

## The Third Place Appliance

*A Thirdplace location requires a certain amount of technology, both to enable the visitor to function and for the owners to physically and commercially operate the space. A key part of that technology supplies the infrastructure of a location. ThirdPlaceMaker is an appliance that manages what happens onsite, and connects to functionality offsite.*

SEPARATE FROM OUR FIRST PLACE (HOME) AND SECOND PLACE (THE OFFICE), "THIRD PLACES" HAVE BECOME INCREASINGLY POPULAR...  
STEELCASE INC.

THIRDPLACEMAKER IS THE APPLIANCE THAT DELIVERS THIS INFRASTRUCTURE.

### A Look at Third Place Venues

By definition, **Third Place Venues** are where one works when not in the office or at home. Traditionally such workers are guests of the hospitality industry – coffee shops and hotel lounges. It is still probably the predominant view that a quiet hotel lounge is all one really needs.

But not everyone. Those in need of networking and community will seek out a CoWork or hub. Those who need privacy and hospitality will use lounges and clubs. Consultants have regular touchdown space, and project workers have regular meeting venues.

In other words, people seek something extra, be it resources, culture, convenience or opportunity. The percentage of the workforce using a third place is growing rapidly among both the employed and the self-employed. Thus not just property operators, but all sorts of players have an interest in seeing the development of Third Place working.

### The **ThirdPlaceMaker** Concept

If we decide there's more to a Thirdplace than a quiet coffee shop with tables, what resources might we want? It's clear that there is no single recipe or design for such space, but we believe there is a case for the site to be under the control of a common infrastructure manager. This is the Medusa *ThirdPlaceMaker* appliance.

An Infrastructure Manager provides common resources that everyone needs: Internet, printing etc. But it also provides the platform for optional external resources sourced from a wide range of potential suppliers. More than that, each space operator or owner will have their preferred choice of management software for billing and other functions.

Ideally the property will have installed the minimum hardware. Only devices that require a physical presence should be allowed – switches, WiFi access points and any tangible resources we wish to automate. Everything else is, if at all possible, provided in the cloud as a service. Enabling and managing these interactions is the role of the **ThirdPlaceMaker** Appliance.

### More Resources than a Coffee Shop / More Open than a Club?

Our models for use of Thirdplace space are not currently well developed. Herein lays the opportunity for a flowering of hundreds of differentiated ThirdPlaces over the next few years as they seek to segment and niche the generality of mobile workers. For an example of how the even the simplest ideas work, see the Starbucks panel.

When thinking about the infrastructure design of a third space, there is more design complexity than might first be imagined. Consider:-

- Payment methods – credit, pay as you go, third party.
- Privileges – free services based on membership, transferable privileges from other programmes. Reservation –v- open use.
- Charging – by consumption, allowance, promotions or barter.
- Variable performance levels. Time of day charging.
- Space differentiation.
- Group services for meetings, training, networking.

The operator may choose to implement the application of these options manually, but true cost savings and opportunity will probably only come from automated administration.

### Review the experience...

So we need to imagine someone in need of a place to work, whether on a regular or a once-off basis. They may find the location via Google or an App, or via a website or reservation system, or through membership of some community or club.

When they arrive the user needs to check in and thus start their clock, discover the available resources, and make bookings or purchases. At some point they need to pay for what they have used. They will certainly need Internet, but they may need food, coffee, printing, or storage.

If they like what they find they may share the experience via social media, and seek out affiliated or branded equivalents in other locations. The operator may reward them for loyalty and make suggestions as their pattern of use builds up.

These workers may find a networking community within the ThirdPlace, or just a convenient touch-down handy for a customer or even the crèche. If their access to resources is easy and their welcome is warm, they will return.



## Starbucks as exemplar

of the very simplest concepts done well.

Like all cafes, Starbucks is formally 'pay-as-you-go' and 'first-come, first-served'. That is, no tabs are opened and no tables reserved.

But we find Starbucks operates loyalty programs and cards, which also deliver the (newly free) WiFi. Independent Foursquare's has weekly promotions, there are iPhone Apps, and currently there are trials of Starbucks meeting rooms and work desks in progress.

## Analyzing ThirdPlace Infrastructure Choices

### Basic-level Infrastructure

Every location needs a minimum infrastructure in order to provide a ThirdPlace environment. Space operators may then enhance the infrastructure to provide the style and culture desired by the community, brand or institution.

Users always require a managed and resilient (multiple connection) Internet service, a managed and secure WiFi service, and some common services.

Recognition of users, along with some form of usage accounting, is needed to deliver the promised service plan. In addition there are specific requirements to be met for

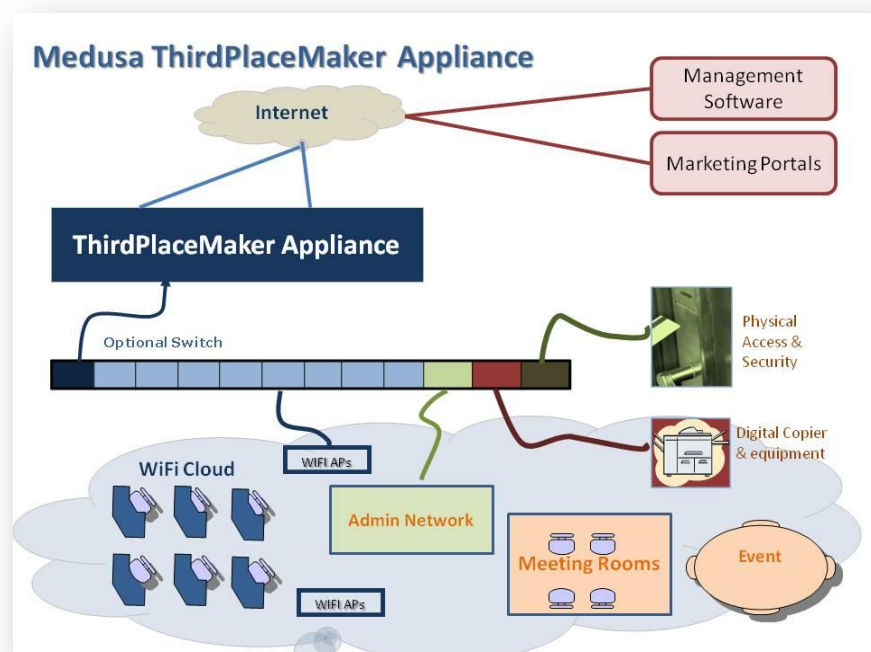
legal compliance, and other precautions for commercial protection such as the delivery of terms and conditions.

Abusive or reckless use of the Internet can prevent other users from working and even threaten their security, and the task of the appliance is to minimise these threats.

There will be at least one “user” environment and often an entirely separate and secure admin environment. However it is likely that multiple, differentiated user environments will develop over time.

Common services - at the very least a user will need the ability to print and may want scan and fax facilities. This is done by a utility or DMZ network as part of the Appliance.

We envisage that this Basic-level is created through a kit of parts including the Appliance, which is easily installed by non-technical staff or owners. However the Appliance must be easily enhanced with optional additional resources and management without requiring significant local IT input.



## Internet is a Managed Resource and not a Commodity

Users have different needs depending on their applications they use in their business and social life. With cloud and social media, it is important that Internet use is managed and does not become a Darwinian fight for survival.

In many shared-space locations a choice of bandwidth is offered, with an entry level that is suitable for simple use such as web and email, and enhanced service level(s) for greater needs. It is hard in a Thirdplace to determine if a user’s need for enhanced bandwidth arises from a business, social or entertainment need. Indeed, unlike conventional office space, the distinction might be meaningless. Therefore we expect the service levels to be customisable and charging by resource consumption to be an available option as operators and owners evolve their offers.

Internet is required to be reliable and resilient but also cost effective. Historically we have solved that on Medusa by use of an automatic fairness algorithm which guarantees all users adequate bandwidth.

Many Thirdplace locations have an event and conference programme and organisers will want to know that their Internet needs are guaranteed and special event service or tickets are reserved for their guests.

## WiFi and Multiple Devices

Until recently a user really only had one device, usually a laptop. Today we see users arrive at a location with 2 or even 3 personal devices, which they expect to connect over WiFi.

We need to enable these devices to specific user accounts as it is unlikely that the customer will want to be pay as 3 separate users. WiFi is important – whatever is claimed about mobile broadband using 3G/MiFi, in the most part a good WiFi connection is almost always more responsive and preferred by users.

## Key to Thirdplace - Access and Use Infrastructure

In our study of Thirdplaces, we identified a common issue is that of physically identifying and tracking guests or members. To handle this we added an external service which integrates the management of locks and cameras into the Appliance. These locks and cameras are both network managed and powered.

In addition, the lock service is delivered via a cloud-based portal. This allows instant and remote management of all security aspects.

If every guest has a unique code, then not only will the code let them in to the property, but also record the length of time they are on the property. Most Thirdplace locations offer quantity based programmes, e.g. 10-hours per month, 20 hours etc, so the code covers two distinct accountability tasks: access and hours usage.

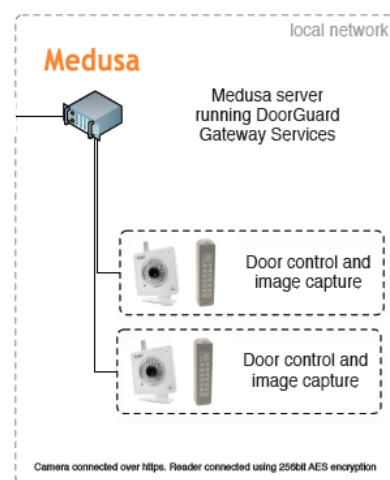
However the codes can be used to bill the consumption of optional resources. Keypads and screens allow access to resources as diverse as meeting rooms to vending machines.

Codes also link to reservation systems. If an operator promotes individual resource booking such as a specific desk or room, then the code can be used to unlock the resource and confirm the user.

Codes help guests with security as well, as their use indicators that all visitors are legitimately on the premises. They can also be used to automate services such as lockers as a benefit to members.

Further, because each code is unique we can supply instant one-time or time-limited codes to people who may have just bought access off Google maps, social media or a reservation website. Web or mobile payment systems provide a degree of authentication of individuals.

Codes are tokenised in 3 main forms: as digits for a keypad, as a fob or proximity card or soon as “contactless” presence tracking via smart phones.



## Security

The networked lock access system is easily extended to networked cameras. There are three functions which add flexibility to management of the space.

Cameras can be positioned to record faces at the point of use of the code, and indeed this is the primary use. In a Thirdplace the main use of this is for dispute resolution over inappropriate use of codes.

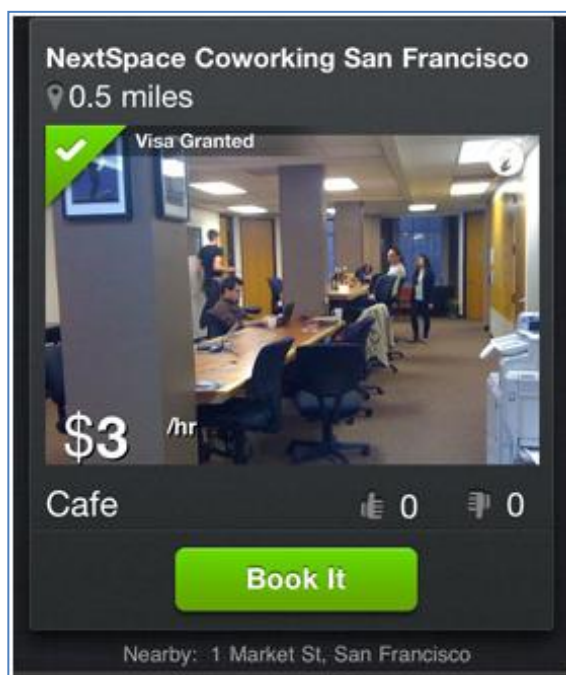
Cameras can also be set to stream live video. This may be used for remote reception purposes (e.g. to remotely allow access for delivery staff or couriers). However streams can also be recorded on an endless loop to provide a higher security level where needed.

*See our Whitepaper on Medusa + DoorGuard.*

## Social Media, Geo-location, and Mobility

Many people, not just the under 30s, research, interact and manage their lives using social media and mobile devices. Most commonly this is through generic applications such as Google, Facebook, or LinkedIn, but also through blogs and discussion groups.

In addition, Google and Foursquare offer geolocation methods, such that you can ask "what's around me now". Google will tell you how to find a Starbucks or other Thirdplace, and Foursquare offers promotions & chat space about the venue itself.



Currently there is also a Thirdplace specific application in development called **LiquidSpace**, available as a mobile App (see image). This will not only find Thirdplace locations but book you in and order services for you via its 'passport'.

Mobile social media requires that the appliance manages the infrastructure to recognise the user and allow services to be bought or bartered. Geo-location requires that the infrastructure recognises that user is on or near the premises. Both are functions that can be added to the ThirdPlace appliance.

## Other External Resources

There are in fact many other external resources that can be connected via the appliance. Resources under discussion include

- Vending machines
- Furniture interactions (see Steelcase)
- HVACs (environmental control)

- Telecollaboration & broadcast
- Wayfinding, signage
- Touch screen
- Projection
- Remote reception.

## Management through External Interfaces



Each visitor or member at a location will be managed by various software packages which are nearly all cloud-hosted. As a minimum, site management requires tracking of an individual hours, their consumption of resources, invoicing, payment methods, and contact details.

Not only is there not a single solution for the site management task, but it is clear that every location will deploy multiple solutions.

The ThirdPlaceMaker Appliance is designed to interface between these applications and the infrastructure, in the main through the use of something called APIs (Internet commands).

### The Management Task

In our round up of management systems in use we found 6 leading systems for service offices, 2 systems for Coworking, plus a more general use of SAP, Salesforce.com and Sage. That excludes portal software and hospitality systems such as Fidelio.

Basic club (period) membership is simple and automated by a few API commands linked to the software system. Nearly all these systems include a payment option by credit card, PayPal and bank transfer.

### Customer Self-Management Portal Services

The use of hosted platforms to deliver customer self-management is growing, and in areas such as CoWorking almost universal. Self-management allows customers register themselves, request their package level, receive an invoice and pay their bills. They may additionally reserve resources and book events.

These systems are also embryonic community portals with opportunities for networking or conferencing.

Suitable applications include CentreCharge ([www.rjmetis.com](http://www.rjmetis.com)) and Cobot ([www.cobot.me](http://www.cobot.me)), but any cloud based should be compatible if the developers are willing.

### Marketing and Reservation via Online Portals and Mobile Media

We are aware of many proposed online portals that will locate and book places to work or hold meetings. In addition, as mentioned above, there are social media projects to do the same. Plus there is a long standing market for virtual offices offered via web portals that is very similar in nature.

These portals are no different in nature from the other platforms mentioned, except that there may be more real-time and pre-payment interaction.

There are also well-established promotional and hospitality programmes where “members” have benefits, such as IATA airline loyalty cards, hotel groups, and other membership schemes. For many Thirdplaces, interaction with these systems would generate much new business.

We expect operators to commission their own smart phone Apps for iPhone and Android with infrastructure interactions built in. See below.

### The ThirdPlace API

An “API” is a way of interacting with appliances and cloud-based software using commands rather than web portals which require human interaction. These commands can be embedded in any software that has been granted a security key and that obeys the APIs rules.

So for instance your billing system may be told who just got access to the site, or it may instruct the lock that XXX can get access. But the commands can be built into anywhere – even Excel spreadsheets.

You may have heard of Federated authentication – this uses Gmail or Facebook or similar to verify the user. If this interests you, please contact us.





## ThirdPlaceMaker Early Adopter Programme

---

While much of the technology in the **ThirdPlaceMaker** Appliance is taken from our extensive experience of other shared space environments, there is much in the operation of Thirdplaces that is new.

We always seek to learn from user experience and traditionally have supported a number of Early Adopter locations, which in turn provide feedback leading to product modifications.

Because Thirdplaces are diverse in their nature, we anticipate that we will need a large number of early adopters drawn from a range of ThirdPlace concepts.

We invite "Early Adopters" who not only will get to try out our approach but also will have an opportunity to suggest design features that suit specific needs.

Contact : [info@thirdplacemakers.com](mailto:info@thirdplacemakers.com)

[www.thirdplacemakers.com](http://www.thirdplacemakers.com) or [www.medusabusiness.com](http://www.medusabusiness.com)



## Appendix Medusa ThirdPlaceMaker

---

### Medusa ThirdPlaceMaker Specification

4 GigEthernet network ports (bypass). USB x 2, Console.

Wan Interfaces: 1 with firewall, public IP routing and forwarding.

Optional additional WAN interfaces and load balancing.

Onboard PPTP VPN and optional IPSEC.

Traffic management, bandwidth and QoS control.

LAN Interfaces: 1, 2 or many secure independent local networks, each with DHCP scope & option codes, DHCP reservation, IP Aliases, static IP control. DMZ Networks.

VLAN switch management programmable, port status indicator, Mac-based VLAN, converged operation (tagged + untagged) on single port. Supports low cost Layer 2 switches.

Diagnostics – tcpdump in real time, ARP table, ping, traceroute, network scan, and other functions. Alerts. MRTG. SNMP.

Example Dimensions: 180mm (w) x 150mm (d) x 45mm (h). Weight: 0.75 Kg.

Supplied as Appliance with external power supply.

### Medusa Appliance API programmable interface.

We will be requiring Restful APIs with RPC-XML or JSON. Authentication will be by OAUTH 2 such as OpenID or federated access with social media.

Smartphones & Gadgets – example APPs and gadgets supplied.

### WiFi Access Point (option)

Specialist devices for WiFi providing support for multiple IDs in both isolated (hotspot) and training (networked) modes. WiFi wireless is programmed from the Appliance automatically including changes of key password and protocols. Connected user status report and other data.