the sales market, where presenters can use the ChipServer to share their sales presentations with their audience before the presentation begins. Soon, ChipServer will allow users to take notes on the presentation PDF as it is being presented, and then saved on the users device. Note taking can also be used in education, medical and security situations.

Low Cost Used Devices

One of target audiences for the ChipServer is the education market in rural areas. One of the barriers to using ChipServer is that each user needs to have a browser enabled device, such as phone, tablet or laptop. ChipServer is working with suppliers to offer low cost browser enabled devices to cross over that barrier.



Join us in revolutionizing access to ideas and emerging technologies.

Please visit www.theChipServer.com to schedule a free demonstration!



THANK YOU!

Questions?

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