

# Kiosk Deployment at Jaipur (Sterlite Tech Smart City Project)



## SCOPE

In Smart City Projects, KIOSK plays a major role. As a move towards an “approachable city administration”, these city kiosks are expected to act as an extended arm of city administration departments and help in connecting with citizens while promoting “anytime services” complementing the mobile platform based service delivery. While delivery, G2C (Government

to Citizen) services shall be the primary focus of City Kiosk systems, in order to ensure broader adoption and ensure business viability, B2C (Business to Company) services may be provided through City Kiosk.

## DEFINITION

The word “Kiosk” is of Turkish and earlier Persian origin, where it meant an outdoor pavilion or a portico. In information technology, a kiosk

(pronounced KEE-ahsk ) is a small physical structure (often including a computer and a display screen) that displays information for people walking by. Kiosks are common near the entrances of shopping malls where they provide shoppers with directions. More sophisticated kiosks let users interact and include touch screens, sound, and motion video.



### 1. INFORMATION KIOSK



#### TYPES OF INTERACTIVE KIOSKS

This type of kiosk is purely for information purposes. Usually found in large places with a high density of people to provide information regarding the area. This is the same type of kiosk used for way finding in places that are easy to get lost in. Apart from making sure that patrons of the establishment are well informed, there isn't any tangible ROI for Point of Information kiosks.

### 2. PRODUCT PROMOTION KIOSK



Product promotion can come in the form of electronic coupons or plain advertisement. These types of kiosks are used in retail to provide information and offer a chance for customers to take advantage of the promotions. Electronic coupons can come in the form of messages or a consequence to customers acting on "call to action" buttons on business websites or the digital signage.

### 3. SERVICE KIOSK



There has been a high demand for service kiosks due to its shorter service time when compared to the same service done manually. These are the kiosks that you use to pay your bills, fill out application forms and the more menial tasks that can be done without the need of staff assistance. This is known to give high ROI since there are more customers that get to be serviced at a short amount of time





#### 4. PRODUCT DISPENSING KIOSK



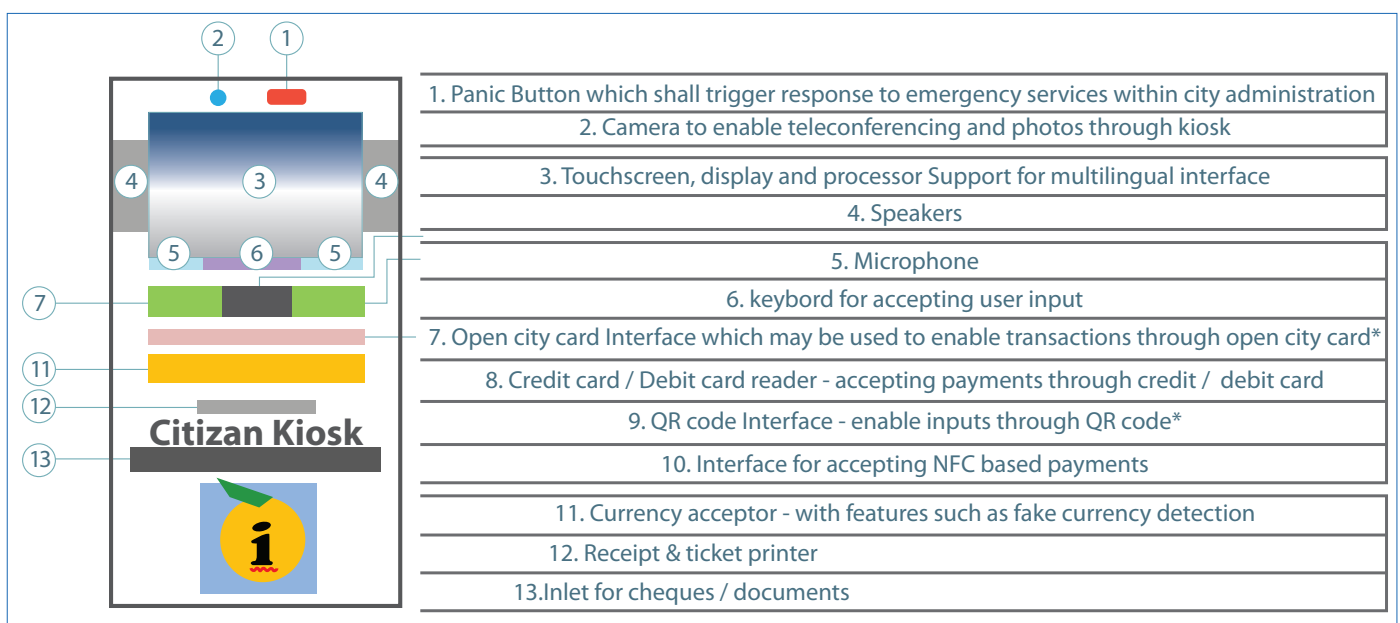
Also known as vending kiosks, these are the hardest type of kiosk to implement due to having the complete merchant process in one machine. From creating the product to delivering it, up to receiving the payment, the product dispensing kiosk is a store-in-a-box. This used to be deployed only in ticket issuing establishments like train stations, theatres and banks but has now expanded to dispensing every small and basic item.

#### 5. INTERNET COMMERCE KIOSK



These kiosks have internet connection for users to be able to buy from retail and financial establishments conveniently. These kiosks directly connect to a company's website for customers to make direct purchases. Internet commerce kiosks are starting to appear a lot in public places for quick purchases or for people to participate in online investment services.

#### KEY COMPONENTS



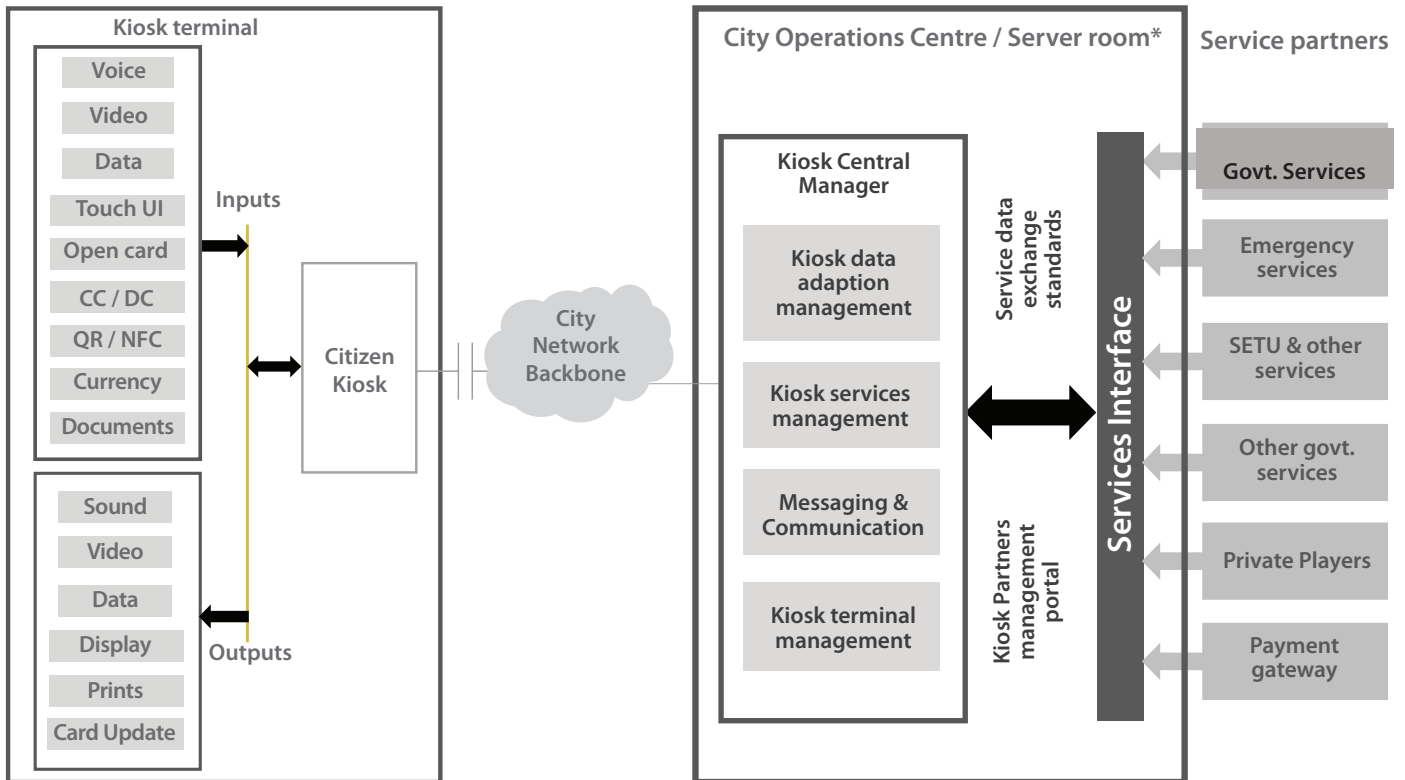
ITEM	INDICATIVE REQUIREMENT DESCRIPTION
Screen	<ul style="list-style-type: none"> <li>i. Minimum 15" LCD touch screen,</li> <li>ii. Shall support 1280x1024 Resolution or better,</li> <li>iii. Support for following features: Wide Viewing Angle, Low PowerConsumption, High Contrast Ratio, High Aperture Ratio, Short Response Time;</li> <li>iv. Capacitive Touch Display,</li> <li>v. All-glass touch-screen with a transparent metallic conductive coating is preferred</li> </ul>
Computing module	<ul style="list-style-type: none"> <li>i. Platform shall support leading operating systems</li> <li>ii. Processor speed minimum of 1.6 GHz Intel®/equivalent Processor or better</li> <li>iii. Min 2 GB RAM</li> <li>iv. Internal persistent storage capacity of minimum 20 GB</li> <li>v. Slots and support for connecting other components as required</li> </ul>
Key Board	<ul style="list-style-type: none"> <li>i. Alphanumeric keyboard with minimum of 50 keys</li> <li>* This may be replaced with an onscreen keyboard, depending on the design</li> </ul>
Speakers	<ul style="list-style-type: none"> <li>i. Output: 20 Watts or better</li> <li>ii. Shall be able to deliver clear stereo sound</li> </ul>
Microphone	<ul style="list-style-type: none"> <li>i. Shall support speech based interaction during video conferencing when enabled through kiosk</li> <li>ii. Shall be able to isolate the main sound source and minimize background noise, highlighting the performance</li> </ul>
Open City Card Reader & writer	<ul style="list-style-type: none"> <li>i. Shall be capable of reading/writing / updating certain data within the card. It is understood that this component may not be made available in the initial set up, however, as and when open city card is made operations during course of contract, this functionality shall have to be enabled</li> </ul>
Credit / Debit card reader	<ul style="list-style-type: none"> <li>i. Shall accept all major credit / debit cards from major payment gateways including Visa, MasterCard, Rupay, American Express and others</li> <li>ii. Shall be capable of reading latest magnetic strip and chip-based cards</li> </ul>
QR Scanner	<ul style="list-style-type: none"> <li>i. Shall be able to read Quick Response Code from Mobile phones, tablets and paper prints</li> </ul>



<p>NFC based payments</p>	<p>i. Shall be compliant with applicable ISO/IEC standards and also shall be able to accept payments from multiple vendors based on industry standards</p> <p>ii. It is understood that this component may not be made available in the initial setup, however, as and when NFC based payments are made available during course of contract, this functionality shall have to be enabled.</p>
<p>Currency acceptor</p>	<p>i. Shall be able to read INR notes of various denominations including 10, 20, 50, 100, 500 &amp; 1000</p> <p>ii. Shall have capabilities to identify fake notes</p> <p>iii. Shall be able to dispense change as per mutually agreed terms</p>
<p>Printer</p>	<p>i. Type: DMP / Thermal or suitable printing</p> <p>ii. Shall be able to print receipts, which may be preserved for a period of 12 months</p> <p>iii. Width: Type A 76mm or more</p>
<p>Physical form</p>	<p>i. Kiosk body enclosed in a protective shell made of robust weather proof material</p>
<p>Security requirements</p>	<p>i. Kiosk machine shall ensure that any data stored within or being transferred is encrypted as per industry standards. Machine shall ensure no data loss to the extent possible.</p> <p>ii. Kiosk machine shall be equipped with sufficient tamper-proof mechanisms to ensure detection in case of physical tampering to the kiosk</p>
<p>Other Requirements</p>	<p>i. Kiosk shall be upgradable through a central system remotely over internet</p> <p>ii. It shall be possible to monitor critical parameters related to health of the kiosk device remotely</p> <p>iii. Kiosk shall be able to provide details related to inventory requirements to central system</p> <p>iv. Multilingual support: Shall necessarily offer support for multiple languages including English, Hindi and Marathi (min)</p> <p>v. Kiosk shall provide for custom branding complete with signage and digital displays</p> <p>vi. Kiosk shall work fine under following operating conditions:</p> <ul style="list-style-type: none"> <li>• Temperature 0°-50°C</li> <li>• Humidity 10%~90% RH Ta&lt;40°C</li> <li>• Power: DC +12V, 100~240 V@ 60/50Hz</li> </ul>



## KIOSK Backend Connectivity Details



As mentioned in the diagram the various formats in which input shall take place to kiosk include voice, video, data, touch UI, open card, credit card/ debit card, QR code, NFC, currency and documents whereas outputs include sound, video, data, display, prints, card updates. Above mentioned components shall enable these interfaces.

### Choosing the right service provider

Anyone developing a kiosk, manufacturing a kiosk, selling a kiosk or deploying a kiosk has many considerations to take

into account. From hardware to software, from networks and aesthetics it is important not to forget about installation and repair service.

Here are the top 4 elements to make sure your selected service provider has in their 'tool kit' when considering a kiosk installation and repair company: There are dozens of kiosk suppliers in the market today, and each of those companies has their own unique design and parts list. When choosing a kiosk installation and repair company to help manage your deployment, will that firm have

experience in dealing with your particular model of kiosk, or will any issue be a complete surprise? Does the firm have access to quality documentation that will enable it to troubleshoot and solve issues quickly? Does the servicer have direct access to factory technical support from the field? In addition, can the firm access needed parts quickly, or will it take days or weeks to acquire those parts. Does the service company have the means to carry parts for your kiosk?

**-Rahul Bajaj**  
**Business Excellence & Quality**

