

RFID Library Automation

idsolutionsindia.com



ABOUT US

ID Tech Solutions Private Limited an **ISO 9001:2015** certified company formerly known as **ID Solutions** was founded in **April 2004** to cater to the needs of Plastic Cards and Smart Cards in the Indian subcontinent.

We are the leaders in the “next generation” of Smart Cards, Plastic Cards, RFID products, Card Printers, Handheld Devices, Time Recorders, Entrance Automation Products Access Control Systems, IT and other customized solutions.

Over the past 17 years, we have grown from a company primarily providing plastic cards to **Smart Cards, RFID products, Entrance Automation Products, Track & Trace Solution & Services**, one with the capability, experience, and expertise to provide customized electronic security management focused solutions and services.

Our experience and strong mission-first work ethic has helped us develop capabilities, insights, and skills that few, system integrators can match.

ID TECH IN NUMBERS



19 years of
Manufacturing



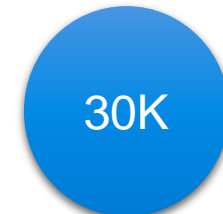
150 million RFID Tags
Sold



Largest Seller for RFID Tags In
India



10 Thousand RFID
Devices Sold In India



Boom Barriers Sold Till Date



7 Offices In India



3000+ Customer Base



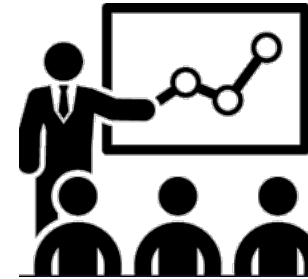
200 employees PAN
India

360°RFID SOLUTION PROVIDER



Hardware

- ❖ RFID Tags
- ❖ RFID Labels
- ❖ RFID Readers
- ❖ RFID Antennas
- ❖ RFID Printers



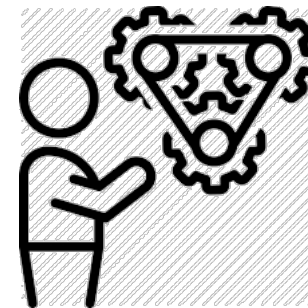
Training

- ❖ Solutions Architecture
- ❖ Installation
- ❖ Hardware Selection
- ❖ POC



Software

- ❖ Asset Management
- ❖ Inventory Tracking
- ❖ WMS
- ❖ RTLS



Support

- ❖ Technical Support
- ❖ Warranty Spare management
- ❖ Extended Warranty Contracts
- ❖ AMCs/CMCs

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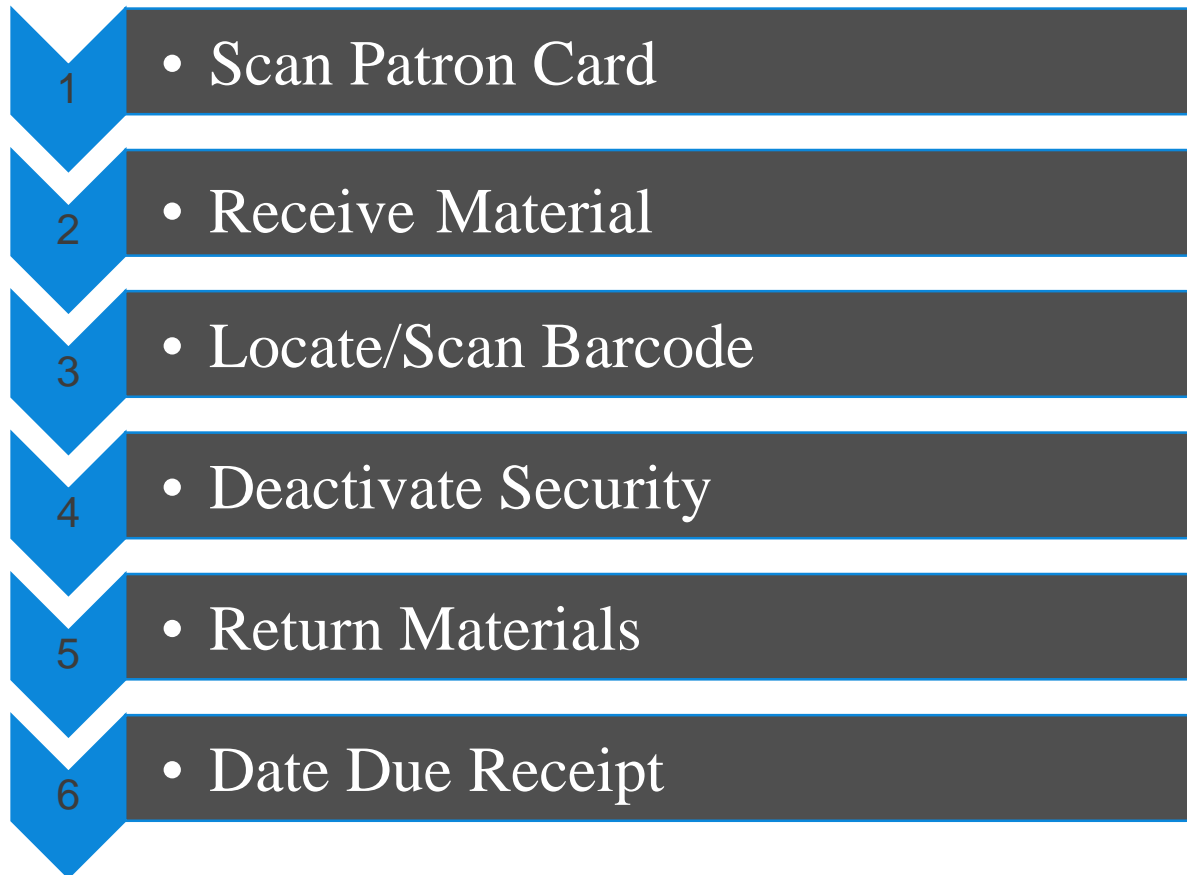
WHAT IS RFID?

RFID (Radio Frequency Identification) an Auto-ID data collection system surveillance, using RF waves for Identifying, Tracking and doing Management of material flow.

Features

- An AUTO-ID based system
- A method for controlling inventory
- Automatically identify objects
- Saving Time and Money
- Non-Line of Sight Communication
- Minimize Work Stress of Staff
- Offering Self Check out/in
- Gathering statistics on used items
- Improve Customer Services and
- Easily Prevent Theft

CONVENTIONAL PROCESS AND LIMITATIONS

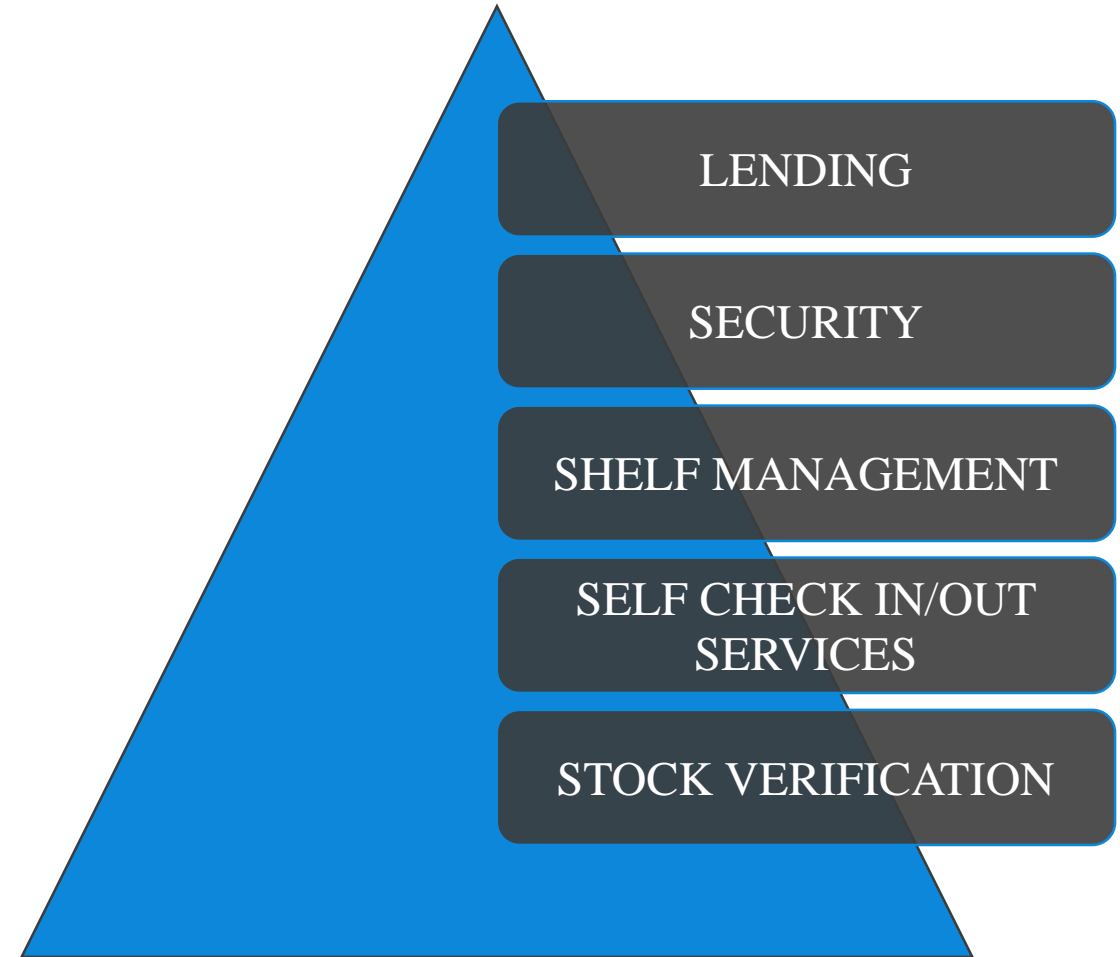


Limitations:

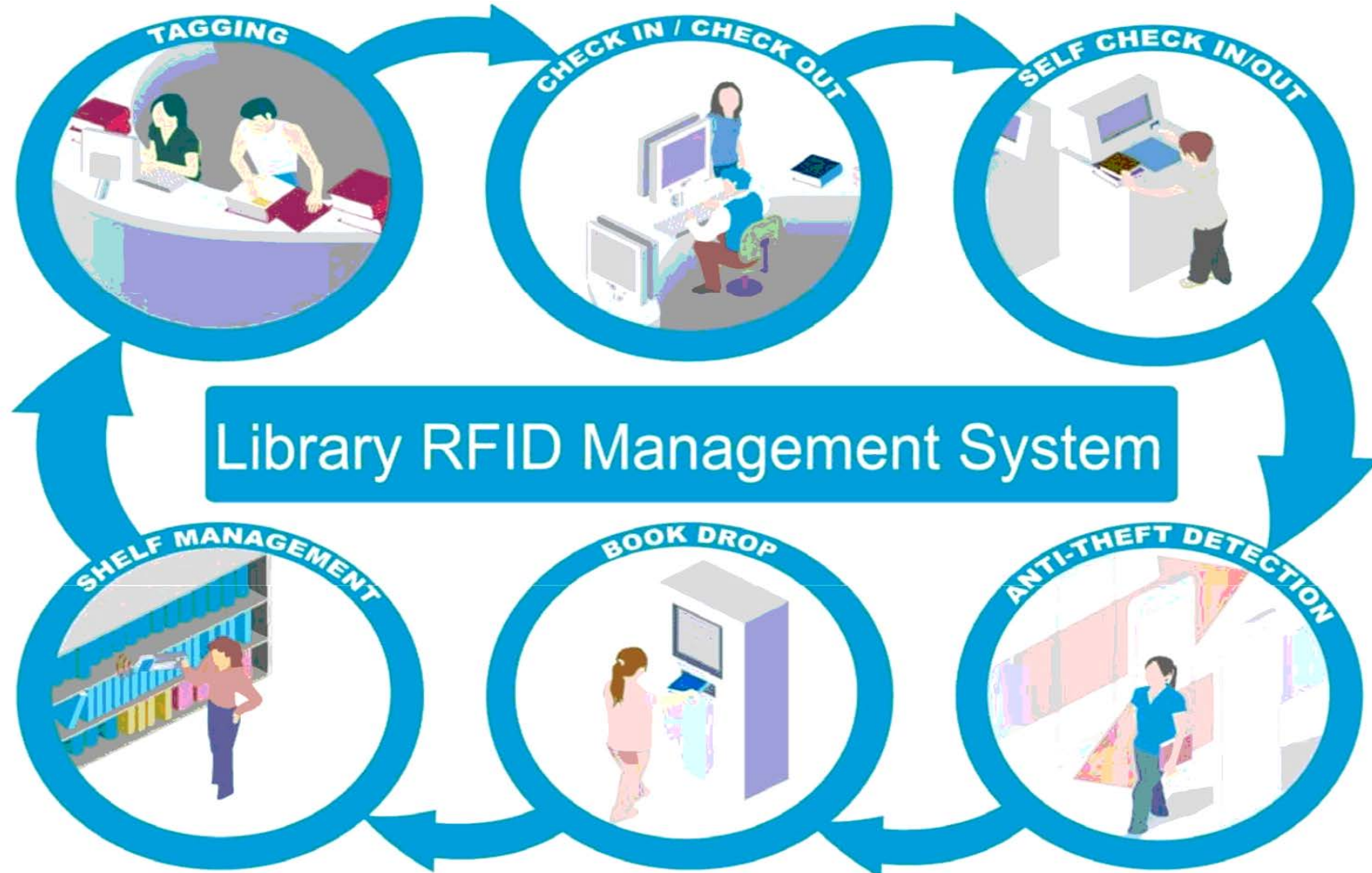
- Six Step Process
- Tedious and Slow
- Shelving Done Manually
- Time Consuming
- Misplacement of Items
- Mis-shelving of books
- Repetitive Reshelving Task

RFID IN LIBRARIES

- Efficient Book circulation management
- Automatic Check-in and Check-out
- Library inventory tracking in minutes instead of hours
- Multiple books can be read simultaneously
- Unique ID of the RFID tag prevents counterfeiting



PROCESS FLOW

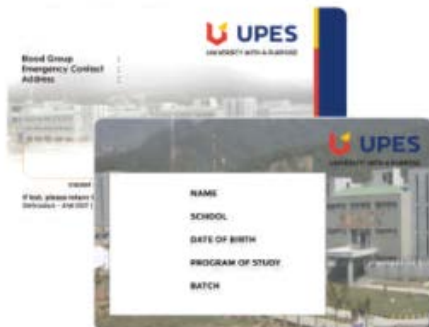


HARDWARE COMPONENTS



RFID Book Tag (IDT Lib Label 100/110/200):

- Complete Range of tags for books, CD's and DVD's
- Standards: ISO 18000-3, 15693, 28560-1, CE
- Operating Frequency: 13.56 MHz
- NXP Icode SLIX
- Data Retention: 50 years
- Read Distance: 25 cm



RFID Smart Card:

- Based on Mifare 1k technology working on 13.56 MHz
- Contactless smart card used for identification, library, canteen and access control
- Institute and personal details can be printed on the cards



HF Staff Station Reader:

- Used for Library Desk Circulation/Lending
- Self-Intellectual Property
- Support ISO 15693/NXP EPC, NXP UID, 18000-3 Tags, ISO 15693, ISO 14443 A/B
- Read Distance: Up to 30 cm
- Low Power dissipation design
- Can be used in harsh environment

HF Anti-Theft Gate Reader:

- Fully compliant with the proposed tags and other readers
- ISO 15693/ISO 18000-3 and 13.56 MHz
- Item identification is done through LMS database cross check
- Can easily detect unauthorized tags passing through it
- Entry and Exit counter
- Inbuilt audio visual alert facility



Self Check-In/Check-Out Kiosk:

- Users can take the book and self issue the book
- User + Tag Identity Authentication
- (RFID reader + card reader + Mounted Screen + Receipt Printer)
- Customizable Receipts
- Standalone device with multi protocol (ISO 15693/ISO 14443A)
- Material: Wood/Acrylic
- Can view and print transaction related information such as number of books issued, outstanding fine etc
- Enable of reading multiple tags at once
- Can be integrated with Biometric (Optional)



Book Return Station:

- User has to just slide the book in drop box to return the book
- (RFID reader + trolley + Mounted Screen + Receipt Printer)
- Customizable Receipts
- Standalone device with multi protocol (ISO 15693/ISO 14443A)
- Material: Wood/Acrylic
- Can view and print transaction related information such as number of books issued, outstanding fine etc
- Enable of reading multiple tags at once
- Storage Capacity: 200 books



Portable Handheld reader:

- Used for inventory taking, shelf management, locating or searching a book
- Capable of reading and writing the tags
- ISO 15693 compliant working on 13.56 MHz
- Support GPRS, GSM, 3g, Wi-Fi
- Provide USB, RS 232 communication port
- Environmental Sealing: IP 65
- Light Weight
- Operating System: Windows CE/Android

Please remember this resource is meant for many other users like you, so do not tamper, tear or damage the contents.

We believe that this is an individual social responsibility to take care of the library material.

Please do check before you borrow it as you may have to compensate if the material is returned in a damaged condition.

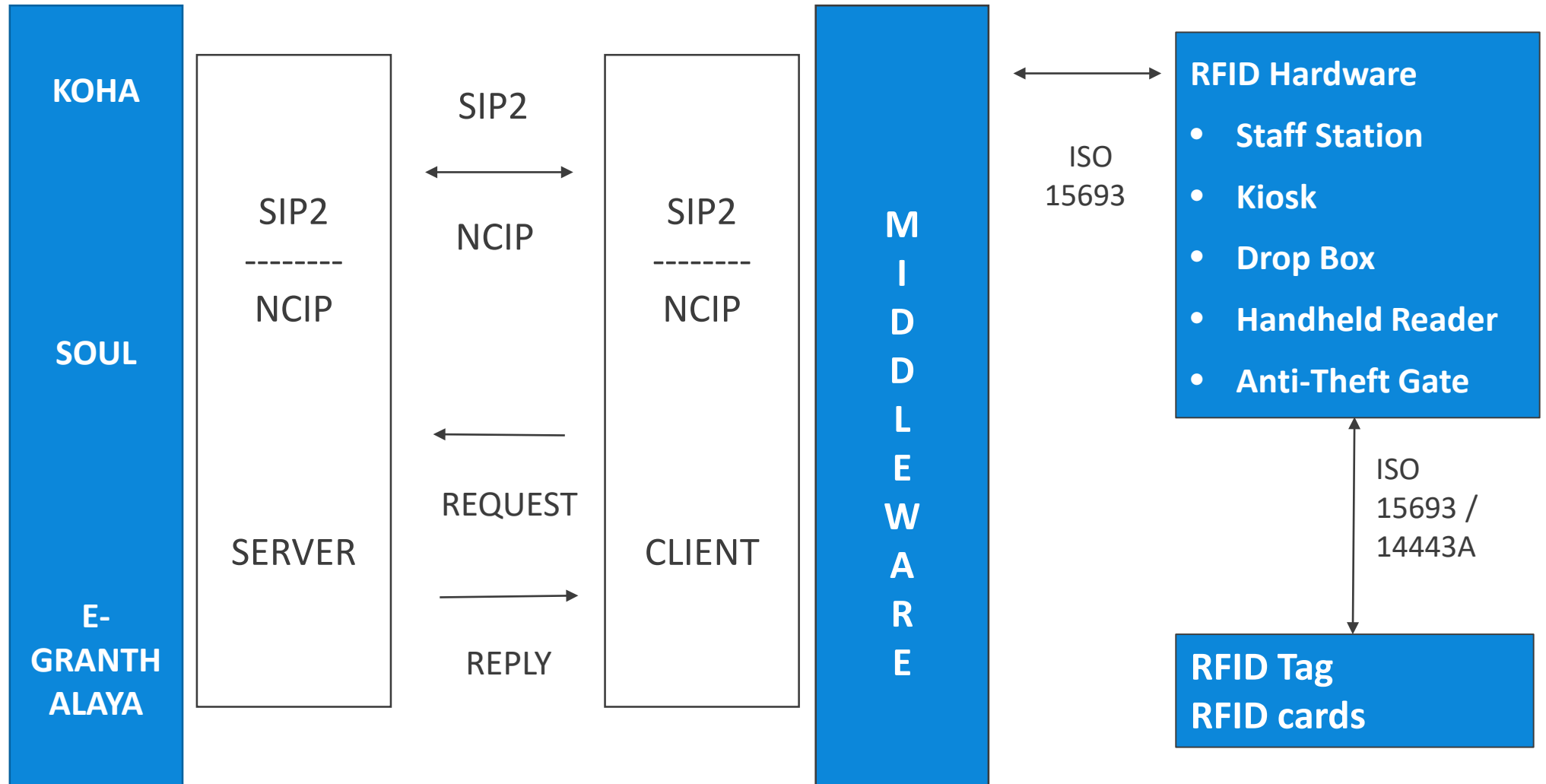
Institutional Labels:

- Comes with Strong Adhesive which does not leach into the paper of book.
- Main objective of pasting these label is to protect the RFID tag
- It is generally half inch longer than RFID tag in all directions

Card Registration Reader (ACR 128):

- Small USB based reader for user authentication
- Performs card registration in library environment
- Capable of reading and writing cards of ISO 14443A standard

COMMUNICATION PROTOCOL



CASE STUDIES

Case Study I – *Institute of Chemical Technology*

Locations: Mumbai, Jalna, Bhubaneswar (RFID operational since 2018)

Number of Books Tagged: 1,50,000 (Book Tagging was also done by ID TECH)

Before ID TECH: ICT was using a conventional Barcode System for all the library process

Pain Point: Barcode was time consuming, institute couldn't find the books when required. Moreover, institute wanted to track the books and automate transactions

After ID TECH:

ID TECH provided them with RFID hardware along with KOHA. The integration happened through NCIP V2.0. It made the whole process automated which included issue/return process as well as theft protection. Later the same process was done for their other 2 campuses.

CASE STUDIES

Case Study II – *Tata Institute of Social Sciences*

Location: Tuljapur (RFID operational since 2015)

Number of Books Tagged: 1,00,000

Before ID TECH: TISS was using Barcode with SOUL 2.0

Pain Point: TISS wanted to move to RFID but with integration with their existing LMS

After ID TECH:

ID TECH provided them with RFID hardware and successfully integrated with their existing LMS. Automation included the issue and return process, self check in stations, book drop box etc. ID TECH also handled the charge of tag pasting and encoding along with on site support for an year

CASE STUDIES

Case Study III – *Raja Ram College*

Location: Kolhapur (RFID operational since 2016)

Number of Books Tagged: 1,00,000

Before ID TECH: Raja Ram college was using manual process for circulation

Pain Point: manual process was a tedious, time and effort taking process

After ID TECH:

ID TECH provided them with RFID hardware and successfully integrated with KOHA. Automation included the issue and return process, self check in stations, book drop box etc. ID TECH also handled the charge of tag pasting and encoding as well as giving them the on-site support for 2 years

CONCLUSION

- ID TECH provides good quality products meeting the international standards
- ID TECH not only provide the hardware but only provide the fully automated solution
- Capable of integrating the hardware with existing LMS
- Provide satisfactory after sales support & AMC
- Flexible Enough to provide on-site support for more than 3 years
- Customized, Reliable and Balanced Software
- Customer-centric approach
- Committed to solve the issue within 24 hours of escalation whether hardware or software

Rich Hands on Experience with:

- KOHA
- SOUL 2.0
- E-GRANTHALYA

CLIENTELE



and many more ...

WHY ID TECH SOLUTIONS?

Quality Hardware



We are the leading manufacturers for RFID Tags and Readers.

Experience



We have been providing solution to multiple industries and have the perfect experience.

Warranty



We stand behind our hardware, software and systems.

Versatile Software



Versatile software that can be customized to adhere to the needs of industry.

Global



We have installed multiple systems at various locations and hence can handle any need.

Tech Support



Our Experienced Technicians are always there to support you when you need them.

***THANK
YOU***



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