



CMR's India Video Surveillance Report

(2011-2016)

Indian Video Surveillance Market (2011-2016)

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Executive Summary

The video surveillance market in India has seen significant changes in its market landscape in last decade mainly due to the increasing security related issues, rising terrorism, increasing criminal activities, need for remote monitoring of the live footage and others. Initially concentrating on analog based surveillance systems the market is now experiencing a major shift towards IP based surveillance systems.

Ability to provide remote access, integration with wireless technologies such as WiFi, ZigBee and others are the factors that has driven IP based surveillance systems in India .

2008 Mumbai terrorist attack is observed as a major event in the Indian history that has impacted the video surveillance market in India. Post 2008 attacks, the market saw increasing government initiatives, funding in the areas of security especially in video surveillance. Homeland security, airports, railways, bus terminals were the areas where maximum installation of video surveillance cameras were noticed.

Apart from government vertical, vertical such as commercial and banking & financial offers high growth opportunity for the market players. Residential vertical, though in nascent stage offers immense underlying opportunity for the market players.

The Indian video surveillance market is mainly captured by foreign players namely Bosch, Honeywell, GE, Pelco, Samsung, Hi Sharp, Sanyo, Vicon, Sony, Axis, DVTel, Verint and others.

1. Introduction

1.1 Key Highlights

- Thorough discussion on different types of surveillance systems
- Industry life cycle of different surveillance systems
- Market trends
- Market dynamics
- Opportunities in different vertical markets

1.2 Report Description

The Indian video surveillance market report compares and evaluates different surveillance systems that are deployed in the market. The report discusses the key dynamics of the market that are driving the market towards growth. It provides thorough insights on the current and future market trends and also accesses present and future market positioning via industry life cycle.

Apart from evaluating key market dynamics, trends and others, the report also identifies underlying opportunities in different vertical markets for the stakeholders. The vertical markets that are discussed in the report are namely government, commercial, residential, banking and finance and industrial.

2. Product Overview

Key Findings

- Analog based surveillance systems performs better in low light conditions
- IP surveillance systems allows remote access of the footage
- Analog surveillance maintains video quality whereas in IP based surveillance systems videos are compressed.
- IP surveillance systems are more reliable than coaxial cable based analog surveillance systems

2.1 Evolution of Video surveillance

The video surveillance systems are being deployed in Indian market from past one decade. The surveillance systems can be classified as analog based surveillance systems and IP based surveillance systems. In India, analog based surveillance system dominates the video surveillance market. However, shift towards digital technology based IP surveillance systems can be noticed in the Indian market.

Figure 1

Evolution of video surveillance systems in India

The rising security related issues, ease to integrate with wireless technologies, need for 24x7 live footage, more secured than analog based surveillance systems have led for the demand for IP based surveillance systems.

In early 1990s, analog based CCTV systems were deployed in the markets which were thereby connected to VCR (Video Cassette Recorder) for recording purposes. These VCRs used to use magnetic tapes to record the live footage for about 8 hours.

Limited data storage, need to change the tapes at regular intervals and inconsistent image quality of VCR based analog CCTV systems, showed the way to DVR (Digital Video Recorder) analog CCTV system. Unlike previous surveillance systems these systems were connected to hard disks for video recordings which were able to last for many days.

The need for remote monitoring of the footage opened the doors for network DVR in analog CCTV systems. Analog based CCTV systems were connected to network DVR equipment via Ethernet for network connectivity. These kind of CCTV systems were partial digital, where the video captured by the analog cameras were digitized and compressed in DVR and then were transmitted over the network for remote monitoring.

Another shift which Indian market noticed was shifting towards network video systems using video servers. These types of surveillance systems include video server and network switch. The video

captured is compressed and converted into digital format by video server. The digital video is then transmitted to network switch to be viewed over PCs.

Though analog surveillance systems have dominated the Indian video surveillance market; but the need for continuous monitoring, consistency of images, access over wireless network has resulted for the deployment of IP based surveillance systems. IP based surveillance systems are fully digital systems where remote access of the video can be done via network.

2.2 Video surveillance systems: By types

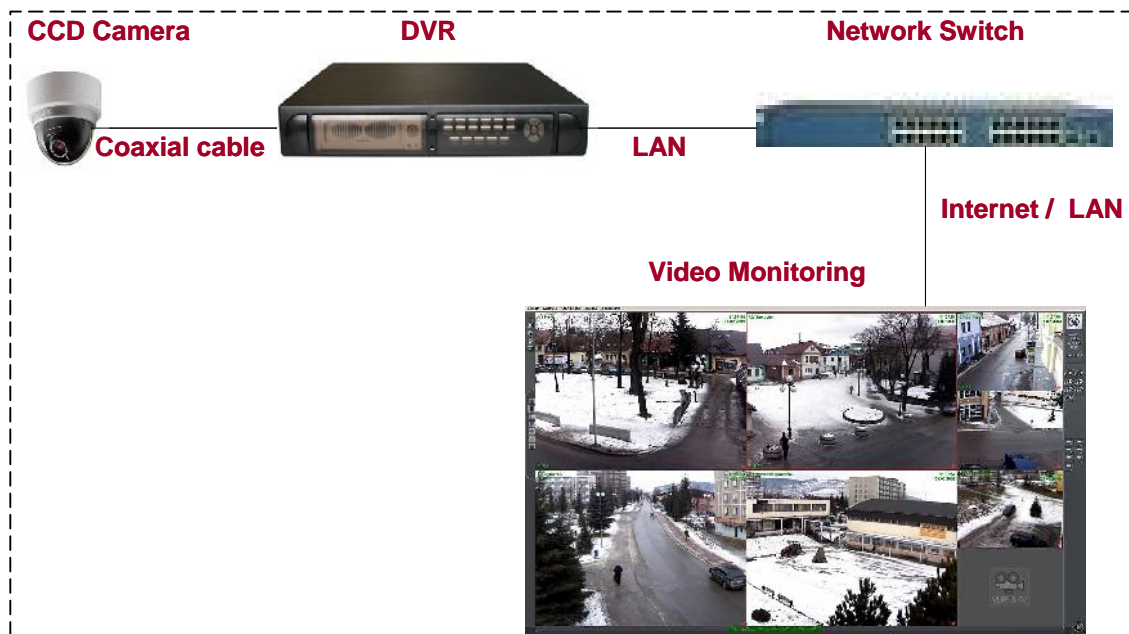
The video surveillance systems are broadly classified as analog based surveillance systems and IP based surveillance systems. The analog surveillance systems have dominated and have captured majority of share in Indian surveillance market but now have started losing its dominance due to the introduction of IP based surveillance systems. Post 2008 Mumbai attacks, increasing terrorist activities, need for remote access, digital video format are the few factors that have driven IP based surveillance systems in India.

2.2.1 Analog based surveillance systems

Analog based surveillance system includes components such as analog cameras, DVR, network switch and monitoring systems such as PC. The analog based surveillance systems use CCD cameras to capture the images. The images thus captured are directly sent without compression to maintain the image quality. The video captured is then compressed by DVR and is then sent for monitoring. The main advantage of analog based surveillance systems is that images captured can be again retrieved in the original format which is not seen in IP based surveillance systems.

Figure 2

Analog surveillance systems



Source: CyberMedia Research, 2011

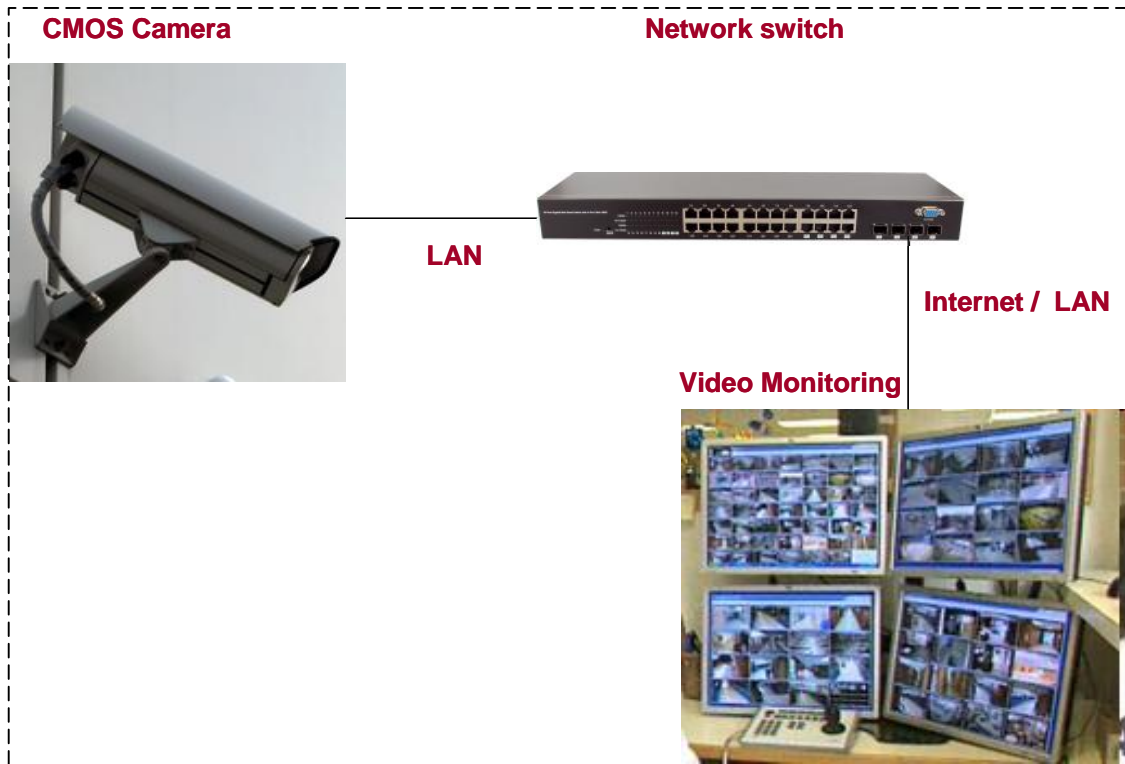
The analog surveillance systems have dominated the Indian market as these systems offers high quality images and also are capable of capturing images/videos under low light conditions. Ease of installation is also a prime reason behind the growth and dominance of analog surveillance systems market in India.

2.2.2 IP based surveillance systems

IP based surveillance systems include components such as network cameras, network switch and monitoring system such as PC. In IP based surveillance systems network cameras generally uses CMOS cameras to capture the videos. The images captured by CMOS cameras are compressed and then sent for monitoring purposes. Since the images/videos are compressed on the first hand the picture quality is not good as analog cameras.

Figure 3

IP surveillance systems



Source: CyberMedia Research, 2011

The demand for 24x7 live footage, remote access, transmission over wireless networks and consistent image quality has driven the market of IP based surveillance systems in India. The images/videos captured are encrypted first and are then transmitted over the network. This encryption avoids access of the videos or images via intruders which was regarded as a common issue in analog based surveillance systems.

2.3 Analog surveillance systems VS IP surveillance systems

As mentioned above, in India, analog based surveillance cameras are the most widely used; however these surveillance cameras are now expected to lose its market share due to the wide installation of IP based surveillance cameras.

Table 1

Comparison between Analog and IP cameras

Parameters	Analog cameras	IP cameras
Image/video quality	Capable to capture picture in low light condition.	Capable of capturing high definition images but faces challenges in low light condition
Camera Technology	CCD	CMOS
Video Compression	No pre-compression is done which maintains the video quality	Compression of video is done before viewing.
Transmission	The transmission is not affected due to network related issues and have virtually unlimited bandwidth.	Transmissions of the video get affected due to the presence of traffic over the network and also have limited bandwidth.
Reliability	Analog surveillance cameras are less secured than surveillance cameras as these can be easily accessed through cabling infrastructure.	IP surveillance cameras are regarded as secure but since these are connected on the network so the chances to be accessed by hackers increases.

Source: Cyber Media Research Limited, 2011

3. Market Overview

Key Findings

- Analog based surveillance are in the maturity stage of industry life cycle
- IP surveillance systems are in introductory stage of industry life cycle.
- Shift seen from analog based surveillance systems towards IP based surveillance systems.
- HD CCTV, 3G and video analytics regarded as future market trends.

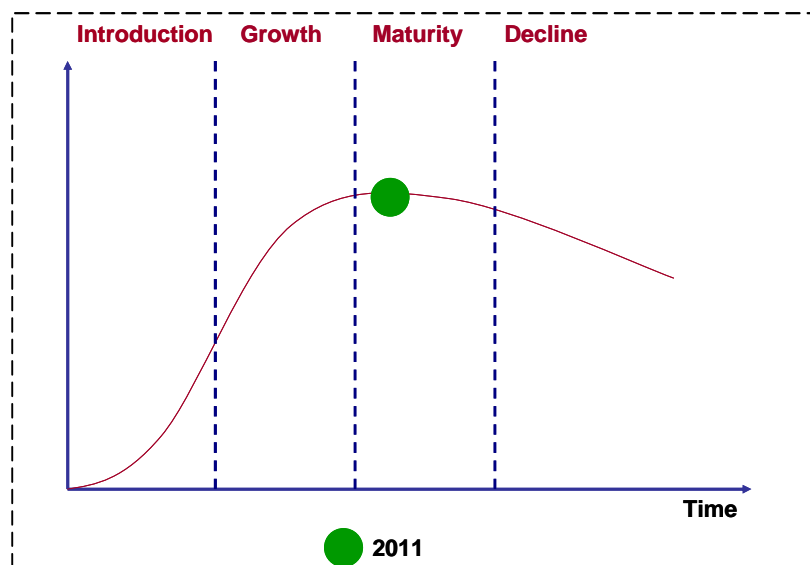
3.1 Industry Life Cycle

Industry life cycle section discusses the life cycle of video surveillance market by its type i.e. analog and IP based surveillance systems in India. The industry life cycle includes 4 different stages namely introduction stage, growth stage, mature stage and decline stage.

3.1.1 Analog based surveillance systems

Figure 4

Industry life cycle: Analog surveillance systems



Source: CyberMedia Research, 2011

The above diagram shows the industry life cycle of analog based surveillance systems in India. It can be seen from the diagram that analog based surveillance systems are in maturity stage of the industry life cycle.

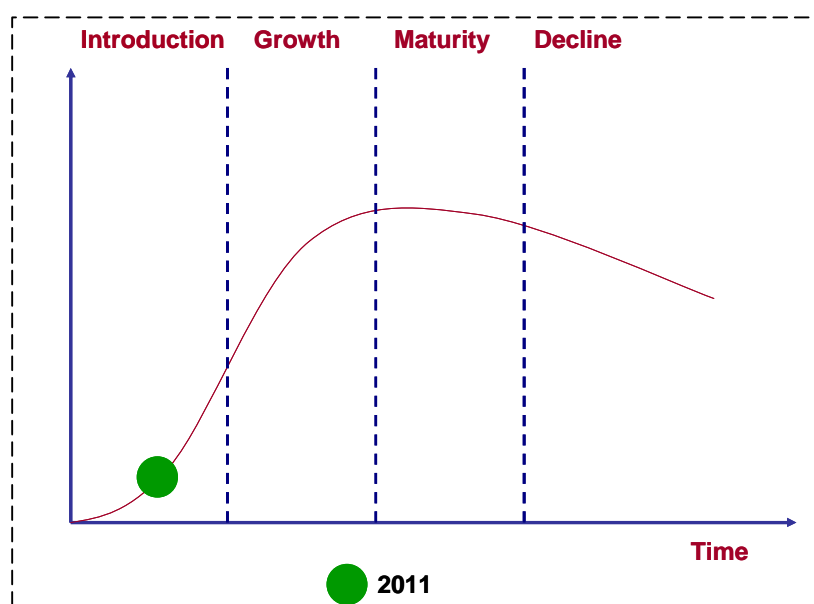
The analog surveillance systems are present in the Indian market since more than a decade. The market of analog surveillance systems is most likely to see a downfall by 2016 with the introduction of IP surveillance systems in India. The shortcomings of analog surveillance systems have shown a way to IP surveillance systems in India to a greater extent. The market of analog based surveillance

systems is expected notice a decline of atleast 30% by 2016 due to the ongoing deployment of IP surveillance systems in India.

3.1.2 IP based surveillance systems

Figure 5

Industry life cycle: IP surveillance systems



Source: CyberMedia Research, 2011

The IP surveillance market is in the nascent stage or introductory stage in India. The edge of IP surveillance systems over analog surveillance system is expected to drive its market. The capability of IP surveillance systems to integrate itself with wireless technologies, ability to provide remote monitoring, faster installation, increasing terrorist activities and others are the few factors that have resulted for its market growth in India.

By 2016, the Indian market is expected to adopt IP surveillance systems largely and which would push the market towards growth stage of industry life cycle. Homeland security is regarded as a key area where IP surveillance systems are expected to occupy its maximum space. Some of the key players in IP surveillance market in India include Axis, Sony, Verint, DVTel, Lenel and others.

3.2 Current and future market trends

3.2.1 Shift towards IP surveillance systems

Like other countries of the world India is too experiencing a major shift from analog based surveillance systems to IP based surveillance systems. Ease of installation, better performance, low cost of the systems has led for this shift in Indian market. In the current market scenario in India, the existing analog surveillance systems are getting converted into IP surveillance systems by using encoders. The purpose of the encoders is to convert the analog signal from the cameras to digital output. Homeland security, retail sectors, etc are the few areas where IP surveillance systems are playing their crucial role. The IP surveillance systems are now installed at over 20 airports of India.

3.2.2 Surveillance systems going wireless

Surveillance systems getting integrated with wireless technologies such as Wi-fi, Zigbee and others is most likely to happen in near future at larger scale in India. Integration of surveillance systems with wireless technologies not only avoids cabling but also avoids reconstruction or renovation of a building; thereby bringing the cost for installation down significantly. The wide adoption of wireless surveillance systems is likely to be seen commercial and residential markets.

3.2.3 HD CCTV

HD CCTV is the also expected to happen in near future in India since more than 70% of the market share is captured by analog based surveillance systems. HD CCTV technology is based on HD-SDI standard which uses SMTPE 292M format. The biggest advantage of HD CCTV is that it uses existing coaxial cable of analog surveillance systems which transmits the video captured to DVR without using encoders or existing network. The use of HD CCTV technology ensures cheaper way to modify from existing legacy analog system to HD surveillance systems.

3.2.4 3G and video analytics

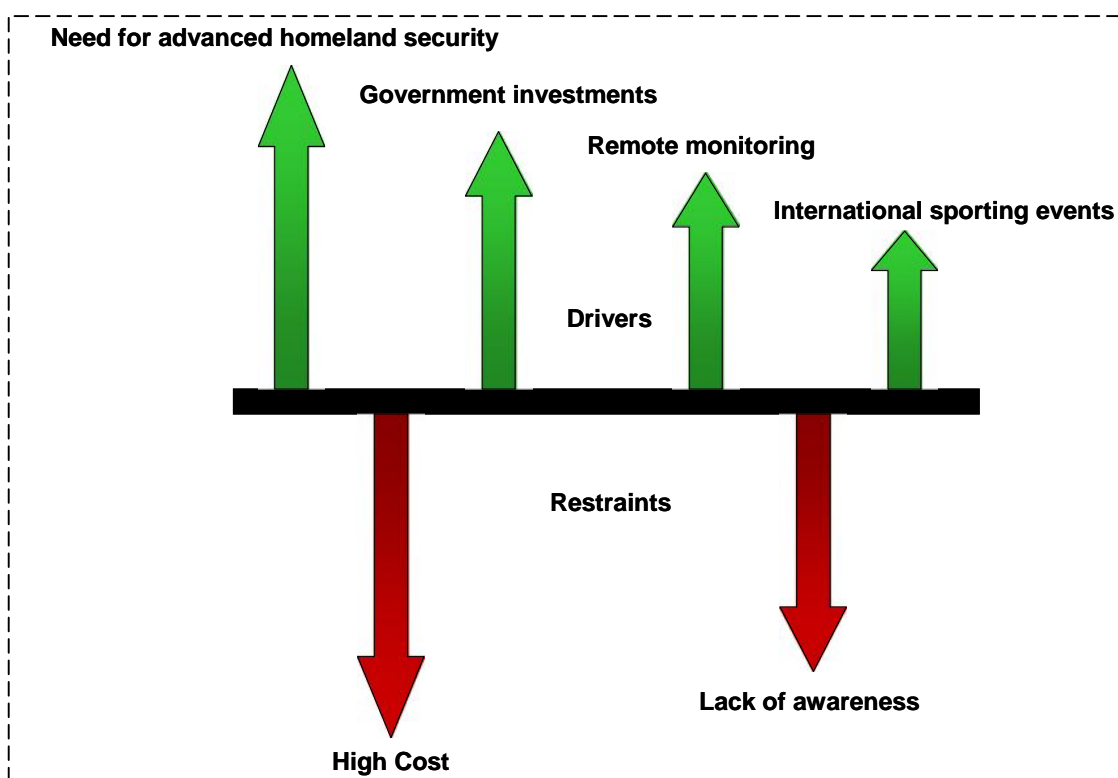
With the launch of 3G services in India in 2010 by telecom operators it would be possible to stream VGA video signals at reduced framed rates. The 3G services will enable the users to view the videos captured by the 3G IP cameras over 3G mobile phones.

3.3 Market

This section of the report covers various factors that shape Indian video surveillance market. The market dynamics chapter includes market drivers, restraints and opportunities. The market drivers are the factors that constitutes for driving the market towards growth while on the other hand restraints are the factors that can hinder the growth of the market. Opportunities are the factors that constitutes for future market growth.

Figure 6

Impact of market drivers and restraints



Source: CyberMedia Research, 2011

The above diagram shows the impact of various factors over video surveillance market in India. The length of the arrow represents its impact over the market; higher the length higher is its impact on the market.

3.3.1 Market Drivers

3.3.1.1 Need for advanced homeland security

Increasing terrorist activities at recent times has surged the need for advanced and enhanced homeland security. The video surveillance market in India noticed remarkable growth after 2008 Mumbai attacks especially. Recent 2011, Delhi terrorist attacks has further added to the turmoil that has resulted the need for wide installation of video surveillance cameras. These terrorist activities have resulted for the large scale installation of video surveillance cameras in India.

Apart from terrorist activities, rising crime has also resulted for wide deployment of surveillance cameras in India.

Table 2

Total Crime Incidence in India

Crime Categories	Total Incident
Murders	32,369
Rape	21,397
Kidnapping & Abduction	33,860
Robbery	22,409
Burglary/House Breaking	92,070

Source: National Crime Records Bureau

Above is the data released by National Crime Records Bureau of India in 2009; such a high crime rate pushes the government to enhance the security thereby impacting the surveillance system market of India. The emerging security concerns in India has resulted in deployment of surveillance cameras in wide range of application such as government, banking, industrial, commercial, residential and others. However, the areas such as government applications, commercial are the prominent contributors of this market; however the area such as residential is regarded as upcoming growth opportunity.

3.3.1.2 Government investments

According to the 12th Five year plan (2007-2012) 7.5% of the GDP is expected to be spent on infrastructure development activities which include development of roads, railways and airports; such a huge development of infrastructure will also attract the need for high level of security in India, thereby

impacting video surveillance market. It is expected that India's total homeland security spending is estimated to reach \$7.8 billion by 2016 that includes \$1.1 billion spending on hotel infrastructure security, \$1.05 billion spending on transport sector security, etc.

3.3.1.3 Remote monitoring

Remote monitoring has also resulted for the growth of surveillance market in India. Remote monitoring of the footages can be easily done via IP surveillance systems. IP surveillance system uses network which allows remote monitoring even on the smartphones. Apart from remote monitoring, integration with wireless technologies such as WiFi, ZigBee and others is also possible in IP surveillance systems.

3.3.1.4 International sporting events

India being the host of various international sporting events such as Commonwealth Games 2010, F1 race and others has also impacted the video surveillance market. International sporting events attracts huge investments in the area of security; same was noticed in India where \$84.7 million was invested towards implementation of integrated security systems during 2010 Delhi Commonwealth Games.

3.3.2 Market Restraints

3.3.2.1 High Cost

High cost of the video surveillance cameras is acting as a hurdle in between the growth of video surveillance market in India. The surveillance cameras in India are prominently imported from outside mainly from countries such as China, Taiwan and others. The importing of the surveillance cameras fetches high tax and custom duties from the buyers which can act as a hurdle between the growth of the video surveillance market in India. The custom department charges 34% of the custom duty on these surveillance cameras and also 12% of the VAT is charged which increases the overall cost of surveillance cameras.

3.3.2.2 Lack of awareness

Limited customer awareness or knowledge in India is also a prominent restraint which is seen in the Indian video surveillance market. Lack of awareness restricts the mass adoption of video surveillance cameras across the verticals. However, over the years the conditions pertaining to awareness have improved but still it is regarded as a key challenge in the Indian market.

3.3.3 Opportunities

3.3.3.1 *Entry of foreign players*

The initiatives taken by the government to strengthen the national security, increased government budget for surveillance have attracted many foreign players in Indian market. Though, Indian video surveillance market is governed by many foreign players but in-order to meet the shortage of surveillance cameras new players are expected to play very crucial role.

3.3.3.2 *IP based surveillance systems*

The integration of the security systems over the networks, technical advancements of IP based surveillance systems over analog based surveillance systems; introduction of wireless technologies such as Wimax, GPRS in security system has attracted a huge installation opportunity for IP based surveillance systems across India.

4. Vertical market

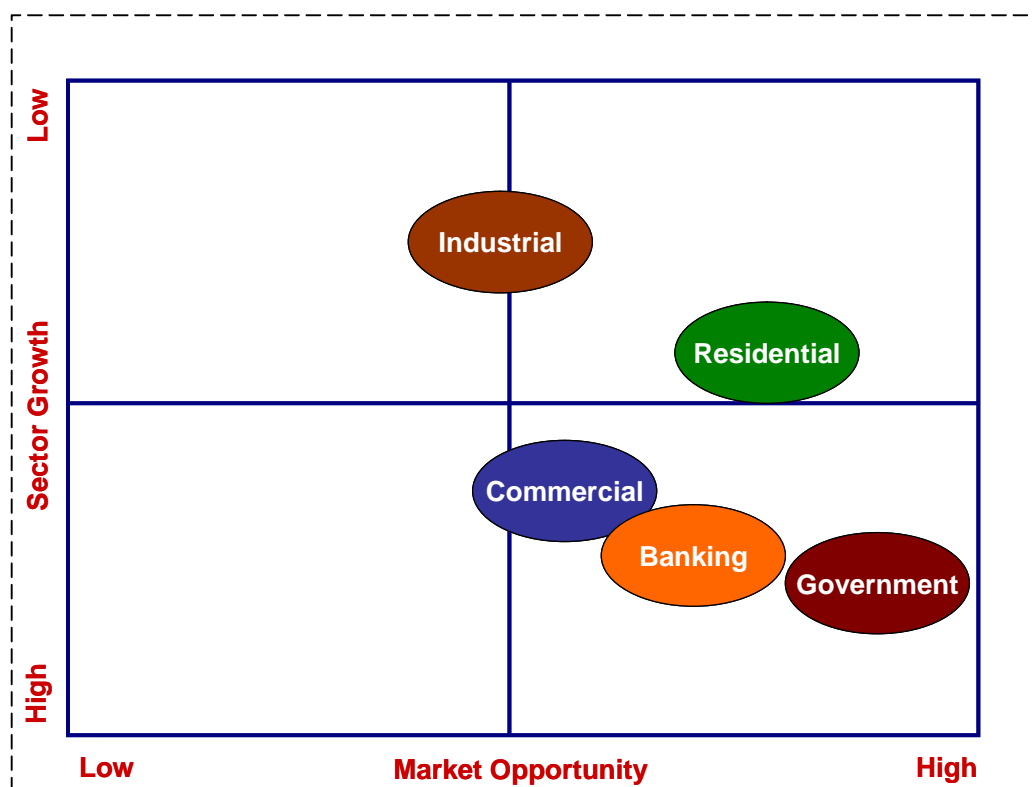
Key Findings

- Government vertical dominates Indian video surveillance market.
- Commercial, banking & financial offers high growth opportunities for the market players
- Residential market in nascent stage in Indian video surveillance market

Video surveillance cameras are now getting deployed in wide range verticals such as government, commercial, banking/financial, industrial and residential. Government vertical dominates the Indian video surveillance market where it is finding its maximum space in the areas of homeland security. However, vertical markets such as residential, banking & financial and commercial market offers immense growth prospects.

Figure 7

Sector growth VS Market opportunity (2011)



Source: CyberMedia Research, 2011

The above diagram plots sector growth of different verticals against market opportunity for video surveillance systems. The diagram talks about present market scenario (2011) where government vertical offers maximum market opportunity followed by residential, banking, commercial and industrial vertical.

4.1.1 Government

In the present market scenario government vertical offers maximum growth opportunity for various stakeholders of video surveillance market. The increasing terrorist attacks and rising security related issues have resulted for greater penetration of video surveillance cameras in government vertical. Government vertical comprises airports, railways stations, government buildings and others.

Homeland security is seen as major area where maximum deployment of video surveillance cameras can be seen. Government of India is now heavily investing in the security market so as to improve the level of security. It is expected that India's total homeland security spending is estimated to reach \$7.8 billion by 2016. The Maharashtra Government has already spent \$63.83 million to enhance the level of security in the state. Several other initiatives have been taken by the government so as to improve the level of security in India; such huge investments taking place in Indian market is expected to drive the video surveillance significantly.

4.1.2 Commercial

The commercial market comprises offices, institutions, hospitals, lodgings, retail outlets, auditoriums, and others. Among all mentioned areas offices and retail outlets are regarded as key growing areas of video surveillance market. Commercial customers are the regular consumers of video surveillance systems that deploy cameras to avoid data theft & any kind of burglaries.

The Indian retail sector is estimated to reach \$412 billion in 2011 and is expected to generate \$805 billion by 2015 with a CAGR of 18.6% from 2011-2015 and also it accounts 22% towards Indian GDP. Double digit growth rate, foreign players entering the Indian retail market and opening up of new of retail outlets across India has constituted for need for installation of video surveillance systems.

4.1.3 Banking and Financial

Banking and financial vertical also offers underlying opportunity for the stakeholders of video surveillance market. According to the new directives given by Reserve Bank of India, every ATM must include CCTV cameras, has spurred the video surveillance market. The increasing number of ATMs of banks across India has opened new horizons of video surveillance market in banking/financial sector. It

is estimated that the growth of plus 25% is expected to be seen in the area of ATM machine installation; thereby impacting the video surveillance market.

4.1.4 Industrial

The industrial application mainly includes manufacturing units, warehouses, oil & gas and others. The installation of video surveillance cameras has picked momentum especially in the area of oil & gas. The need for monitoring the activities at refineries has driven its growth. According to the Ministry of Petroleum and natural gas, crude oil production during April-July 2011 was 12.858 million metric tones as compared to 11.985 million metric tones of previous for the same period. The increasing production capacity has significantly drive video surveillance market.

4.1.5 Residential

Video surveillance market in residential application is though in nascent stages but is regarded as high growth potential market. The increasing burglaries, murders are the prime factors that regard for the installation of video surveillance cameras at residence.

Apart from increasing burglaries activities, coming up of new housing societies across India has also created the demand for video surveillance cameras. The real estate builders are now deploying surveillance cameras to provide full proof security at these residential complexes. In 2010, the total number of residential houses launched in top 7 populated cities of India was 248,250 units as compared to 2009 year launch of 128,650 units i.e. noticing growth of 92.9%.

5. Vendor profiles

5.1 Bosch Security

5.1.1 Overview

Bosch group was founded in the year 1886 whose headquarter is in Germany. Bosch is known to provide its products and services in the areas of automobile, residential, energy, electronics, packaging, security and others. Bosch being an umbrella brand has different subsidiaries in across different verticals. Bosch Security systems 'are known to provide solutions in the areas security, safety and communication. Security, safety and communication market offers systems namely video surveillance systems, intrusion detection systems, access control systems, fire alarm systems and others. The company has a worldwide presence and has manufacturing units in America, Asia and Europe. Total number of employees working in the company in 2010 was 11,991.

5.1.2 Key Financial facts of 2010

- Revenue of Bosch: Euros 47,259 billion
- R&D expenditure: Euros 3,810 billion
- Areas contribution: Automobile-59%, Industrial-14%, Consumer goods, Building technology and others-27%
- Geographical distribution: Europe-59%, Americas-18%, APAC & others: 23%
- Revenue of Bosch Security: Euros 1,361 billion

5.1.3 Key Developments

Developments	Links
Bosch introduces further enhancements to its Building Integration System	http://www.boschsecurity.co.in/content/language1/html/3219_ENU_XHTML.asp
IP Video Compatibility	http://www.boschsecurity.co.in/content/language1/html/3232_ENU_XHTML

Website	asp
Awards	http://www.boschsecurity.co.in/content/language1/html/1444_ENU_XHTML.asp

Source: Company Website

5.2 Honeywell

5.2.1 Overview

Honeywell was founded in the year 1906 whose headquarter is in U.S. Honeywell is known to provide its products and services in the areas of aerospace & defense, automotive & transportation, healthcare, safety & security, energy, and others. Total number of employees working in the company in 2010 was 130,000. Honeywell automation & control is known to provide solutions in the areas video surveillance market. In video surveillance market Honeywell automation & control offers products namely cameras, lenses, domes, keyboards, DVRs, VCRs, quads, multiplexers and others. The company has a worldwide presence in America, Asia Europe and others.

5.2.2 Key Financial facts of 2010

- Revenue of Honeywell: \$33.3 billion
- R&D expenditure: \$1,466 billion
- Business contribution: Aerospace-32%, Automation & control-41%, Specialty materials-14%, Transportation Systems-13%
- Revenue of Honeywell automation & control: \$13,749 billion

5.2.3 Key Developments

Developments	Links
Honeywell Introduces Entry-Level IP Video System Ideal for Smaller Businesses	https://www.honeywellvideo.com/news/press_releases/311787.html
Honeywell Teams with Boeing to Develop New System to Secure Airports, Shopping Malls, Campuses, Industrial Facilities	https://www.honeywellvideo.com/news/press_releases/307011.html

Honeywell's Newest Recorders Help Simplify Analog-To-IP Video Transition	https://www.honeywellvideo.com/news/press_releases/306922.html
Honeywell Releases Outdoor IP Camera for Total Connect Video Services	https://www.honeywellvideo.com/news/press_releases/306918.html
Honeywell Adds Entry Level H.264 DVR to its Performance Series	https://www.honeywellvideo.com/news/press_releases/306921.html
Honeywell Adds Mobile Capabilities to Performance Series DVR	https://www.honeywellvideo.com/news/press_releases/304475.html

Source: Company Website

5.3 Panasonic

5.3.1 Overview

Panasonic was founded in the year 1918 whose headquarter is in Japan. Panasonic is known to provide products and services in the areas of automotive, consumer electronics, surveillance, medical and others. In security market Panasonic offers analog, hybrid, and IP video surveillance cameras. Total number of employees working in Panasonic in 2010 was around 385,000. The company has a worldwide presence in America, Asia Europe and others.

5.3.2 Key Financial facts of 2010

- Revenue of Panasonic: Yen 8.7 trillion
- R&D expenditure: Yen 527.8 billion
- Areas contribution: Japan-54%, Americas-12%, Europe-10% and Asia -26%
- Business contribution: Digital AVC Networks-33%, Home appliances-13%, PEW-17%, Components & Devices-9%, Sanyo-16% and others-12%.

5.3.3 Key Developments

Developments	Links
Panasonic new compact dome network cameras are packed with features and offer flexibility for a variety of uses	http://www2.panasonic.com/webapp/wcs/stores/servlet/prModelDetail?storeId=11301&catalogId=13251&itemId=651009&modelNo=Content09162011050423228&surfModel=Content09162011050423228
Panasonic analog PTZ dome video cameras feature super dynamic 6 technology	http://www2.panasonic.com/webapp/wcs/stores/servlet/prModelDetail?storeId=11301&catalogId=13251&itemId=651010&modelNo=Content09162011051611996&surfModel=Content09162011051611996
Panasonic introduces analog day/night fixed cameras	http://www2.panasonic.com/webapp/wcs/stores/servlet/prModelDetail?storeId=11301&catalogId=13251&itemId=651503&modelNo=Content09162011051122441&surfModel=Content09162011051122441
Panasonic Unveils i-Pro 1.3mp Network PTZ	http://www2.panasonic.com/webapp/wcs/stores/servlet/prModelDetail?storeId=11301&catalogId=13251&itemId=627004&modelNo=Content040420110

With 288x Zoom	45216227&surfModel=Content04042011045216227
Panasonic Introduces Fixed Dome Analog Camera With Advanced Super Dynamic 5 Technology	http://www2.panasonic.com/webapp/wcs/stores/servlet/prModelDetail?storeId=11301&catalogId=13251&itemId=627502&modelNo=Content04042011045425029&surfModel=Content04042011045425029
Panasonic Adds Two New Best-In-Class Outdoor Cameras To Top-Selling Analog Lineup	http://www2.panasonic.com/webapp/wcs/stores/servlet/prModelDetail?storeId=11301&catalogId=13251&itemId=627503&modelNo=Content04042011045547567&surfModel=Content04042011045547567
Panasonic Debuts Companion Product to I-Pro SmartHD Dome Camera	http://www2.panasonic.com/webapp/wcs/stores/servlet/prModelDetail?storeId=11301&catalogId=13251&itemId=618506&modelNo=Content0211201111521279&surfModel=Content0211201111521279

Source: Company Website

5.4 Pelco

5.4.1 Overview

Pelco was founded in the year 1957 whose headquarter is in U.S. Pelco is known to provide its video surveillance systems in the areas of education, BFSI, gaming, healthcare, government, infrastructure and retail. In 2007, France based Schneider Electric acquired Pelco under its umbrella brand. Total number of employees working in 2010 was 2,250. In video surveillance market Pelco offers products namely Network Cameras, Hybrid Video Recorders, Network Recording and Video Management Solutions domes, Dome Positioning Cameras and others. The company has a worldwide presence in America, Asia Europe and others.

5.4.2 Key Financial facts of 2010

- Revenue of Schneider Electric: Euros 19,580 million
- R&D expenditure: Euros 818 million
- Revenue of Pelco: 2.89 million

5.4.3 Key Developments

Developments	Links
Pelco and Feeling Software Partner to Offer New 3-D Camera Design Tool that Aids in Optimizing Camera Placement and Coverage	http://www.pelco.com/sites/global/en/company/news-room/news-viewer.page?c_filepath=/templatedata/Content/Press_Release/data/en/local/2011/09/20110907_pelco_and_feeling_software_partner_to_offer_new_3_d_camera_design_tool.xml
Schneider Electric's Pelco Endura Network Video Management System Integrated with CNL Software's	http://www.pelco.com/sites/global/en/company/news-room/news-viewer.page?c_filepath=/templatedata/Content/Press_Release/data/en/local/2011/10/20111006_schneider_electric_s_pelco_endura_network_video_management_system_inte.xml

IPSecurityCenter™ PSIM Solution	
Illuminar Joins Pelco's Partner First Program	http://www.pelco.com/sites/global/en/company/news-room/news-viewer.page?c_filepath=/templatedata/Content/Press_Release/data/en/local/2011/05/20110531_iluminar_joins_pelco_s_partner_first_program.xml
Pelco to Feature New Products at ISC West 2011	http://www.pelco.com/sites/global/en/company/news-room/news-viewer.page?c_filepath=/templatedata/Content/Press_Release/data/en/local/2011/04/20110404_pelco_to_feature_new_products_at_isc_west_2011.xml
Pelco Offers Maximum Value for IP Video Migration with New Megapixel HVRs	http://www.pelco.com/sites/global/en/company/news-room/news-viewer.page?c_filepath=/templatedata/Content/Press_Release/data/en/local/2011/02/20110224_pelco_offers_maximum_value_for_ip_video_migration_with_new_megapixel_h.xml

Source: Company Website

5.5 Samsung Techwin

5.5.1 Overview

Samsung Techwin was founded in the year 1977 whose headquarter is in South Korea. Samsung is known to provide its video surveillance systems in the areas of education, BFSI, healthcare, government, industrial, retail and others. Total number of employees working in 2010 was around 7,000. Samsung Techwin product portfolio includes security, imaging, semi-conductor, surface mount technology, aviation, defense and engineering. The company has a worldwide presence in America, Asia Europe and others.

5.5.2 Key Financial facts of 2010

- Revenue of Samsung Techwin : KRW 3,198 million
- R&D expenditure: KRW 141.3 million

5.5.3 Key Developments

Developments	Links
Samsung launch new 1.3 Megapixel High Definition network PTZ dome with 20x optical zoom	http://www.samsungsecurity.co.uk/news/product_view.asp?iPage=1&seq=384&selSearch=all&txtSearch=
New generation of video surveillance security solutions from Samsung on show at IFSEC	http://www.samsungsecurity.co.uk/news/product_view.asp?iPage=1&seq=383&selSearch=all&txtSearch=
Samsung introduce two new competitively priced additions to the SRD series of H.264 DVRs	http://www.samsungsecurity.co.uk/news/product_view.asp?iPage=1&seq=382&selSearch=all&txtSearch=
Samsung launch fully weatherproof High Definition network	http://www.samsungsecurity.co.uk/news/product_view.asp?iPage=1&seq=375&selSearch=all&txtSearch=

camera	
amsung launch compact and robust vandal-resistant dome camera with built-in IR LEDs	http://www.samsungsecurity.co.uk/news/product_view.asp?iPage=1&seq=367&selSearch=all&txtSearch=
Samsung Launch People Counting Network Dome	http://www.samsungsecurity.co.uk/news/product_view.asp?iPage=2&seq=337&selSearch=all&txtSearch=
New entry level 4-channel H.264 DVR from Samsung	http://www.samsungsecurity.co.uk/news/product_view.asp?iPage=2&seq=331&selSearch=all&txtSearch=

Source: Company Website