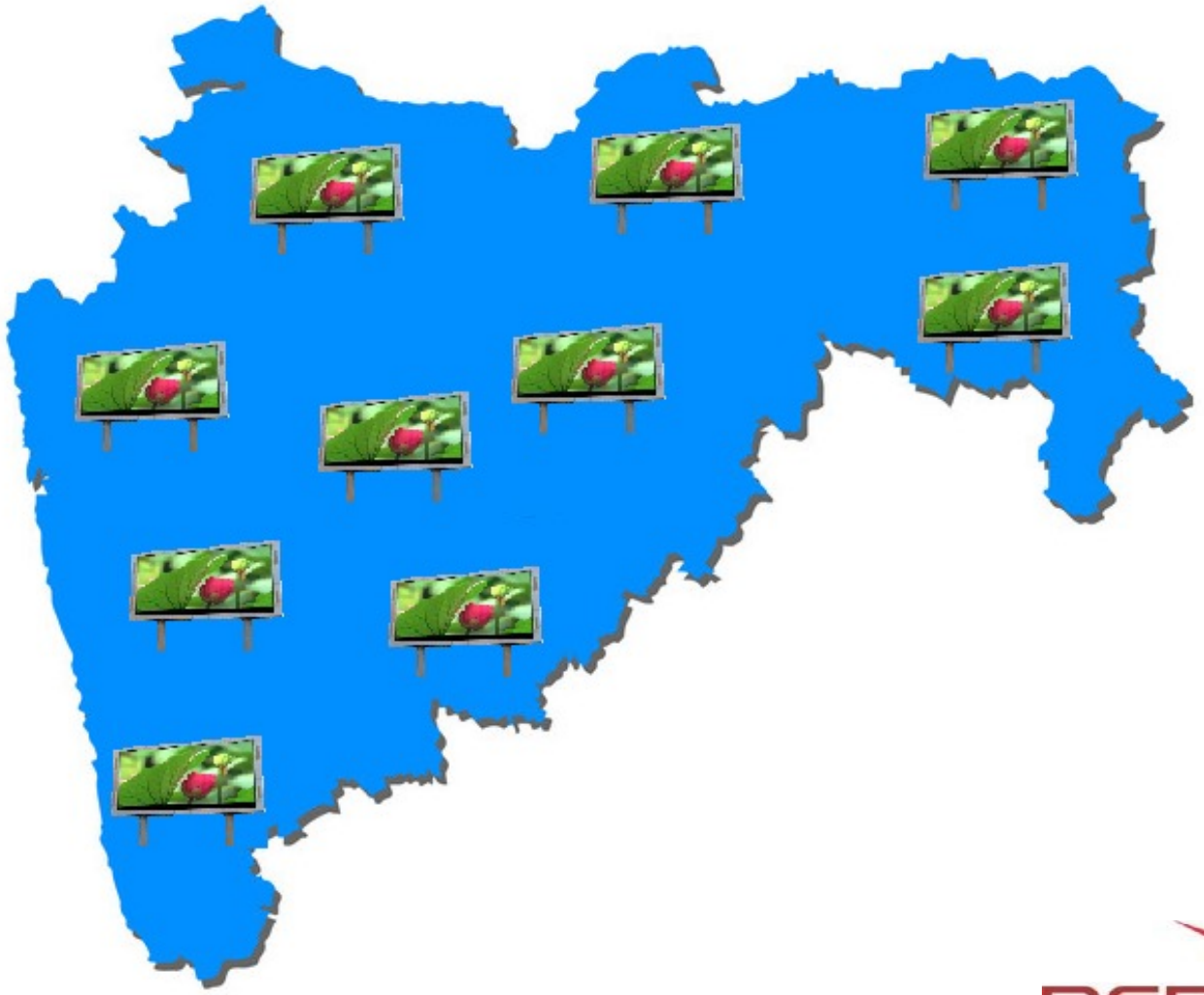
LED Communication Network



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Automation Concepts

Introduction – Pentagon Automation Concepts

- Pentagon Automation Concepts specialize in the installation, maintenance and servicing a wide range of signage, security & automation systems, having major experience in communication & security landscape.

- Currently there are 17 District hospitals with 100+ beds and resident colleges, where there is a need to install a mass communication media for general public information on the facilities & services offered by the hospital & college together.

- We aim to implement a network of LED screens across all the hospitals to benefit the 5000+ daily visitors, who arrive at each of these facilities.

- Along with providing latest information for all visitors of the facility, the LED network will also assist as a revenue generation platform.

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Executive Summary

- The objective of this presentation is to propose building a state-wide infrastructure of mass communication, provisioned via network of LED-wall based point of displays (POD), installed across Maharashtra government hospitals with resident medical colleges.
- Through the course of this presentation, we aspire to demonstrate how the best in class & multi-purpose visual media displays would provide a variety of flexible benefits to the Ministry of Public Health, Maharashtra.
- We are experienced in communication programs with proficiency in brand planning, creative development, media & even planning and digital integration.

Body of Work

- Installation of 18x12ft LED Point of Displays (POD) at district hospital with resident medical colleges.
- All existing 17 hospitals with resident colleges to be equipped with the PODs, with additional flexibility to promptly install screens on other or new hospitals too.
- This concept is seamlessly extensible to urban corporate & commercial promotion infrastructure setup & management too.

- POD will be designed to play video streams, motion pictures, still images & scrolling text and will be installed on top of 18-20 feet high platform, for clear visibility upto 150 meters.
- All PODs will be centrally managed from a control room, with recovery systems for business continuity during any unplanned outages.

Details of Hardware

- Bigger column diameter - 200 mm, Smaller column diameter - 150 mm
- Both columns will be connected by flanges
- Final column will be mounted on concrete base by anchor bolts
- Column will be supported by two C-channel from opposite sides to cater for wind load
- C- channel frame will be mounted on top of column to support digital board
- 3 column supports are required for 12ft x 18ft advertising board
- Oil & Radium painted surface finish (All seasons + night vision + lifespan 10 years)

Artefact	Period
Fabrication	2 Days
Installation	1 Day
Foundation	4 Days
Phase 1 implementation (150 locations)	< 100 Days

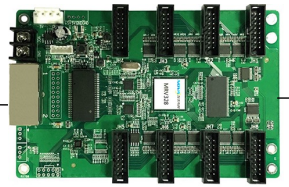
Installation of Hardware and Software

- LED Grid display will be integrated with a controller which will be attached to a processor which will run the software for the content of desired choice.
- Processor will have a internet connectivity which will upload the content to the desired location, content will be software driven.
- Software will have the ability to change the content from the control room. It will have flexibility to dynamically display the content automatically, during required timings.
- Content will be designed in such a way that the commuter will be able to view it from a distance of about 150 meters.
- Power backup can be provided by diesel generator & surpassed with UPS of correct wattage.
- Bespoke software to run on all standalone systems powered through a powerful quad core processor to play media.
- Software WILL be remotely operated on for individual machines or mobile applications and will be broadcasted to all PODs across India through internet connectivity.

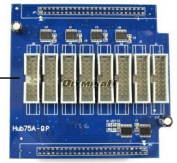
End to End Infrastructure

Control System

Video Processor &
Application Software

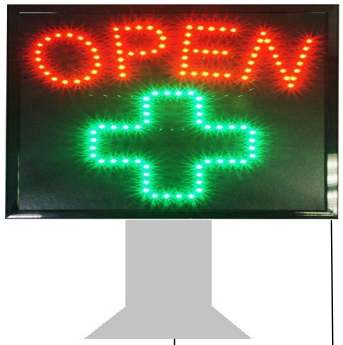


Receiving
Card



Sending
Card

POD



Power Distribution

Value Proposition

Mass communication

Instrument, with daily reach to over 85000 visitors

Emergency communications

can be displayed for public awareness in extreme incidents like natural disaster, fire, pandemic etc.

Broadcast in local language,

allowing communication to reach wide range of audience

Location specific broadcast

allowing most relevant communication to reach local residents

10% time allotment to MoHFW

of the transmission time for dedicated broadcast on facilities, status, availability, natural disaster, pandemic information etc.

Immediate broadcast

of message across media channels like video, image, text etc.

Value added features

The idea behind the installation of the large screen at at every college hospital will to be to create a visual awareness for the visitors in different facets of life and allow us many opportunities as:

- Government advertisements & campaigns
- Hospital facilities & department locations
- Dedicated support to MoHFW communications
- Safety standards & PPE SOPs
- Public messages & crisis communications
- Sponsored advertisements
- Various aspects of safety & precautions
- Health tips & locality information
- Expedited information sharing & disaster communications e.g., pandemic, critical services etc.
- Software will be bespoke and smartly designed to centrally manage media content to be broadcasted on pan-India screens & monitored from same central hub
- All changes will be centrally managed & communicated remotely via the hub

LED Tech Specs:

S. NO.	Artefact	Description	Configuration
1	Model	FS 10/12	10-12mm Pixel Pitch
2	Physical Density	10-12k dot/m2	
3	LED Config	1R1G1B	SMD3535
4	Module Size	320x160	32x16 pixels
5	Drive Mode	1/4 Constant Current Drive	
6	Viewing Angle (Deg)	H140/V140	Brightness 5500
7	Grey Scale	16 bits	Refresh rate 1920
8	Cabinet Resolution	96x96 Pixels	Weight 50 KG
9	Power Consumption (W/m2)	Max: 750 / AvG : 250	
10	Cabinet Material	Iron / Aluminium	Color >16.7
11	Input Voltage	110-220V AC (+/- 10%)	IP65 Protection
12	Refresh Frequency	60HZ	
13	Humidity Support	10-95%	Temp: -30 to +60
14	Certificates	CCC, CE, R0HS	

Project Plan & Duration

4 **Phase 3**: 3 months
POD installation on final 8 locations
Beta Testing & Handover – Q4 2022
AMC commencement

3 **Phase 2**: 3 months
POD installation at 6 locations
Beta Testing – Q3 2022

2 **Phase 1**: 3 months
POD installation at 3 locations
Beta Testing – Q2 2022

1 Project Approval and Commencement
Q1 2022

MoHFW Support

To accelerate implementation of this program, a support model is also requested MoHFW, as:

- POD installation space at all 17 college hospitals
- 20KVA electricity supply line (to be paid for & maintained by project team)
- POD & electricity line access to AMC contract vendor for maintenance purposes
- Lease term of 9 years

Q & A