

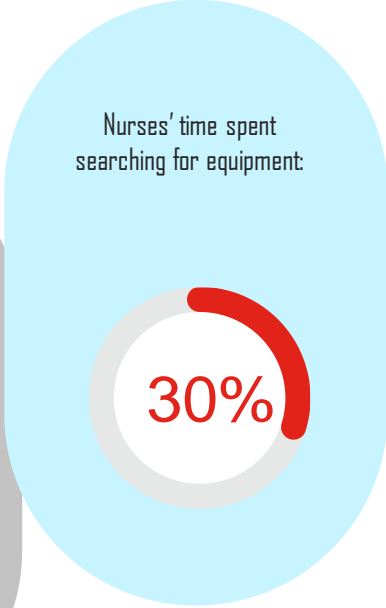
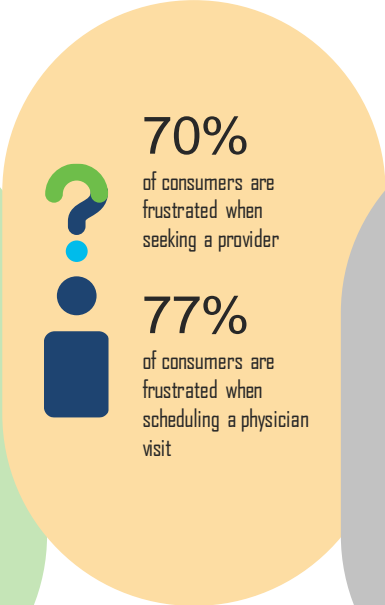
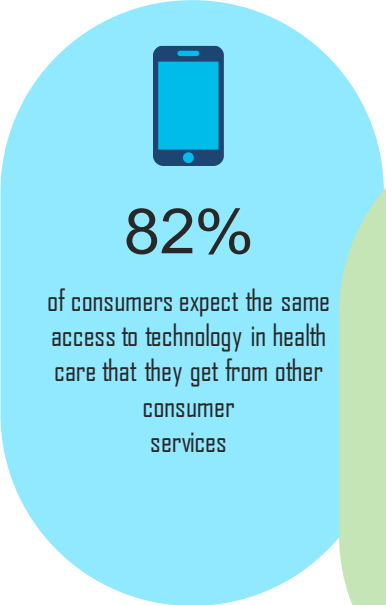
# Inšpiratívne príklady digitalizácie zdravotníctva

Zuzana Švecová  
Cisco Systems, CZSK Architecture Lead

Medzinárodný kongres ITAPA 2019  
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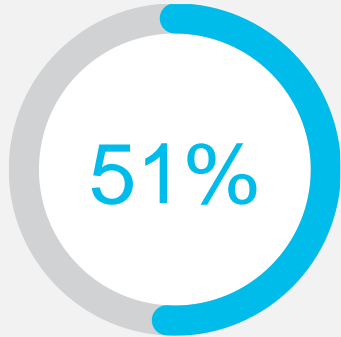


# Patient experience: challenges and drivers

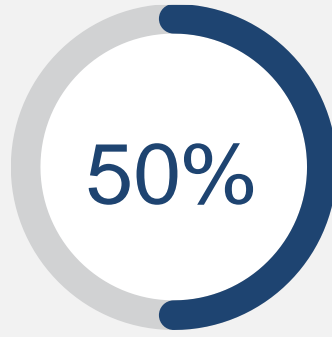


# Legacy IT hinders healthcare innovation

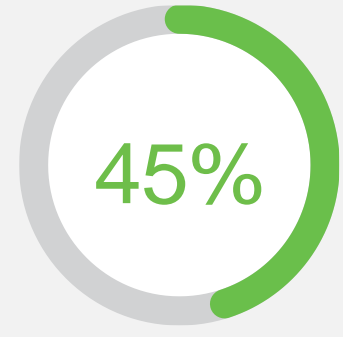
IT decision makers/influencers at hospitals and health systems say, when asked about the barriers to advancing digital health initiatives:



Clinician resistance to adopting new solutions



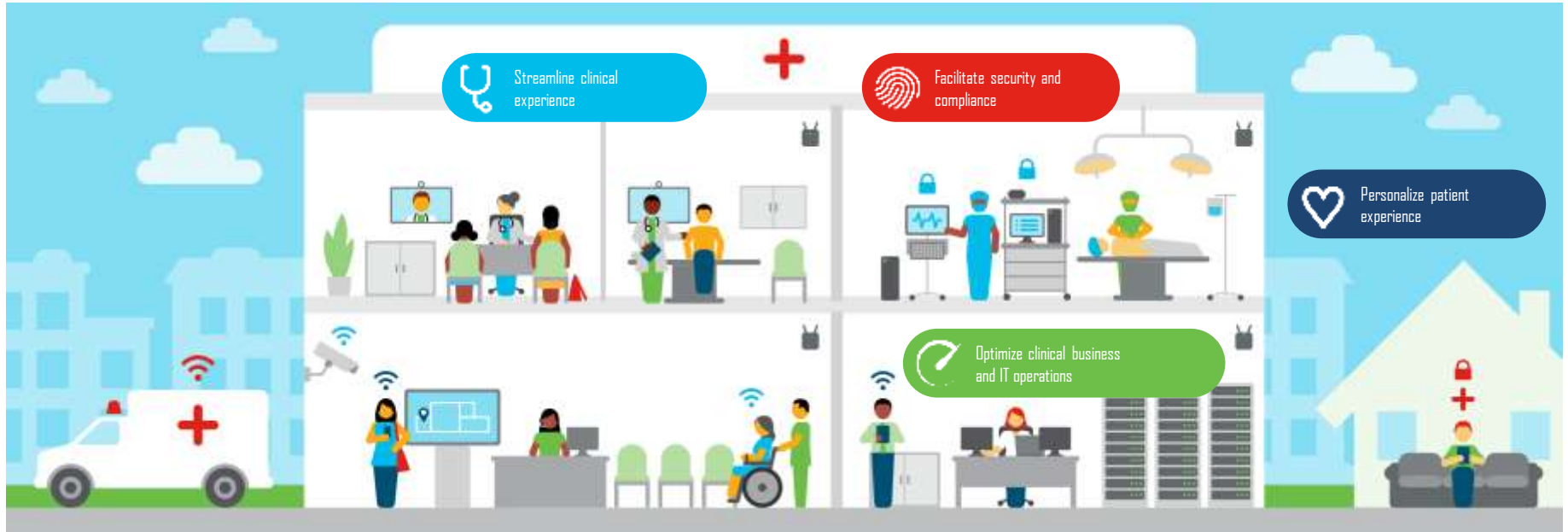
Difficulties integrating legacy systems with new digital/mobile technologies



Identification/remediation of cybersecurity threats

HIT Consultant: "4 Digital Health Adoption Barriers for Hospitals & Health Systems"

# Cisco for healthcare



## Personalize patient experience

- Guest wireless
- Mobile experiences—wayfinding
- Population health outreach
- In-patient bedside experience
- EHR-integrated telehealth



## Streamline clinical experience

- Provider video consult
- Location services for clinical environments
- Clinical communications and collaboration
- Virtual patient observation



## Facilitate security and compliance

- Network and micro-segmentation
- Healthcare cybersecurity



## Optimize clinical business and IT operations

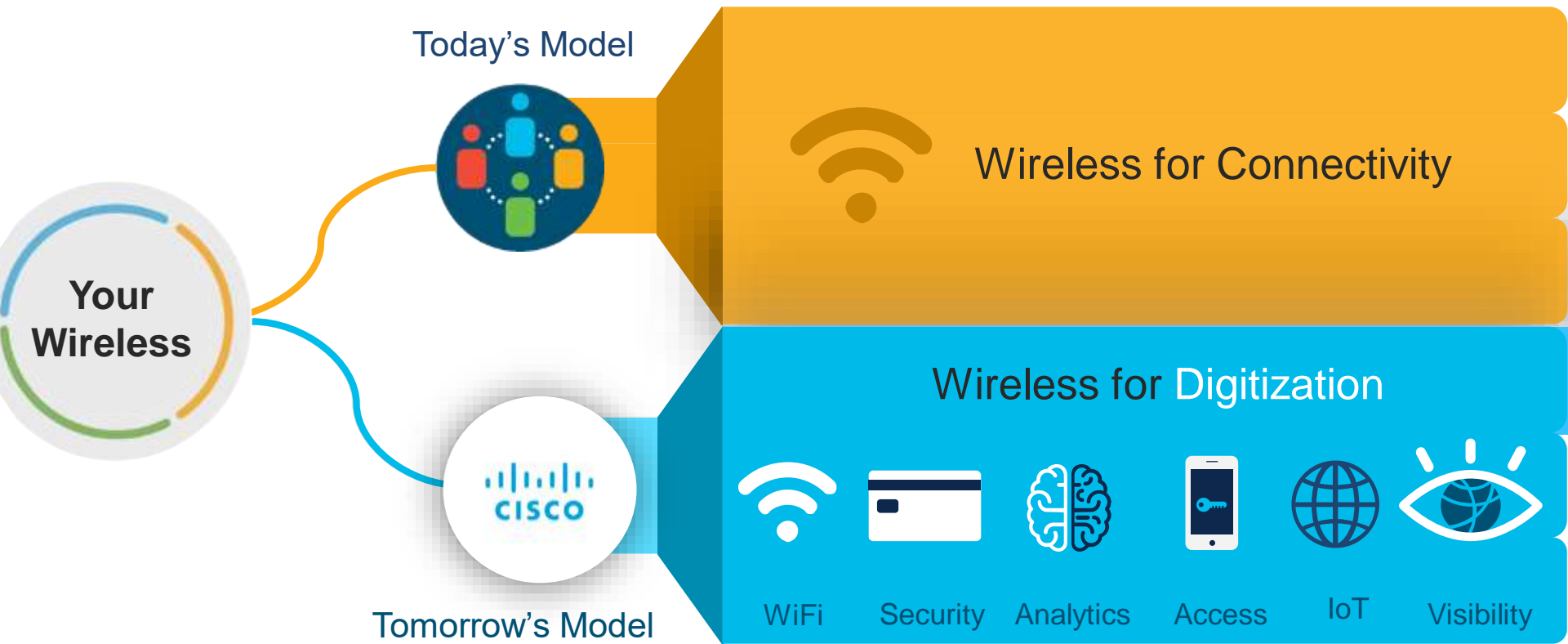
- Facilities and equipment monitoring
- Administrative collaboration
- Next generation data center
- Network optimization



# WiFi + Analytics + Navigation

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Patient expectations are increasing and the bar is rising to deliver the same access to technology in healthcare as seen in other consumer services. Cisco technology is the foundation for seamless access to care, integration, and a personalized experience for patients and consumers.



# Leveraging Cisco Wireless Network for Digitization



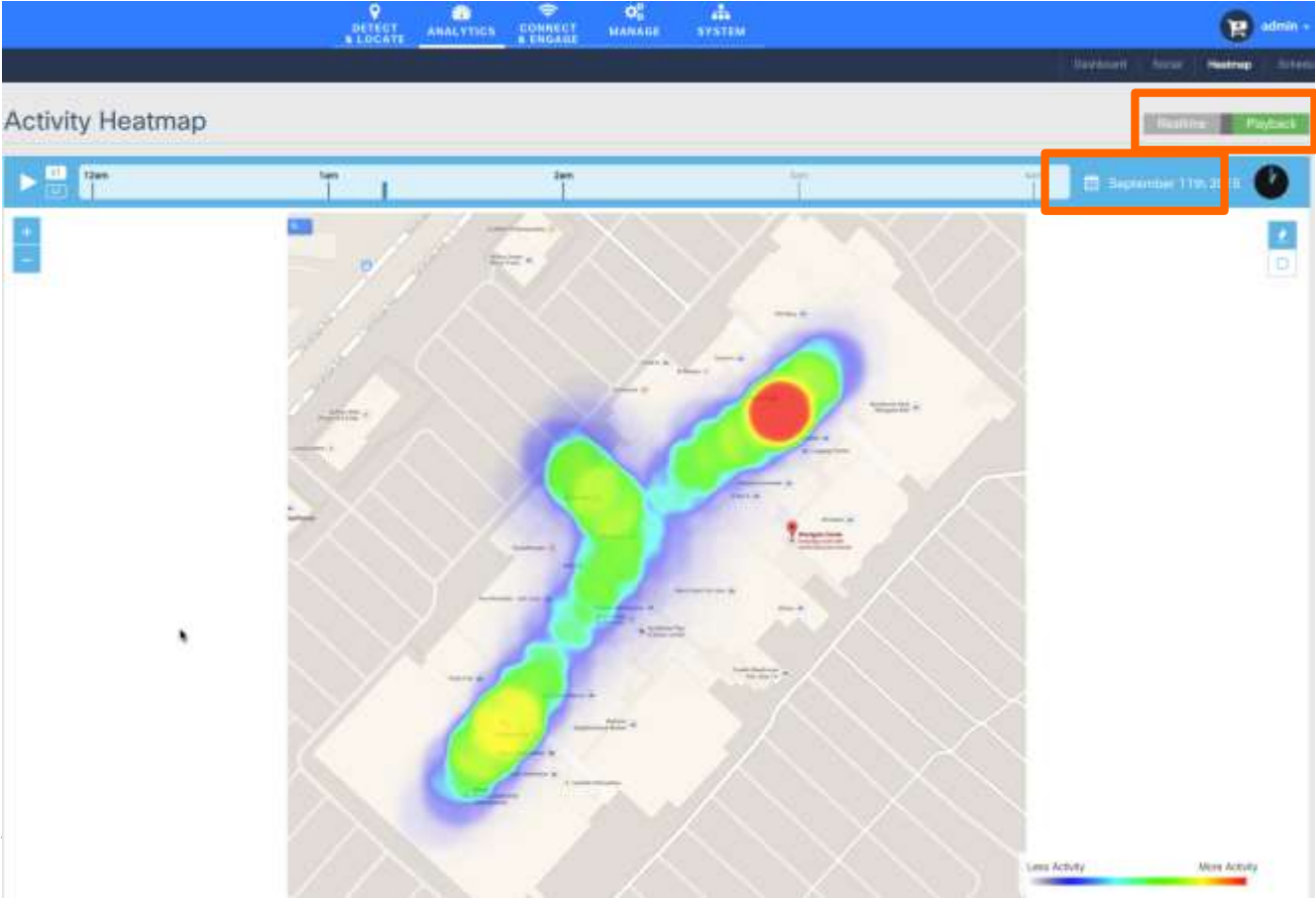
Digitizing Healthcare: People and Things

# WiFi + Analytics





# Heatmaps



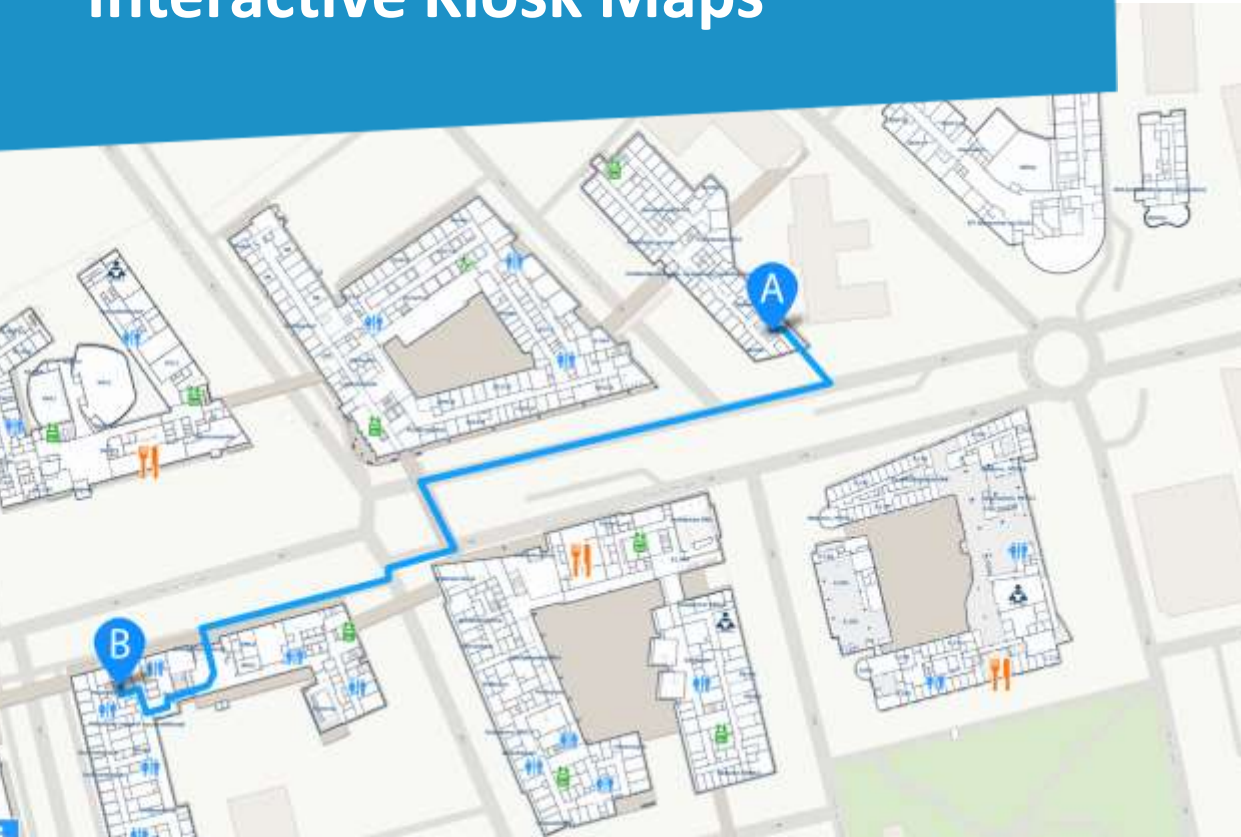


MazeMap is a provider of indoor maps and navigation services

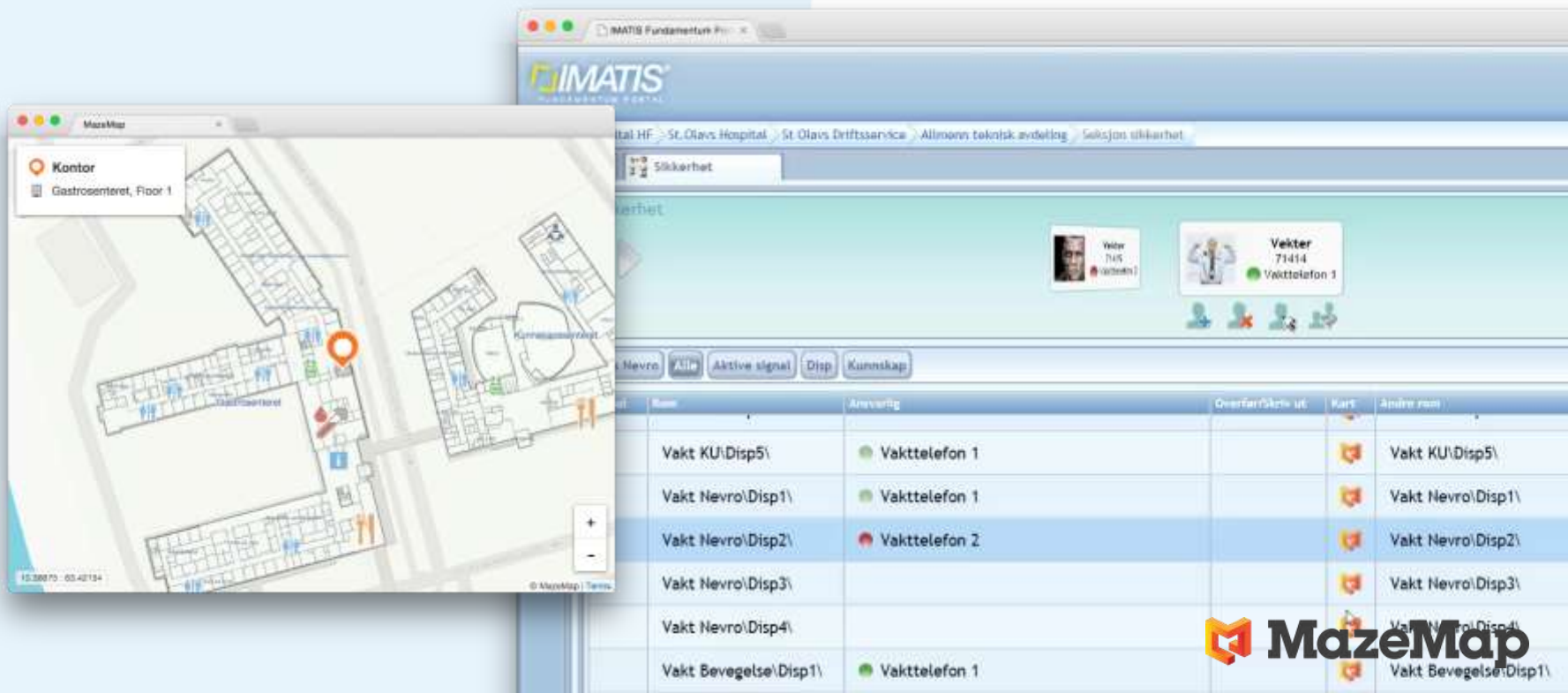
We help anyone locate what they search indoors either it is **rooms** or **“things”**









# Interconnection with digital systems: Interactive Kiosk Maps



# Intergration with hospitals alarms: Saves time in critical moments



The screenshot displays the IMATIS (Intelligent Monitoring and Alarm Triage System) interface. On the left, a 'MazeMap' window shows a detailed floor plan of the Gastroenteret, Floor 1, with an orange location pin and a legend. The main window shows the system's dashboard with a navigation menu, user avatars, and a table of active alarms.

Navn	Ansvarlig	Overført/Skriv ut	Kart	Ansvar rom
Vakt KU\Disp5\	Vakttelefon 1			Vakt KU\Disp5\
Vakt Nevro\Disp1\	Vakttelefon 1			Vakt Nevro\Disp1\
Vakt Nevro\Disp2\	Vakttelefon 2			Vakt Nevro\Disp2\
Vakt Nevro\Disp3\				Vakt Nevro\Disp3\
Vakt Nevro\Disp4\				Vakt Nevro\Disp4\
Vakt Bevegelse\Disp1\	Vakttelefon 1			Vakt Bevegelse\Disp1\



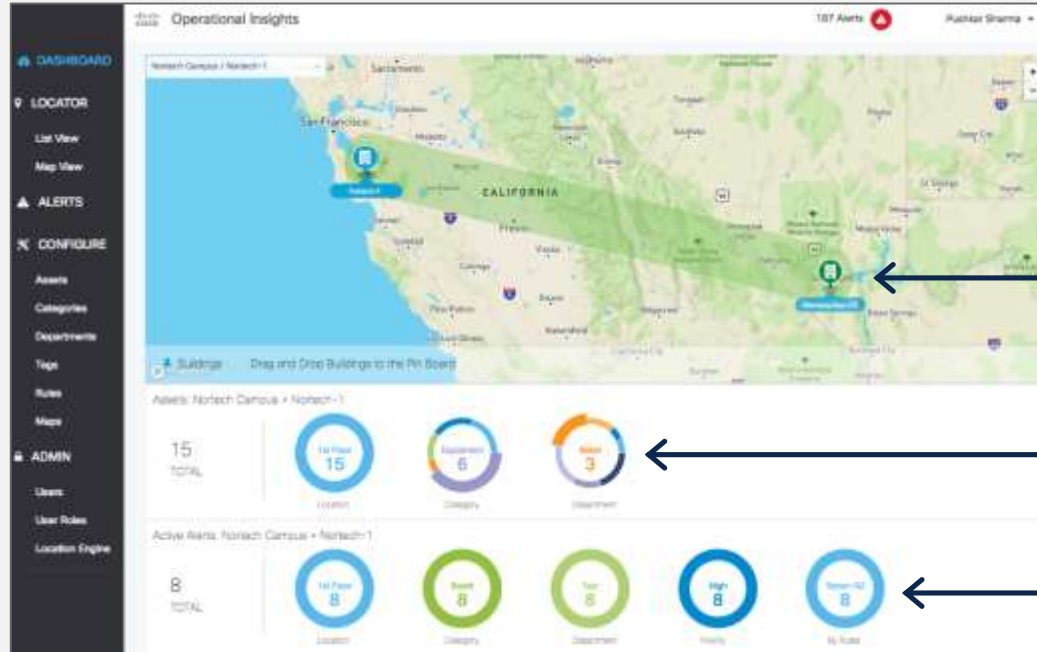
# WiFi + Data + IoT tracking

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The complexity facing clinicians every day to deliver better patient care is compounding and operational challenges mean more patients per clinician to serve. Access to secure data enables care teams to stay connected allowing better delivery of patient care at the bedside.

# Main dashboard

Navigation panel



○ Customized data access by user role

○ Available locations on interactive map

○ Snapshot of all assets available to user

○ Outstanding alerts

# Map view

The screenshot displays a web-based interface for managing a location. On the left is a dark sidebar with navigation options: DASHBOARD, LOCATOR (with sub-options for List View and Map View), ALERTS, CONFIGURE (with sub-options for Assets, Categories, Departments, Tags, Rules, Maps, and Zones), ADMIN (with sub-options for Users, User Roles, and Location Engine), and TOOLS. The main area is titled 'Location' and shows a floor plan map with three distinct zones: a purple 'Hospital Zone' at the top left, a green 'Retail' zone at the bottom left, and a teal 'Bar Area' on the right. Above the map, a filter bar shows counts for various asset categories: All (15), PC (1), Furniture (3), Member (3), Equipment (6), and Book (2). A callout box on the left, titled 'Click to view asset details', shows a list of assets with columns for Name, Location, and Status. Three callout arrows point to specific features: one points to the filter bar with the text 'Filter map by category', another points to the 'Categories' option in the sidebar with the text 'Click to view asset details', and a third points to the map area with the text 'Edit zones on map to create effective alerts'.

Click to view asset details

Filter map by category

Edit zones on map to create effective alerts

# Asset details

Asset and tag details



Asset activity for chosen date



Asset activity playback



Review important information about asset



The screenshot displays the 'Operational Insights' dashboard for a 'W PUMP'. The interface includes a left-hand navigation menu with options like 'Dashboard', 'Locator', 'Alerts', 'Configure', and 'Admin'. The main content area is divided into 'Overview' and 'History' tabs. The 'Overview' tab shows a 'General' section with the following details:

Serial Number	33-03-01-44
Name	W Pump
Description	
Category	Equipment
Subcategory	W Pump
Department	Hospital
Location	North Campus - Selected - 1 - 1st
Floor	
Last Heart	3 minutes ago
State	Active

Below the general information is a '00:12:00' section with a table of activity:

Name	Type	Assigned	Manufacturer	Model	Clear Interval
00:12:00:00:00:00	RFID	UnAssigned	Genetec		30 sec

The interface also features a floor plan visualization on the right side of the overview section and a heatmap visualization at the bottom of the activity playback section.



# Existing rules

Add new rules



Last Heart	Serial Number	Name	Description	Category	Subcategory
9 days ago	22-00-00-01	Desk 03-1A	Somebody's desk	Furniture	Desk
5 days ago	22-00-00-02	Break room microwave	Break room microwave	Equipment	Microwave
5 days ago	22-00-00-04	3rd floor printer	3rd floor printer next to Chair 4 and behind learn room 42	Printer	Canon
5 days ago	22-00-00-06	Break Room Fridge	Break Room Milk Refrigerator	Refrigerator	Frost
1 days ago	22-00-00-07	Table 01-1B	Common rest area	Furniture	Low table
6 days ago	22-00-00-08	Desk 03-1B	Somebody's desk	Furniture	Desk
8 days ago	22-00-00-34	TR 27 Monitor	Monitor in Team Room 27	Monitor	Class
4 days ago	22-00-00-24	Printer 100	Printer facing Bldg 24	Printer	Canon
5 days ago	22-00-00-26	Desk 110-2	Somebody's desk	Furniture	Desk
9 months ago	22-00-00-17	Refrigerator in Kitchen	Refrigerator in Station	Refrigerator	Frost



Activate, edit, or delete rules

# Alerts

Filter alerts for easier review

Operational insights

187 Alerts

187 Alerts

133 High Priority Alerts

54 Medium Priority Alerts

0 Low Priority Alerts

950 Open Alerts

37 Closed Alerts

Date (Time)	Priority	Rule	Alert Details	Status	Action
Jul 26th, 2017 10:30:08 PM	Medium	WheelChairExit Rule	Wheelchair left the building from Gate ...	Open	2312312 - 0/0
Jul 26th, 2017 12:30:18 PM	Medium	WheelChairExit Rule	Wheelchair left the building from Gate ...	In Pr...	
Jul 26th, 2017 06:44:22 AM	Medium	WheelChairExit Rule	Wheelchair left the building from Gate ...	Open	
Jul 26th, 2017 03:42:08 PM	Medium	WheelChairExit Rule	Wheelchair left the building from Gate ...	Open	
Jul 26th, 2017 02:53:43 PM	Medium	WheelChairExit Rule	Wheelchair left the building from Gate ...	Open	
Jul 26th, 2017 12:47:02 PM	Medium	WheelChairExit Rule	Wheelchair left the building from Gate ...	Open	2312312 - 0/0
Jul 26th, 2017 07:48:48 AM	Medium	WheelChairExit Rule	Wheelchair left the building from Gate ...	Open	2312312 - 0/0
Jul 26th, 2017 02:38:24 AM	Medium	WheelChairExit Rule	Wheelchair left the building from Gate ...	Open	2312312 - 0/0
Jul 24th, 2017 11:48:02 PM	Medium	WheelChairExit Rule	Wheelchair left the building from Gate ...	Open	2312312 - 0/0
Jul 24th, 2017 08:33:40 PM	Medium	WheelChairExit Rule	Wheelchair left the building from Gate ...	Open	2312312 - 0/0

Context Menu:

- Status
  - Clear
  - In Progress
  - Closed
- Add a note
- Close

Update the status of an alert, comment, or close it when resolved

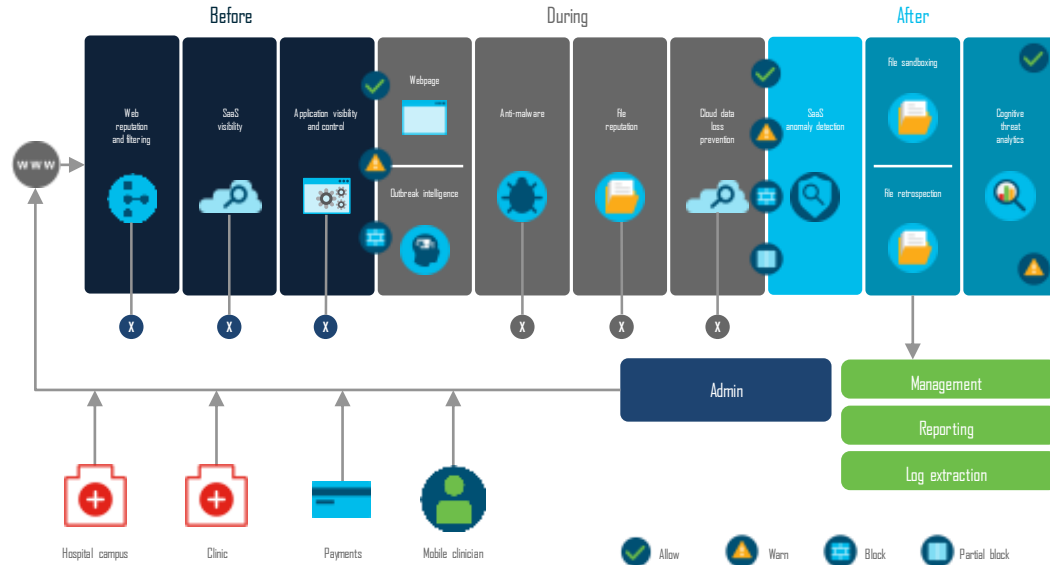


# Facilitate security and compliance

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A medical record is one of the most valuable black-market assets often trading at 15 times a validated credit card. The threat surface in a healthcare system is one of the largest of any industry and why Cisco enables endpoint and network security to secure critical medical devices, electronic health records and clinical applications.

# Healthcare cybersecurity



## Cisco products

Web reputation and filtering	AMP/Threat Grid
SaaS visibility	CASB
Application visibility and control	NetFlow, Prime Infrastructure, Stealthwatch
Webpage	Umbrella
Outbreak Intelligence	Talos
Anti-malware	AMP
File reputation	AMP-ESA
Cloud data loss prevention	CloudLock
SaaS anomaly detection	Tetration
File sandboxing	AMP/Threat Grid
File retrospection	AMP-WSA
Cognitive threat analytics	CTA

