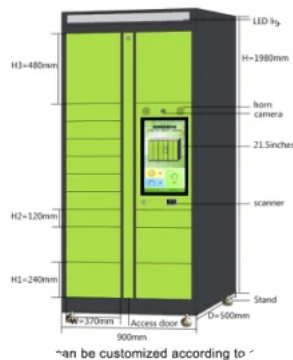# Project Research

This is all the research done so far on the project **"An Information System for Smart Delivery Boxes"**

Research

We have searched for parcel lockers on Alibaba.com and talked to several vendors about it. There were several vendors but we have included only two who could meet our requirements.

- Customized intelligent express cabinet smart parcel locker with touch screen for self pick up delivery express by **Shenzhen Upus Technology Co., Ltd**

- Electronic digital small parcel locker delivery locker metal package cabinet smart parcel locker smart by **Luoyang Yinlong Office Furniture Co., Ltd.**

Shenzhen Upus Technology Co., Ltd

After discussing with the manufacturer, they provided with the following document. The document gives APIs that will control the parcel locker but the document does not give any information regarding how will they connect to system or are the APIs hosted on the internet

We discussed with the manufacturer about our concerns but they could not understand due to language barrier but best we understood from the discussion they are node modules which are hosted on the internet

- SmartLocker API (https://drive.google.com/uc?export=download&id=1iOkpgUJ9jpe-kPwc1nWaYTqu_JboYYo6)

The cost of the product is PKR 36000 and Shipping cost is PKR 5000

So the complete cost would be around PKR 41000

Luoyang Yinlong Office Furniture Co., Ltd.

After discussing with the manufacturer, they provided with the following document. The document gives APIs that will control the parcel locker but the document does not give any information regarding how will they connect to system or are the APIs hosted on the internet.

Upon discussing with the manufacturer they cleared our confusion and clearly said that the APIs are hosted and they can be integrated with our system. We just have to access it using URL over the internet.

- SmartLocker API (https://drive.google.com/uc?export=download&id=1iOkpgUJ9jpe-kPwc1nWaYTqu_JboYYo6)

- Manual of the Locker (https://drive.google.com/file/d/1eRhzbWFZUEIelKtIHTKjQBSDZldL3Z7j/view?usp=sharing)

The cost of the product is PKR 97000 and Shipping cost is PKR 5000. So the complete cost would be around PKR 102000

Other Vendors

Shandong New Beiyang Information Technology Co., Ltd

- Specs of Parcel Locker (https://docs.google.com/spreadsheets/d/1bnYq3t16HcaJjFY_WWbRSxaIereo0UnD/edit?usp=sharing&ouid=112083732959538361973&rtpof=true&sd=true)

The manufactures sent the above document that gives the specs for their parcel locker. They did not provide any APIs and could not meet our requirements for the parcel locker. So we excluded them.

Xiamen Headleader Technology Co., Ltd.

This parcel locker worked by connecting the system with a serial port. That means that to access the locker you must carry a device that connects with serial port which was not a good option so we excluded them

Conclusion

There were other many products but the best product in our opinion is the parcel locker from **Luoyang Yinlong Office Furniture Co., Ltd.** They completely understood our requirements and answered our queries without confusing us.

Description of product and delivery charges is follows:

- Product(Customized for 3 compartments) price is 350$
- Shipment and clearance charges are 520$

Total price for it's delivery to our doorstep is 880$. Hitherto, according to our research, it is the best product that fulfils our requirements and also providing the best optimum price plan as well. For others, we were responsible for custom clearance and shipment services, but if we buy suggested locker, this will be count under company's responsibility.