



# Building and Running Contact Centers in Emerging Economies

## *A Best Practice Perspective*

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*Over the last few years, Contact Centers have mushroomed in emerging destinations such as India and Philippines creating job opportunities for millions. As businesses become more customer-centric, more Contact Centers are being established every day. Businesses will continue to outsource to only those Contact Centers that have kept pace with time, deployed state of the art technologies and stood on world class management policies and processes. Extensive research has been carried out in establishing and operating best in class Contact Centers. Contact Centers business is racing ahead and is poised to be a \$450 billion industry by 2014. To take advantages of such an opportunity, it is very important for both budding entrepreneurs & established organizations to have a closer look at the best practices and recommendations to setup a Contact Centers. This document outlines some of the best practices in setting up & operating a Contact Centers facility*

## Introduction

In recent times, organizations have become more customer-centric. Customers demand and expect smooth, quick resolutions to their queries and problems. Being aware of this fact, even mid-size and small size organizations are opting for contact centers as a strategic move. Contact center is now the most successful function in serving customers effectively and satisfactorily.

This document gives you an insight into the key best practices in the hard and soft aspects of building and running a contact center.

## Physical Infrastructure Requirements Overview

Location of a contact center is an important business decision and can be based on several factors such as proximity to the client or the end-customer, availability of suitable infrastructure, affordable rental cost, availability of skilled manpower, etc. Once the business decision on location is made, physical infrastructure is the next step that would need attention.

Infrastructure has an important role to play in providing good quality working environment to all contact center employees. While building contact center infrastructure, it is important to take into consideration the fact that the facility in most likelihood will be hosting a 24/7 operation.

We provide below some of the best practices that apply to the set-up of physical infrastructure of a contact center.

## Ideal Contact Center Layout

Contact center premises are a lot different from any other work place as they have to support a 24/7 work culture. While setting up a contact center facility, care should be taken to ensure that it has all the provisions like safety, food, entertainment & a pleasant work environment for its employees. Following are some of the provisions made by all international contact center service providers with regards to infrastructure build and layout.



Figure 1

1. Agent Desk with PC'S
2. Noise cancellation boards between two stations
3. Lighting arrangements & Echo cancellation ceiling



Figure 2

1. Team leader seat at the head of the bay
2. Agent seating arrangement
3. Standard space between two agents not less than 3.5 feet
4. Standard space between rows not less than 4 feet
5. Briefing room

## Additional Physical Requirements

- Lockers
- Medical room
- Recreation room
- Cafeteria
- Conference room with audio/visual equipment
- Training rooms
- Server room
- Administration area
- Electrical & UPS room
- Air-condition plant room
- Telecom service room

Please note that these physical requirements are non-critical in nature and should be deployed after a needs assessment of the employees and organization policies.

## Contact Center Security and Compliance

### Data Security

To protect the contact center from data security breaches and possible attacks, care should be taken to:

- Counter expected malware variants
- Deploy clean disk policy
- Monitor social networking & Web 2.0
- Re-architect the technical security perimeter and firewalls
- Deploy data leakage prevention tools

- Re-evaluate incident response capability and compliance to laws and regulations, malicious incident or infection, denial of service, employee abuse
- Secure mobile & mobile data storage devices
- Deploy antivirus & personal firewall
- Defend against social engineering
- Implement cryptographic key management (CKM).
- Verify virtual machine (VM) security

## **Physical Security**

To protect the contact center from any untoward human incidents, physical security should be strengthened by means of:

- Installing digital cameras on the floor and on premises
- Deploying security guards at front and rear entrances
- Restricting access to production area
- Installing fire safety equipment & stationing trained fire safety personnel
- Planning for business continuity during pandemics - organizations should plan for up to 50 percent staff absenteeism for a period of about two weeks

The above mentioned items need to be deployed after an appropriate need and impact assessment of the technologies and human capacity.

## **Contact Center Interiors**

In an international work setting, it is very important to have an aesthetic and comfortable interior design that creates an atmosphere for an employee to focus and enjoy an otherwise stressful work routine. Following items need to be taken care of:

### **Lighting**

- Installation of service light units with sensors to detect the number of people in the production area for intensity & on/off
- Setting office lighting at standard 200 - 300 Lux

### **Air-condition Server Room**

- Installation of precision air-conditioner units with humidity control
- Minimum requirement is two number on rotation basis with full load capacity

### **Air-condition for Operation Area**

- General air-conditioning can be used with 30% surplus capacity

### **Noise Reduction**

- External noise reduction by double panel windows with sealing
- Internal noise reduction by noise reduction boards installed at agent desk
- Carpet across operations floor
- Noise cancellation microphones can be used

# Technical Infrastructure Requirements Overview

Technology forms a critical component of any contact center and it defines the capabilities that the contact center may have. With the ever increasing demand from consumers and businesses, contact center technology has also evolved to meet the rapidly changing demands of consumers and businesses. Innovation and continuous evolution of technology and telecommunications have enabled contact center technologies make significant improvements in productivity while greatly reducing operating costs. Following are some of the options that are available to host contact center technical infrastructure.

## Premise-based Contact Center Technology

Historically, contact centers have been built on PBX equipment that is owned and hosted by the contact center operator. The PBX might provide functions such as Automatic Call Distribution, Interactive Voice Response and skills-based routing. The contact center operator would be responsible for the maintenance of the equipment and necessary software upgrades as released by the vendor.

## Virtual / Hosted Contact Center Technology

With the advent of the software as a service (SAAS) technology delivery model, virtual contact centers has emerged. In a virtual contact center model, the contact center operator does not own, operate or host the equipment that the contact center runs on. Instead, they subscribe to a service for a monthly or annual fee with a service provider that hosts the contact center telephony equipment in its own data center. Such a service provider may host many contact centers on its premises. Agents connect to the service provider's equipment through traditional PSTN telephone lines, or through Voice over IP. Calls to and from prospects or contacts originate from or terminate at the service provider's data center, rather than at the contact centers operator's premise. The vendor's telephony equipment then connects the calls to the contact center operator's agents.

Virtual Contact Center Technology allows people to work from home, instead of a traditional, centralized, contact center location, which increasingly allows people with physical or other disabilities that prevent them from leaving their homes to work.

## Premise-based Contact Center Technology

On-premise contact center solutions provide businesses with the opportunity to tailor their system to specific business needs. These solutions are flexible and can be customized to meet changing business needs. The other big advantage is that the on premise contact center provides business with confidentiality and security of data as the data is stored in house.

On-premises contact centers solutions typically cost more than a hosted solution, but there is one financial benefit to consider. The organization can take advantage of asset depreciation tax write-offs if they buy and own their own contact centers equipment. There is no depreciation tax benefit available if you choose to go with a hosted solution.

An on-premises contact centers typically involves greater up-front costs compared to hosted solution. However, hosted solutions may require costly upgrades and maintenance fees that add up to significant expenses over time.

One potential drawback of investing in a premise-based solution is the additional time and expense involved in implementation and configuration. Organizations will need to invest in hiring a consultant or a system integrator to keep their on-premises system functional.

The on premise contact center solutions provide the following Technology options:

- 1) Complete Time Division Multiplexing (TDM)-based technology
- 2) Complete IP-based contact centre
- 3) Hybrid architecture with TDM and IP-based solutions

**TDM-based contact center technology:** is robust and, more importantly, proven. The technology has always been around for long and it provides toll-quality voice. The technology has evolved over a period of time to offer state-of-the-art features. However, TDMA-based systems present limitations when handling multimedia contacts and multi-site architectures and have high scale-up costs because of proprietary technologies.

**IP-based contact centers:** IP is the evolving technology now and is comparable to TDM in terms of voice quality, due to the advancements in networking equipment. Though TDM-based contact centers have a greater market share today, IP-based contact centers are catching-up fast. They offer open technology platform & multimedia functionality. They have geography-independent architecture (multi-site); easy and cost-effective to scale and easy maintenance. But, perhaps the biggest advantage of an IP-based system is the ability to deploy agents at multiple and remote locations, without the need for adding voice switching equipment.

The current IP-based technologies biggest drawback is scalability. Traditionally, it is not used in contact centers with more than 100 seats since it still has to prove its capability in the large call-center environment.

**Hybrid architecture with TDM & IP-based solutions:** Most large contact center organizations have invested and built traditional TDM based solutions over a period of time. These systems represent a significant investment made by them. They need an effective way to manage the transition by minimizing downtime, enabling interoperability between TDM and IP-based agents and applications, phasing in the new system according to the organization's needs and timelines, and easing training problems. Larger organizations have created applications that unify emerging IP-based technologies and traditional TDM applications into one architecture for optimum flexibility and functionality during the TDM-to-IP transition period.

Pros and Cons - TDM Switch Based Vs. IP Based Contact Centers Suite			
S. No	Features	TDM & Switch based Solution	IP Based Contact Center Suite
1	Configuration	Complex - Due to configuration need to be carry out individual component, but reliable	Simple : Configuration simple and in the core system
2	Adoptability	Need special Technical Skill set to manage	Any system administrator with some knowledge of voice technologies should be able to adopt
3	Expansion	Based on additional infrastructure - (i.e. Requires space, additional hardware, power, HVAC connectivity)	Simple : Need to add additional server
4	Deployment	TDM model needs additional wiring, Only supports Vendor supported IP Phones models and needs additional switches with POE and IP Phones. Soft IP phone client option available but this will be separate license	Flexible options can use desktop IP soft Phone Client to Use phone or can use open standard SIP based IP Phones. Single license can use for both Soft Phone client and Hard IP phones. The cost inclusive of base agent license cost
5	Development	Practically no new development is taking place in the traditional TDM based solutions. The absence of standardized architectures places roadblocks in the path of development teams, limits the potential talent pool for developers, raises market entry barriers, and deters innovation and competition	On the other hand new and improved unified applications are being constantly developed. They have the ability to support integrated, multi-channel (voice, e-mail, text chat, and Web collaboration) customer interaction providing
6	Network administration	Separate voice and data networks are expensive to deploy and maintain. Dual networks also complicate the deployment of integrated multi-channel services that rely on integration between voice and data applications	The ubiquity of IP networks is to provide converged voice and data networks, thereby eliminating maintenance of dual networks.
7	Manageability	Bit Complex if right skill set to manage are not present	Simple - System administrator with Voice knowledge can manage

Pros and Cons - TDM Switch Based Vs. IP Based Contact Centers Suite			
8	Support	In case of Hardware failure, it needs to wait for replacement or sufficient necessary Hardware should be stocked in house	Can use virtual enjoyment, in case of hardware failure, can use the ready image for restoration
9	Pricing	Expensive - due to component wise pricing with many different vendors	Cost effective and single vendor to deal for all requirements

## Technology Essentials of a Contact Center

Component	Description	Vendors
<b>ACD (Automatic Call Distributor)</b>	This is a device or system that distributes incoming calls to a specific group of terminals that agents use.	<ul style="list-style-type: none"> <li>• Nortel</li> <li>• Avaya</li> <li>• Alcatel</li> <li>• Siemens</li> <li>• Cisco</li> <li>• Aspect</li> </ul>
<b>Computer telephony integration (CTI)</b>	This is the common name for any technology that allows interactions on a telephone and a computer to be integrated or coordinated.	<ul style="list-style-type: none"> <li>• Envoy CT Connect</li> <li>• Nortel CCT</li> <li>• Genesys</li> <li>• CISCO</li> <li>• Aspect</li> </ul>
<b>Interactive Voice Response (IVR)</b>	IVR provides touch tone and speech recognition based menus that direct the call to the right resource to deal with that specific type of enquiry	<ul style="list-style-type: none"> <li>• Nortel Periphonics</li> <li>• Envoy CTADE</li> <li>• Genesis voice portal</li> <li>• Voice objects</li> <li>• Avaya voice portal</li> <li>• Voice genie</li> </ul>
<b>Call Recorder</b>	This provides the facility to record calls in the Contact Centers	<ul style="list-style-type: none"> <li>• NICE</li> <li>• Witness</li> <li>• Aspect</li> </ul>
<b>Work Force Management</b>	WFM system that manages the planning, forecasting and scheduling of Contact Centers staff	<ul style="list-style-type: none"> <li>• Blue pumpkin</li> <li>• Pipkins</li> <li>• Q-MAX</li> <li>• InVision</li> <li>• Aspect</li> </ul>
<b>Customer relationship management system (CRM)</b>	CRM system is used to log customer contact and manage customer preferences when dealing with the contact center	<ul style="list-style-type: none"> <li>• Siebel</li> <li>• Oracle CRM</li> <li>• SAP CRM</li> <li>• Microsoft CRM</li> </ul>
<b>Multi-channel management</b>	This integrates email, white mail correspondence, SMS text messages and online web chat into an intelligent work queue	<ul style="list-style-type: none"> <li>• Nortel CC</li> <li>• Avaya</li> <li>• Aspect</li> <li>• Altitude</li> </ul>

		<ul style="list-style-type: none"> <li>• Genesys</li> </ul>
<b>Routing Platforms</b>	These are standard algorithms used to route calls to a particular set of agents	<ul style="list-style-type: none"> <li>• Avaya</li> <li>• Avaya Nortel</li> <li>• Aspect</li> <li>• Altitude</li> <li>• Genesys</li> </ul>
<b>Wall Boards</b>	Wallboards show contact centers statistics from ACDs, workforce management systems and other sources	<ul style="list-style-type: none"> <li>• Innova OnTrack</li> <li>• Checkmate</li> </ul>
<b>Hard Phones</b>	These are the most basic voice devices that are used to communicate with the customer	<ul style="list-style-type: none"> <li>• Avaya</li> <li>• Cisco</li> <li>• Any SIP enabled IP Phones</li> <li>• Alcatel</li> <li>• Snorm</li> </ul>
<b>Headsets</b>	They are essential head gears that allow an agent to listen to a customer while working on a key board.	<ul style="list-style-type: none"> <li>• Plantronics</li> <li>• Jabra</li> <li>• Addcom</li> <li>• Snorm</li> </ul>

## Contact Center Best Practices

### Human Resource

One should not forget that the contact center industry is a people centric industry. When hiring employees, start by hiring the right agent who is motivated and interested in providing good customer services. Hiring the right employees is very important. Have your hiring agent search for skilled unemployed people in areas where large establishments have recently been closed. These places have proved to be a good place to find highly skilled workforce. Consider non-traditional workforce members, like housewife's & part time workers besides hiring school and college graduates.

Once the right candidate is hired, training becomes a crucial factor. A well-trained agent is likely to succeed far more than an unskilled one. A skilled agent can have a higher customer satisfaction. This helps in having both agent and customer satisfied. A satisfied customer means more business to the client and a satisfied agent is motivated to stay with the same organization for a longer period of time.

### Staffing Policies

A sound staffing policy helps both workers and managers. Research tells us that around 20% to 30% of contact center employees change jobs every year. Some of the reasons cited for this high turnover in the contact center industry are mainly monotony of work, lack of career progression and pursuing higher studies.

High employee attrition in the contact centers business amounts to revenue loss which is why robust staffing policies are a must. The average cost of attrition per employee is usually higher than the cost for selection & training.

Some of the best practices used in the industry on staffing policies are as follows.

### **Pay & Remuneration**

- Pay as per Industry standard
- Higher performance bonuses for the meritorious
- If competition for resources is high in the industry, increase number of pay reviews (2 reviews in a year)
- Provide long term incentive pay
- Provide encashment of annual leaves

### **Training & Development**

- Increase availability of training
- Introduction of career development plans
- Introduction of multi-skilling

### **Working Conditions**

- Adjustment of shift hours so workers could work for longer days or fixing shift patterns to enable staff to plan ahead
- Flexible working

In the contact center industry, pay and work conditions are two main important factors in employee retention and productivity and are the biggest motivator for any contact center employee to either stay or leave the organization.

The best practices observed in the contact centers tend to include an incentive based pay policy to retain its employees.

Another equally strong motivator for a Contact Centers employee to stay with an organization is the work environment. Good ergonomic working conditions, flexible work timings increase employee satisfactions. This minimizes the need for an employee to look for change in the employer. Organizations that have high employee satisfaction levels have shown very low levels of attrition. Implementing these best practices would significantly minimize attrition.

## **Operations**

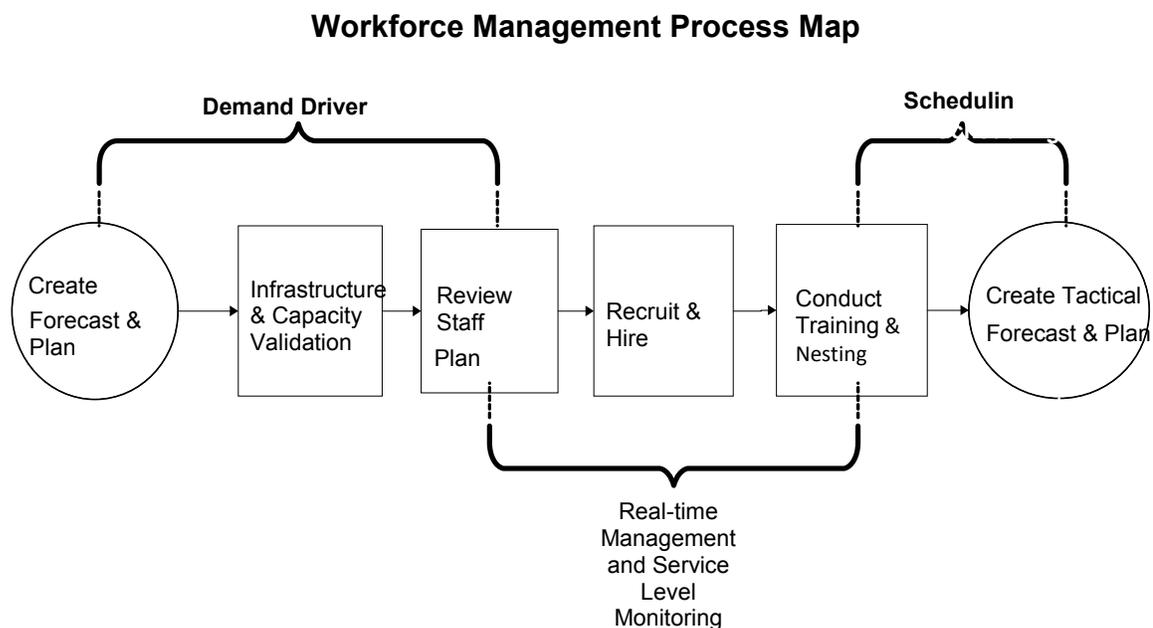
Contact Center facilities operate 24/7 and 365 days a year. A 24-hour day culture needs to be carefully facilitated as this style of working can be stressful on some employees. In recent times, research has shown that fatigue and tension is a common feature in the contact center sector.

A majority of contact centers have implemented agent friendly operational polices that achieved positive results. Some of them are included below.

## Work Force Management (WFM)

Contact centers employ a large work force. Managing such a large work force becomes a difficult but essential task for contact center managers. The simple way to monitor the agents is to have a supervisor look over the cubicle walls and keep track of his employees. He may also be able to listen and watch them while they work and talk to them about their performance informally. If the contact center is a larger one, the best practice is to employ CRM work-force-management software, which simulate agent workloads and ensure that agents adhere to the schedule. Most of the software products allow the supervisor to proxy on an agent call or take charge of the call in case of emergency.

The CRM tool in a support environment helps supervisors to measure agents' effectiveness by comparing the time they take to close calls and how successfully they resolve callers' issues.



Another best practice used by supervisors to manage their workforce is to encourage teamwork and identify agents' issues in a supportive manner. This can be done by holding weekly meetings, where agents are invited to discuss the problems they have encountered, work together to find solutions, or gain recommendations from a supervisor to improve their ability to handle future calls.

In addition to the above, a contact center can have the following best practices and recommendations to improve employee morale, which have proven to be a success.

- Flexible shift planning - allowing staff to swap shifts as and when required

- Notice of changes to shift patterns (min 2-3 weeks)
- Maximum 35 hour working week
- Overtime/stretch pay
- Return to work bonus for new mothers (equivalent to one month's salary)
- Savings schemes – Bonds /Fix deposits.
- On site fitness facilities
- Provision of child care vouchers and/or facilities
- Provision of nursery crèche facilities
- Travel assistance for unsound shifts

## Customer Satisfaction

Contact center industry is all about serving the client and its customer. You may have experienced many a times that a contact center transfers your calls repeatedly or puts you on hold while the agent is supposedly finding you an answer. How often do you wonder if the person on the other end is just taking an extended break?

Managers in the contact center sector need to understand the customer's point of view. Processes need to be simplified, enabling the customer to get the desired services. The customer is going to rate the company from which he has bought the product or service depending on how the contact centers agent serves them. The client can outsource its client services but not its responsibilities.

Much of the contact center industry uses these best practices, making it essential to go directly to the customer and ask for feedback. They deploy managers & quality experts to monitor calls, have secret shoppers or anonymous callers to call in and rate a company's own contact centers on customer satisfaction. Carry out a surprise audit on customer satisfaction and implement the audit recommendations. Having operational guidelines for agents on agent putting a caller on hold or transferring the call to another agent or the IVR is necessary. It is highly recommended to have agents go through refresher training on customer handling every now and then.

## Quality Assurance

It is observed that Quality of Service is directly related to customer satisfaction. The contact center industry, which has customer service at its core, needs quality management and assurance process inbuilt in its operations.

Larger organizations can afford to maintain a dedicated quality management group. In many small or medium-sized businesses, a supervisor can effectively manage quality assurance for his team of around 10 agents.

CRM software makes it easy for an automated system to help monitor calls as well. It is common for a percentage of calls to be automatically recorded for later review. This method is expensive in terms of hardware and human resources, but is a very effective tool to measure

call quality and rate agents' abilities in specific categories such as product knowledge, efficiency or customer service.

As most contact centers are looking for opportunities for improvement in delivering quality services, it is essential to have a black belt quality expert in the organization who will survey and pinpoint potential change and improvement in the process. The quality expert would find solutions that can fill the gaps in performance.

The recommendations in this document are based on actual success stories of contact center companies that have not only achieved higher customer satisfaction by improving and ensuring quality of services but have saved millions of dollars in transactions, achieved lower average handling time (AHT) and decreased costs associated with agents & turnover rate

## Conclusion

With the phenomenal growth in the global outsourcing market, a number of countries around the world are developing comprehensive strategies to rapidly position themselves as an attractive destination for IT & BPO services opportunities and market share.

The timing is good for many African and Latin American Nations (among others) as a favorable emerging outsourcing destination – with an accompanying paradigm shift in traditional perceptions of these two continents. Many African and Latin American countries are pursuing a strategy to become an attractive Outsourcing Destination with the slogan of achieving 'Economic Progress and Employment with Dignity for the Educated Population'.

Having some of the best practices implemented in setting up and operating a contact center would not only help to optimize profits, but also provide greater benefits for clients and investors alike.

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