



Building your Contact Centre

Loyal Agents – Profitable Operations – Delighted Customers

Introduction	4
Some definitions	4
A bit of history	4
Productivity gains	4
Managing interactions.....	5
The real cost of multitasking	5
Designing your Call Centre organization	7
Dimensioning your Call Centre	7
Calculating « Erlangs »	7
Managing peak traffic	8
Technology considerations	9
Automatic Call Distribution.....	9
Interactive Voice Routing	9
Computer Telephony Integration.....	10
The internal organization	11
Internal contact centre of up to 50 agents.....	11
The Call Centre Manager	11
The Supervisors	11
The Agents	12
The Administrator.....	12
The IT Manager.....	13
Internal contact centre of up to 1.000 agents	14
The Team Leaders	14
The Developers	14
The Architects	15
Business Process Outsourcer (“BPO”) or “Outsourcer”	16
The Business Manager	16
Measuring your Performance	17
Service Level Agreement (SLA).....	18
Average Speed of Answer (ASA)	18
Percentage of Calls Answered (PCA)	18
First-Call Resolution Rate (FCR).....	18
Average Handle Time (AHT)	19
On-Hold Time (OHT)	19
Agent Occupancy (AO)	19
Monitoring your Operations	21
Silent Call Monitoring	21
Call Recording System	21

Real-Time Monitoring	23
Performance reporting	24
Reporting on Agents	25
Reporting on Teams.....	25
Reporting for the Management	26
Improving your Operations	28
Workflow based approach (Campaigns & Activities principles)	28
Inbound/Outbound/Media blending.....	30
Multiple Inbound blending	30
Inbound/Outbound blending	30
Media blending	31
Preferred Agent, Call-back IVR, Planning and Listening for History	32
Auto-Ready During Wrap-up & Preview.....	33
Managing Team overflow.....	34
Priority & Profit based routing	34
Profiling your Customers	35
Use a Real Predictive dialer.....	36
Automatic import on data entry.....	37
Managing your End-of-call-files efficiently	37
Conclusions	38
Some References	39
Contact Nixxis	40

Introduction

Most of us who have ordered goods, products or services from a mail order company, made flight bookings or, arranged insurance cover for a motor-car or a house, will have used a call centre and will be 'au fait' with the terminology. But what is a call-centre? How does it operate, when do you need one and what does it do? Who mans it and what are the skills demanded to work there?

This basic document will try to glance through all these questions and explain *you the basics of Call and Contact Centre principles*.

Some definitions

According to Wikipedia ©; ***"A call centre or call centre is a centralized office used for the purpose of receiving or transmitting a large volume of requests by telephone. An inbound call centre is operated by a company to administer incoming product support or information inquiries from consumers. Outbound call centres are operated for telemarketing, solicitation of charitable or political donations, debt collection and market research. In addition to a call centre, collective handling of letter, fax, live support software, and e-mail at one location is known as a contact centre"***.

In practice, Call-centre operators, or 'agents', sit at banks of personal computers (PCs), using simple or sophisticated software packages, which allow them to complete customer details and requirements in a pre-determined sequence for automated transfer to internal or external production and control units and on to automated dispatch.

A bit of history

Armed Forces were the first organizations to use centralized communications for command and control and first among these was the UK's Royal Navy. However, today's commercial call centre culture was developed in the United States and American companies were at the forefront of the introduction of such workplaces, based on military models, and the associated hardware and software technology. During the last decade of the 20th century call centres proliferated as organizations sought to improve their customer services whilst reducing overheads. Computer technology and much improved and higher-speed telecommunication network connectivity allowed many companies to establish a centralized section to control demands for products or services. And, computer software programs provide almost instantaneous access, depending on software capacity, to detailed demand records.

Productivity gains

Although the original centralized communications for command and control centres of the Armed forced were used in order to avoid information fragmentation and improve speed of communication, present Contact Centres have mainly focused on improvement of productivity.

The productivity gains encountered in present day's contact centres are due to the application to their operations of a certain number of Industrial Productivity Management Principles that have been popularized by Frederick Winslow Taylor in the book he published in 1909: *The Principles of Scientific Management*.

Taylor's four main principles are:

1. Replace working by "rule of thumb," or simple habit and common sense, and instead use the scientific method to study work and determine the most efficient way to perform specific tasks.
2. Rather than simply assign workers to just any job, match workers to their jobs based on capability and motivation, and train them to work at maximum efficiency.
3. Monitor worker performance, and provide instructions and supervision to ensure that they're using the most efficient ways of working.
4. Allocate the work between managers and workers so that the managers spend their time planning and training, allowing the workers to perform their tasks efficiently.

Reading through these principles, one can say that Productivity will be increased once the workers keep themselves to simple standardized tasks while managers make sure that productivity is controlled by giving feedback and making sure that workers have all the necessary information/coaching/training to perform their tasks to the optimum level.

Managing interactions

The real challenges for the people in charge of managing Customers interactions in Administration, Hospitals and Commercial companies is to be able to manage these according to various variables and medias.

These variables are:

- *What are the various types of Interactions to be treated and via how many different media's?*
 - *Example: A receptionist has to handle general questions, various specialized questions, appointments, rescheduling and this via telephone and mails.*
- *What is the complexity of each type of interactions to be treated?*
 - *Example: Answers can be sometimes delivered by heart, sometimes a call must be given to a colleague, and sometimes the receptionist has to consult a knowledge database on a computer.*
- *What is the average duration of each interactions type in function of complexity?*
 - *Example: Depending on the knowledge and training of each receptionist the completion of similar tasks might take different durations.*
- *How many interaction requests are received by hours? Days? Week? Month?*
 - *Example: At lunch time, about 10 calls per hours are received and this level increases and decreases in function of the time of the day, day of the week, etc...*

In practice, when one or a pool of receptionists are in charge of taking all the telephone and mail interactions on top of welcoming customers to the reception desks, the person has to perform Multitasking.

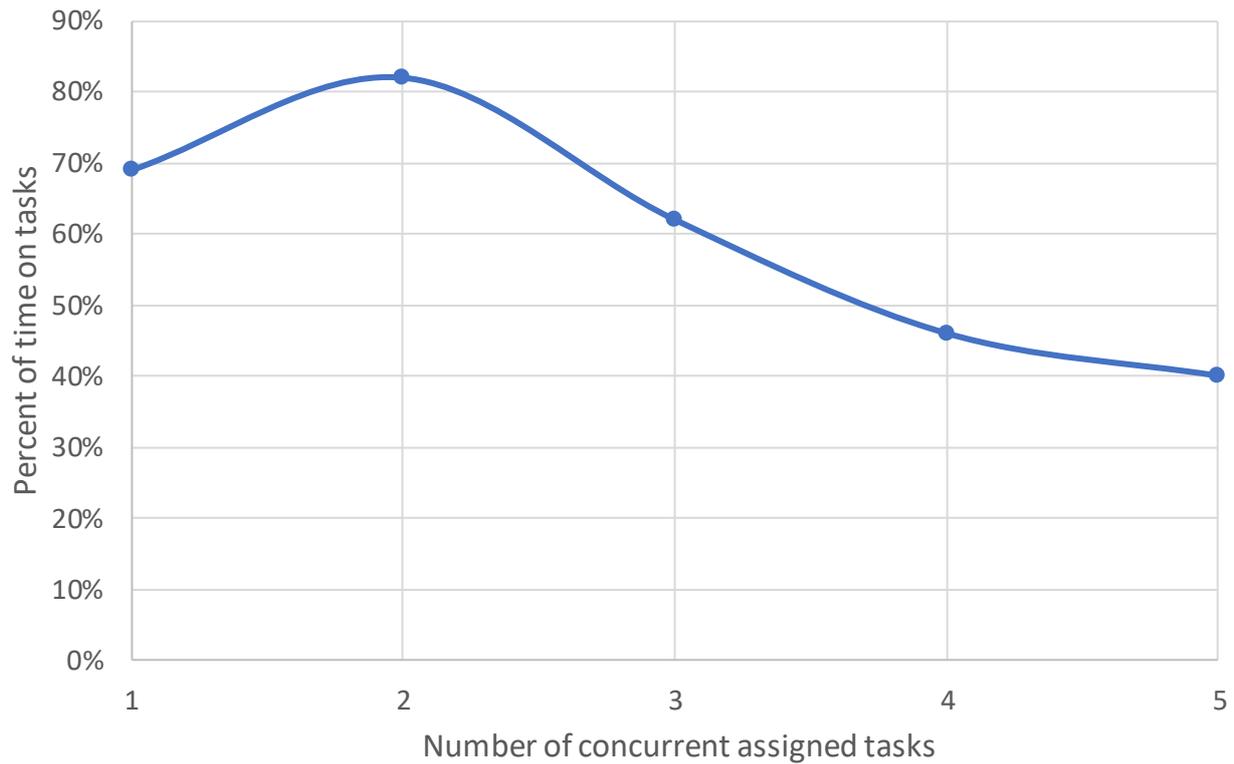
The real cost of multitasking

Based on the principles of scientific management seen before, we can understand that having workers switching from one task to another, will allow them to perform different types of tasks but will cost in Productivity performance. The whole question is: "How much is the productivity decreasing?"

Actually, scientific studies have shown that when workers are switching from one task to another, most of the time lost between that two comes from "Objective Changes" and "Rules Changes". This means that workers loose time in changing in their minds the Objectives they need to attain and the Rules they need to use in order to get there.

One interesting scientific study showed that, ***independent of the training level of the worker, if each of the singles tasks accomplished take less than 10 minutes to perform, more than 30% of the time can be lost only in the switching interval.***

The following graph shows that once more than 2 tasks are assigned to the worker, less total time is available to the worker to work on the tasks in general.



Source 1990's Harvard Study by Steven C. Wheelwright and Kim B. Clark

This says that once you have more than one type of tasks assigned to a specific worker, time is lost in the switching between tasks and when the number is higher than 5 various tasks, only 40% of the presence time is really used to work on the various tasks.

Let's think of our receptionist again that has to manage phone calls, people at the counter, answering various emails and more... How much time could you win by splitting the work differently between your pools of people?

This is of course without taking into account the potential errors of treatment and the stress increase resulting in task switching procedure.

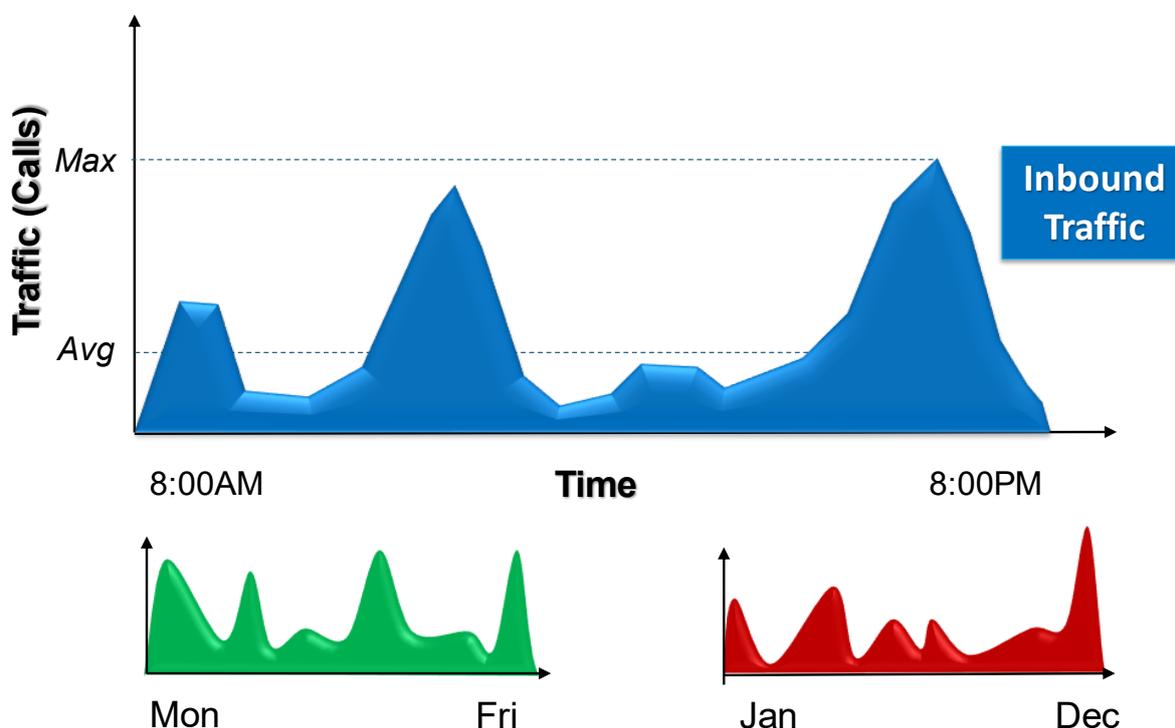
So, the real challenge for a call centre manager is to manage productivity of its agents by giving them enough repetitive activities to make and at the same time, allow variations and initiative to be taken so that the work remains interesting for each worker.

Designing your Call Centre organization

We will see here how the Call Centre industry has responded in terms of technology, organization and working processes in order to respond to the scientific management principles seen before and how this can be used for your own organization. But before that, let's discuss some Call Centre dimensioning principles.

Dimensioning your Call Centre

If your company or administration does not have a Call Centre or an advanced telephony system today, it will be difficult to know how many calls you receive an hour "per issue" or "questions" from your customers. Most of the time by measuring the amount of calls landing on your defined phone numbers (inbound phone numbers are called "DID's" for "Direct Inward Dialling" in Call Centre terms), you will be confronted to the following graph:



Example of typical inbound call traffic measurements on various DID's

So, the question is often, how many agents do we need to manage this incoming traffic?

Calculating « Erlangs »

As this is not a scientific white paper, we have simplified here the formula's used by a Danish Mathematician of the 19th century, Anders Krarup Erlang that originally came up with a formula to calculate the capacity and of which the units used are actually called to his name "ERLANGS":

The ERLANG unit is a dimensionless unit that was originally used in telephony as a measure of load on telephone circuits. The formula is fairly simple and goes as follows:

$$E = \lambda h$$

- λ is the average Call Arrival Rate
- h is the average Call Holding Time (Handle time for Call centres)

So, if thanks to your measurements, you have defined that the Call Arrival Rate is 2,7 calls/minutes and that average Handle time is 3,5 minutes, you will need a load capacity of 9,45 ERLANGS.

Roughly, we can say that you will have on average 10 calls simultaneously to your call centre.

For the sake of clarity, we also need to point out that there are other Erlang formulae used in the Call Centre industry:

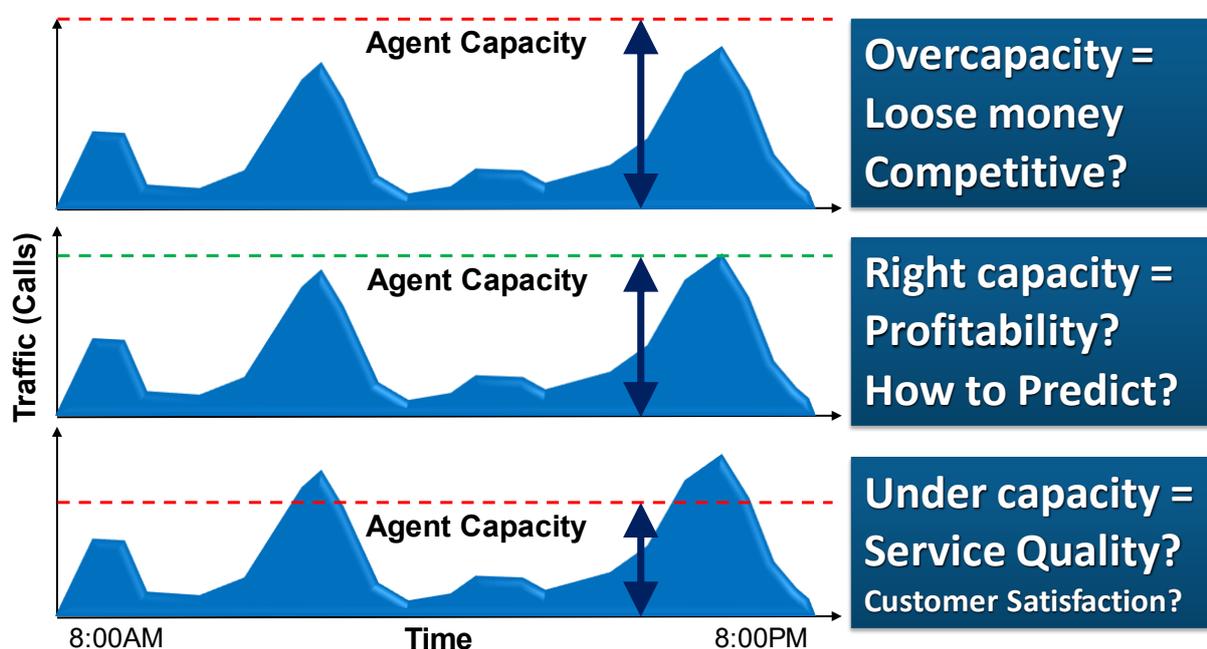
- The ERLANG B Formula calculates the probability of Call Blocking for Telecommunication trunks.
- The ERLANG C Formula calculates the probability of Queuing for an incoming call.

Please refer to more advanced literature or experienced consultants to help you dimension your Call Centre further.

Managing peak traffic

Of course, if the traffic would be constant with time, the life of the Call Centre manager would be ideal. Unfortunately, it is not. We can say that there is always some kind of seasonality on the traffic depending on the time of the day, the day of the week and the week in the year (plus also other factors linked to external events like a network breakdown for a Telecom operator for example).

So, to define the number of logged agents you will need at any one time in your call centre, you will have to make the following choice:



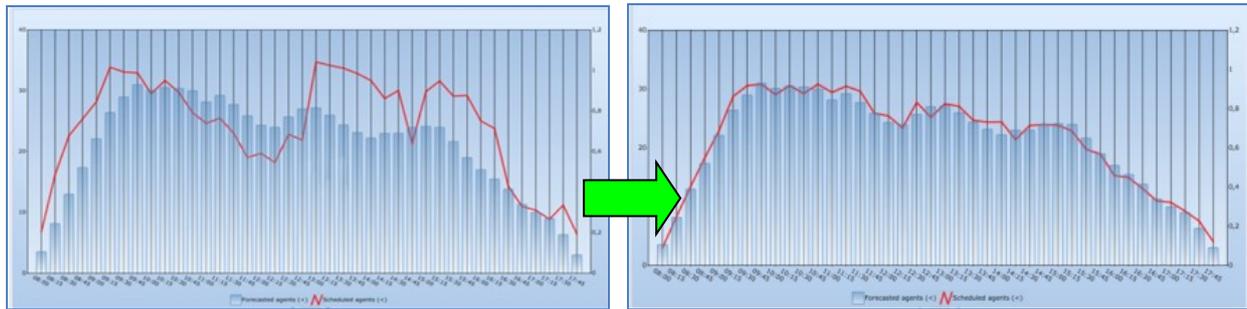
What kind of traffic management scenario do you want?

As shown above, you basically can have the 3 type of scenario's above:

1. **Agent Over-capacity:** If you have too many agents logged in compared to the peaks of your inbound traffic, this means that you will pay too much in salaries for people waiting that the phone rings and this could mean that you are losing money. Your service could be first class because nobody has to wait but the question is: Are you still competitive in your pricing?
2. **Agent Right-capacity:** In this scenario, you have exactly the number of agents needed to answer the calls but the challenge there is to be able to define how many calls you will get on an hourly basis? Still, you will see that off-peak, you have a bunch of agents waiting for the phone to ring and there also you will lose money or run an unprofitable business unit.
3. **Agent Under-capacity:** In this scenario, you consciously under-dimension the agents present at any one time, so you know that during peak traffic time, people will have to wait in a "Queue" but you manage to control their experience with the use of technology and measure that you respect what is defined as a Service Level Agreement or "SLA". We will see later in this document how SLA's can be expressed.

Although your industry or administration might demand that you overstaff your Call Centre, we need to say that there are ways for scenario 1) and scenario 2) still to be profitable options. This is mainly done by using various types of operational strategies for

your call centre like blending agents on various campaigns, overstaffing virtually your team or overflowing the traffic from one team of agents to another, etc... We will see this in detail further in this document.



A good capacity planning can help reduce workforce by more than 20% (source: Teleopti).

A rough rule of thumb says that an agent is approximately available for about 300 minutes per day of work (or 5 hours for a journey of 8 hours) to take calls. So, if your average interaction time is 5 minutes, the Agent should be able to handle about 60 calls during a normal working day. Of course, the amount of interactions will depend on the complexity of the interactions: A simple and repetitive task like inbound calls for scheduling appointments on the fly in an online agenda could give a capacity of about 100 per day while complex IT Helpdesk questions requiring call-back might be limited to 20 per day.

Technology considerations

Without going too deep in the Technology used in present days call centres, we will try to give you have an overview of the major systems and solution used.

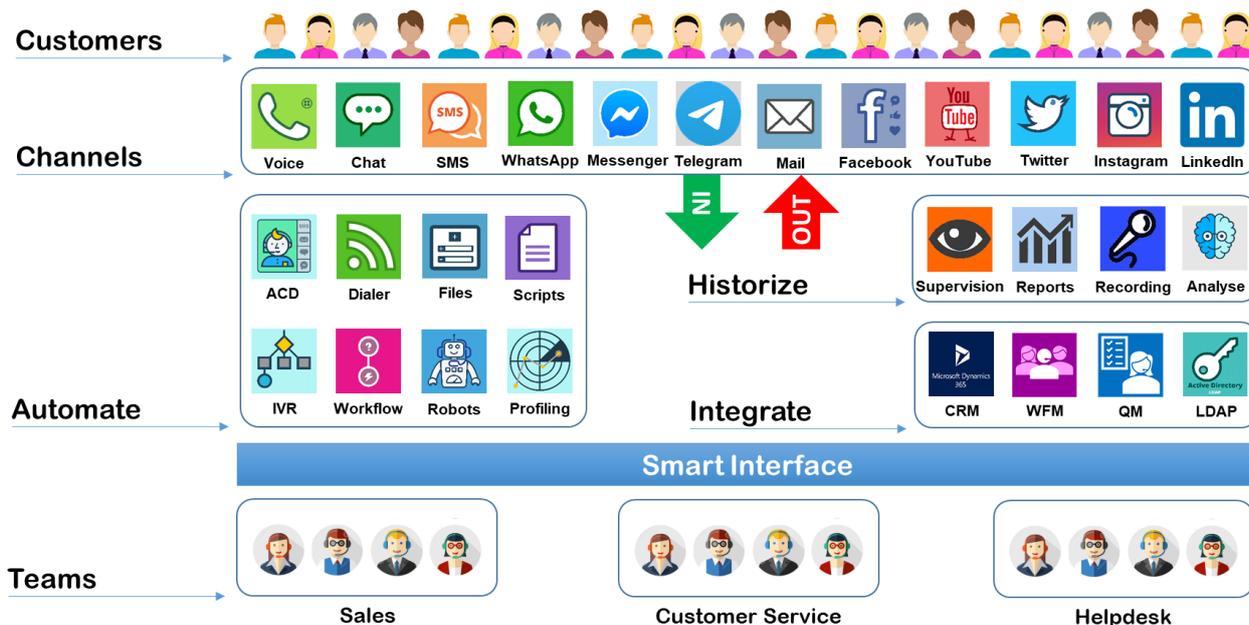
Automatic Call Distribution

A crucial piece of equipment in any commercial call-centre is the Automatic Call Distribution (ACD) system. This equipment, and the associated software, is designed, depending on the sophistication of the programming requirement, to recognise the code of incoming calls either on a prioritisation programme based on the capacity and importance of a customer, or, on the regional numbering which allows for distribution to appropriate operators who deal with customers by region, or, can route the call, again depending on the dialling code, to the most appropriate operator who is fluent in the relevant language.

ACD systems can also be programmed to re-route calls. If and when operators in a particular group are all busy, the system can switch a call to another group or, programmed to provide an answering service which states, for example, “all operators are busy” or, “you are number 2, 3 or 4 in a queue” and then play some kind of prompt or, additionally, programmed to interrupt, say every 30 to 60 seconds, with further information. The main problem with this set-up is that if you do not have enough operators at a particular time nor to meet a particular demand and you keep customers waiting too long, they are likely to go elsewhere. We will discuss this further in the Dimensioning and SLA section.

Interactive Voice Routing

Another popular way to route the calls received by the ACD is the use of an Interactive Voice Routing (IVR) service. This service will use the possibility of the caller to generate codes from 0 to 9 via its keyboard or using its voice in order to define the routing needed. The IVR is generally equipped with a welcome prompt indicating the menu choices (languages and menu included) that, when selected will be used by the system in order to put the call in the right queue.



A smart management platform should be able to automate, historize and integrate.

Computer Telephony Integration

Associated with the ACD is a hardware and software system referred to as Computer Telephony Integration (CTI), a system which connects the Private Branch Exchange (PBX) to the in-house computer-based information systems and enables agents, or operators, to access files and other relevant information at very high speed. Response from this system can be so quick that information is available 'on screen' sometimes before the caller has been connected to an agent.

Newer and more complex CTI systems allow all agents, I prefer the word operator, to access the same network and information system; it also enables the transfer of incoming calls and caller data to other agents on the system (referred to as 'screen-popping'); and, a click of the mouse will allow agents to initiate an outgoing telephone call, from information displayed on the screen.

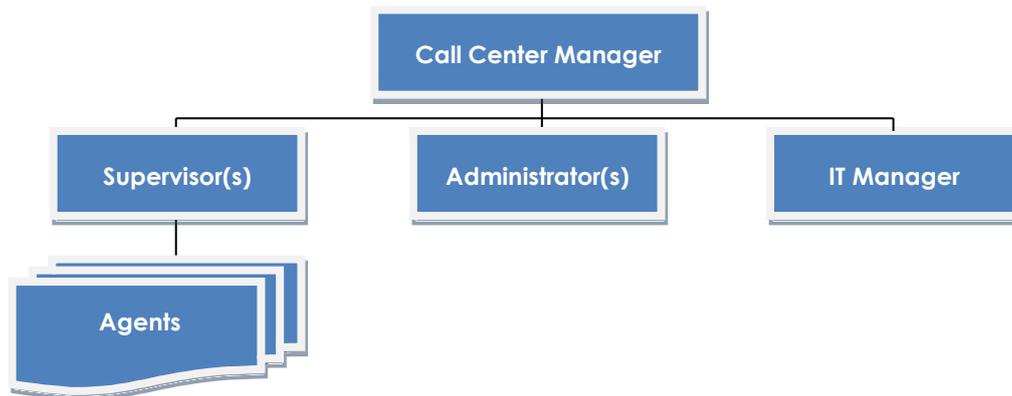
The secondary purpose of a 'dual-purpose' call-centre, when not fully employed in providing advice on goods and services on the Inbound (incoming calls) side, is as a front-line operational marketing facility. This is the kind of additional service that British Telecom directory services has been known to offer to even their ex-directory subscribers. Operators can be tasked to contact regular customers to ask whether they require additional goods or associated services. These are the so-called Outbound (outgoing calls) activities. One of the risks likely to arise from using a call-centre in this manner, as in all other forms of telemarketing, is that it could become an irritant and alienates people from buying your goods or services if it is not controlled properly.

The internal organization

There are various ways that a Call Centre can be organized internally and this depends mainly of the volumes of calls/interactions to be treated. We will take the example here of a Small internal contact centre, a Large internal contact centre and a Business Process Outsourcer.

Internal contact centre of up to 50 agents

Although for some people this might sound rather large, it is recognized by industry standard that a Contact Centre of up to 50 agents is seen as a rather small contact centre operations (even if the company/administration behind it might have thousands of workers).



Typical Call centre organization for up to 50 agents

The Call Centre Manager

The Call Centre manager is responsible for the general Call Centre operations. He/she minds mainly the Customers and the quality of the people employed. For an internal call centre, Customers can be other employees of the same company.

The Call Centre Manager will mainly be driven by financial resources, people management and quality provided. Under him/her, you will find Supervisors, Administrators and IT Managers.

If the Call Centre is an outsourced operation, the Call Centre might act as a Sales representative, trying to gain contracts from its outsourced customers or eventually have one sales manager to perform commercial activities.

The Supervisors

Supervisors have as main business objective to run campaigns by hiring, train and manage teams of agents. Supervisors will have to make sure the Call Centre in running properly both from a quantitative and qualitative perspective.

Supervisors define what goes into “production”, which means which campaigns are assigned to the various agents by eventually having them working on single or multiple campaigns.

Supervisors are the first level where the respect of the SLA is controlled by:

- Monitoring the physical presence and performance of agents using floor plans, graphs and lists.
- Defining exceptional situation on campaign by using alerts and indicators to check the limits.
- Record and listen to conversations and coach agent during the calls using chat or whispering.
- View and analyse historical reports to check agents and campaign performances.

The Supervisor will also handle exceptional cases like complain from customers that had a bad experience with the Call Centre or one specific Agent in order to define what needs to happen next.

When outbound campaigns (outgoing calls) are generated, the Supervisor will make sure the contact list is closely managed and that the eventual modifications to the Script are implemented. The Supervisor will also decide what is done with new contacts being added to the list or recycled from older campaigns.

Supervisors will work closely with the Administrators in order to:

- Setup agent workstations and permissions on the system.
- Schedule opening and closing of campaigns
- Schedule and ask for generation of reports.
- Define database filters on various campaigns.
- Upload new contact lists received from the marketing team or recycle older ones.
- Troubleshoot the system for any issues blocking agents to produce.

A Supervisor is usually an experienced Agent or Team Leader that has shown some Team leadership capabilities. In general, and depending on the complexity of the campaigns in production a Supervisor can manage from 5 up to 10 agents with an industry "sweet spot" around 10 Agents per one supervisor.

The Agents

An Agent interacts with a Customer on behalf of an organization. He/she will answer questions from customer, resolve problems or persuade a contact to do something in case of an outbound campaign.

Agents use desktop software like the Nixxis Contact Suite v2, in order to manage their work and access to all of the information that is needed for their routine tasks. Sometimes and in order to increase productivity and repeatability of the work a script is run on the agent screen in order to define standard words to be used and enter all of the needed data in one single window and interface.

Agent might eventually listen to previous conversations to get help and if needed chat with their supervisors or transfer calls to other part of the organization when needed.

The Administrator

An Administrator is a Technical person that helps to keep the call centre working and support the work of agents, supervisors and team leaders.

The Administrator will first make sure that the technical infrastructure is up and running by looking at:

- Voice infrastructure connectivity from one or several Telecom operators.
- Network infrastructure such as internet connectivity and other networking equipment.
- Server infrastructure running Nixxis Contact suite software.
- Workstation for agents, team leaders and supervisors in a pre-defined way.

Small call centres might use Nixxis Contact Suite from the internet ("Cloud") solution or otherwise have it installed on their own servers in their own server rooms.

Once the Technical infrastructure is up and running, the Administrator will also work on setting up the campaign on the Application server and make sure the operations of the Call Centre is as smooth and possible.

This includes defining:

- Agents' scripts in case scripting is necessary, including the interface to external databases.
- Routing configuration to specify the phone numbers to be used and what has to happen during the call.
- IVR (interactive voice routing) scripts to allow several selections of type of interactions for the customer and the eventual skills needed.
- Based on the above routing constitute Agents profiles, Team composition, Queues management, Campaign and Activities configuration.

The Administrator will therefore work hand in hand with the team of supervisors in order to keep the Call Centre up and running according to the performances (SLA) expected.

The IT Manager

The IT Manager will have a complementary role to the Administrator without taking a direct role in the Call Centre operations processes. He/she will be responsible for managing the IT infrastructure needed to run the Call Centre and sometimes also will define or upgrade the Architecture of it.

As typical IT Manager duties and activities, you will find:

- Start and stop server systems.
- React to system alarms, troubleshoot problems and implement corrections.
- Perform regular IT maintenance tasks like backup, copy, implement patches, service packs.
- Tune the server equipment to ensure correct operations (Memory, hard-disk drive, etc...).

For more fundamental System architecture decision and work, the IT Manager will:

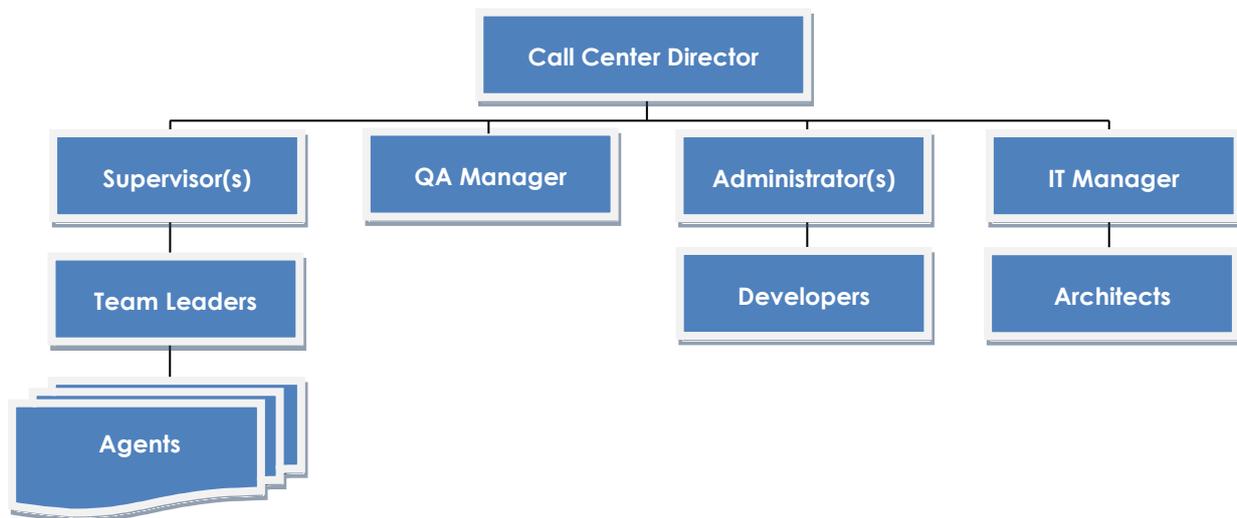
- Design the architecture required to support the concerned campaigns.
- Determine the required computers, services, and configurations.
- Buy the required parts or service agreements from selected vendors.
- Install and update the software.
- Integrate the solution with existing company systems.
- Close agreement with one or several Telecom operators.

The IT Manager will decide closely with the Call Centre manager and the Administrator's on the Call Centre infrastructure strategy and cost base in order to keep the quality and capacity at the required levels.

Internal contact centre of up to 1.000 agents

For Corporation or Administration that have a lot of interactions with their customers like Multinationals active in the B2C (Business to Consumer) world, it is fairly normal that the number of agents quickly grows above 100 Agents with multiple sites, multiple languages and hundreds of various telephone numbers to be managed.

In this case, the Call Centre activity will be distributed between various knowledge and experience centres where specific operational activities will be performed.



Typical Call centre organization for up to 1.000 agents

In order to be able to operate on several locations with several types of interactions, the operational functionalities will be split between a number of new profiles that we will briefly describe here.

The Team Leaders

The Team Leaders will help Supervisors to achieve their business objectives and support teams of agents. The number of agents they will be able to support will be between 3 and 20-25 depending on the complexity of the interactions. As they are experienced agents able to become supervisors one day, they will also be able to train new agents.

Team Leaders will mainly focus on the Qualitative part of the Supervisor job by listening into conversations and giving direct feedback to their team of agents while the supervisor will keep an eye on the productivity via statistics of the team.

A group of 4-5 Team Leaders will typically report to one supervisor and expect him/her to define:

- The Quantitative performances of the team.
- The training path for new agents.
- The agent and campaign policies.
- The start or stop of any campaigns including the provisioning of new contacts for outbound.

In case of a problem with a campaign or an Agent workstation, the Team Leader might report directly to the Administrator but will always first seek advice from his/her supervisor.

Usually, the Team Leaders will usually have a restricted view on the Supervisor accounts.

The Developers

Developers might work together with Administrators in order to automate a number of tasks like:

- Develop, modify and implement new Agent scripts.
- Design complex conversation interface for advanced Agent scripts.
- Design complex call routing for IVR with various interfaces.

-
- Design e-mail, chat or social media integration.
 - Use integration server API to interface with existing client systems.
 - Use any Object-oriented language like C# for client specific DLL's.

Developers have normally an extensive IT knowledge and background and might be full time employees or part-time consultants depending on the volume of requirements. Nixxis can provide development support based on its existing Professional Service department.

The Architects

Architects will work in conjunction with the existing company IT Managers in order to go deeper into the system architecture and perform system specific tasks.

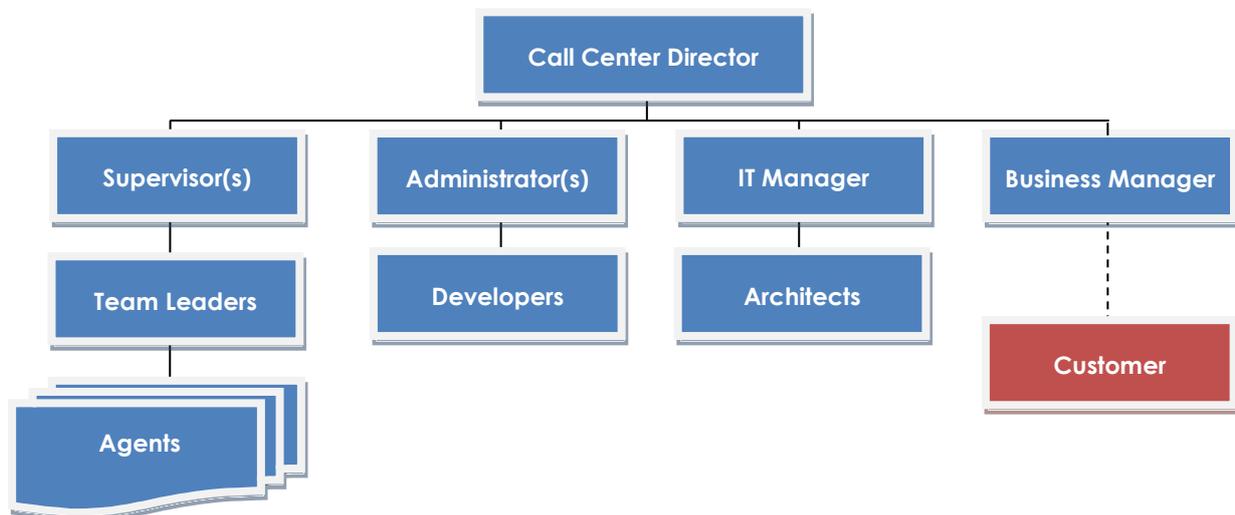
They could for example:

- Take care of the complete system architecture based on a multi-site, multi-national infra.
- Design Business continuity solutions including fall-back in case of emergencies and failures.
- Implement and test "High Availability" infrastructure.
- Ensure deep integration with existing CRM's and ERP's systems.
- Manage integration of external partners from a system perspective.

In general Architects can be experienced IT engineers that can be full time employee of the client or part time consultant that are only intervening when needed.

Business Process Outsourcer (“BPO”) or “Outsourcer”

Business Process Outsourcers or “Outsourcers” are independent and external companies to the client that manages specific interaction with client’s customers. This can be for specific tasks like Telemarketing or Credit collection or the totality of interactions if a client does not want to carry any call centre employee on its payroll.



Typical Call centre organization for an Outsourcer

Compared to in-house call centres, outsourcers can only make money out of the service they provide. This means that they need to act like a Profit centre and not only as a Cost centres as sometimes the case with in-house call centres.

As they often manage a high number of campaigns split between several agents, they most of the time have split the responsibilities of training, hiring and quality control between several persons. There also, the Administrator, Architect and Developers will need to be able to implement rapidly and frequently campaigns that will only live for a few weeks.

In order to connect to their clients, they will have to use the help of a Business Manager.

The Business Manager

The business manager of an outsourcer will be responsible of the integration of the client needs and convert them from business requirements into campaigns. This includes:

- Define clear business objectives for the campaign and how to measure them.
- Design workflow for the calls and the script and screens needed.
- Define which data and on which database the agents will work.
- Whether or not the interactions will be blended to agents.
- What the quality or quantity objectives will be.
- How the outsourcer will be paid.

In order to propose a profitable price, it is of utmost importance that the Business Manager works hand in hand with the Supervisors for checking the capabilities of the people they have. They also need to check with Administrator or/and Architects the technical capabilities of their system and if the processes can be streamlined and optimized.

Outsourcing is not an easy world and many corporations, sometimes even large ones, have filed for bankruptcy because they were not able to meet the expected quality targets over the long term or the prices of the service were too low to ensure long term profitability or both.

Measuring your Performance

Is it an internal of an external call centre, much different kind of data and literature are available in order to define the best KPI's to be used. This is mainly due to the fact that Call Centre are functionally specialized units and they can be named a call centre and still have very different job to perform if they take orders for pizza's or raise funds for a good cause for example.

In general, we can split the KPI's in 3 different categories that will be:

1. Service measure: How well is the service delivered to the calling Customers?
2. Quality measure: How good is the quality of the interaction with my Customers?
3. Efficiency measures: How well is my Call centre using the resources invested?

All of these families of KPI's will have impact on the whole Call Centre level, the Team level or the Individual level. Here is a summary table to a number of KPI's and their level of application:

KPI's		Call Centre	Team	Individual
Service Measures				
Accessibility	<ul style="list-style-type: none"> • Blockage • Hours of Operations • Abandons • Self-service availability 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 		
Speed of Service	<ul style="list-style-type: none"> • Service level • Average speed of Answer • Longest delay in Queue 	<ul style="list-style-type: none"> ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓
Quality Measures				
Call-Handling Process	<ul style="list-style-type: none"> • Telephone etiquette • Knowledge and competency • Error/Rework rate • Adherence to Protocol 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓
Resolution	<ul style="list-style-type: none"> • First-call resolution rate • Transfer rate 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
Efficiency Measures				
Contact Handling	<ul style="list-style-type: none"> • Average Handle time • After-call work time • On-hold time 	<ul style="list-style-type: none"> ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓
Resource Utilization	<ul style="list-style-type: none"> • Agent occupancy • Staff shrinkage • Schedule efficiency • Schedule adherence • Availability 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓
Cost efficiency	<ul style="list-style-type: none"> • Conversion rate • Cost per call 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓

Table of the typical KPI's used in Call centre management

We will only list here the ones that are used by nearly all call centres and, at least we think, the ones that you should for sure use in your own call centre operations.

Service Level Agreement (SLA)

Service Level is the most common speed-of-service measure in the call centre. It denotes the percentage of calls that are answered in a defined wait threshold and is most commonly stated as x percent of calls answered in y seconds or less. Service level is generally measured by half-hour and can be reported as a cumulative simple average over the day, a weighted average over the day based on the actual calls per half-hour, or can be gauged by the percentage of half-hours of the day in which the half-hour service goal is met. Various forms of service level reports are available from the ACD.

Service level is a measure for the call centre and not individual agents. However, service level is directly affected by staffers being available when scheduled, so schedule adherence is the measure of individual performance that is typically in place to ensure that the call centre's speed-of-service goal is met.

There are no industry averages for service level, although 80% of calls answered in 20 seconds (expressed as 80/20) or 30 seconds is a common goal for centres in the health care field. The speed-of-answer goal drives the calculations for staff requirements and scheduled full-time equivalencies for operations. The abandoned call reports, which show how long callers will tolerate waiting to speak with an agent, are an important information source for setting the speed-of-answer goal.

Average Speed of Answer (ASA)

Average speed of answer (ASA) is the average delay of all calls for the period.

Assume that there are 100 callers in a day and the total waiting time for all callers is 1 hour. Total waiting time in seconds = $1 \times 60 \times 60 = 3600$ secs. Total number of callers = 100

Therefore, $ASA = 3600/100 = 36$ secs.

Qualitatively, it implies that on that particular day it takes 36 secs. On an average before his call is answered by a service representative.

ASA is a measure for the call centre, not individuals. However, ASA is directly affected by staffers being available to take calls when scheduled, so schedule adherence is the measure of individual performance that is typically in place to ensure that the call centre's ASA goal is met.

Most call centres measure service level and/or ASA as the average number accumulated at the end of each day. While this is the most common way to assess these two speed-of-answer measures, this end-of-day average is not necessarily the best way to assess and report these measures.

Often, "abandoned" calls are normally excluded from this calculation.

Percentage of Calls Answered (PCA)

This is also sometimes defined as "reachability". It gives the percentage of inbound calls that have been answered by agents. For example, 95% of calls answered. The difference with 100% is the calls that have been abandoned, this means that the customer didn't have an agent on the phone and abandoned the call, most of the time at the level of the IVR or in the Queue.

It is always interesting for a company to understand where calls are abandoned and how many.

First-Call Resolution Rate (FCR)

The percentage of calls completed within a single contact, often called the "one and done," or resolution rate, gauges the ability of the centre as well as of an individual agent to accomplish the call in a single contact without requiring a transfer to another person or area, or without needing an additional call to assist the caller.

The satisfactory resolution of a call is tracked by type of call and, perhaps, by time of day or by group. The one-call resolution rate is also an individual gauge of performance that measures an individual's capability to handle the call to completion without requiring assistance via a transferred call or a subsequent call, meaning higher efficiency and better service.

While resolution rate is a critical measure for many call centres, this measure requires some adaptation when applied to your business. The goal of your business might be to move eligible callers into a specific program that will likely result in several future calls, not to complete that person’s needs in one call. For a service like that, the resolution rate will not be a “transactional” measure of percentage of calls handled with no return rate but rather a “satisfaction” measure of whether the agent was able to address the needs and questions of the caller. In a program-based call centre, the resolution rate is a quality-monitoring score rather than a transaction rate measured by the ACD.

Average Handle Time (AHT)

The most common measure of contact handling is the average handle time (AHT), which is talk time plus after-call work. AHT is used when determining overall workload and staffing requirements. AHT reports are available from the ACD.

To accommodate differences in calling patterns, AHT should be measured and identified by time of day as well as by day of week. It measures overall call centre performance and team and individual agent performance. Although handle times will vary based on call content, an agent should typically deliver a consistent handle time within an acceptable range. However, overemphasizing short AHT can reduce the quality of the interaction and decrease the conversion rate.

There is no industry standard or recommendation for AHT. AHT numbers should be gathered and analysed primarily to determine if agents are in an acceptable range of performance and whether differences among agents are associated with different conversion rates.

On-Hold Time (OHT)

On-hold time is the amount of time a caller spends on hold during the course of the conversation. Obviously, the goal is to minimize the number of times a caller is placed on hold, as well as to minimize the length of the on-hold time.

Measures of on-hold time are available as ACD reports. Most call centres measure on-hold time, but it is not necessarily one of the top performance indicators. An overall high percentage of on-hold time may indicate that system performance is slow or that access to multiple systems is delaying the agents in processing callers’ requests.

On-hold time is more typically used as a gauge for individual agents and can indicate insufficient knowledge or other performance gaps. Call centres will want to review the percentage of calls an agent has to put on hold as well as the length of the hold time.

There is no industry standard for on-hold time. The goal is to minimize the number for increased call efficiency and service to the caller.

Agent Occupancy (AO)

Agent occupancy is the percentage of logged-in time an agent is busy on a call or doing after-call work compared with available time. It is calculated by dividing workload hours by staff hours.

Agent occupancy, or staff occupancy, is one of the most important numbers to measure related to efficient use of personnel. If occupancy is too low, agents are idle. If occupancy is too high, agents are overworked. The size of the centre has a major impact on call centre staffing and the related staff occupancy. Centres handling larger volumes of calls will naturally be more efficient than smaller ones because of economies of scale.

Calls per Hour	Workload (Hr)	Staff Required	Staff Occupancy (%)
100	8,33	12	69%
200	16,67	21	79%
400	33,33	39	85%
800	66,67	74	90%

1600	133,33	142	94%
------	--------	-----	-----

Staff requirements and occupancy in function of Traffic to keep and 80/20 SLA

As can be seen above, doubling the call volume does not require two times the number of staffs to meet the same service goal of 80% in 20 seconds. As the volume grows, the staff-to-workload ratio gets smaller and the agent occupancy goes higher.

With a higher volume of calls, there is a greater likelihood that when an agent is finished with a call, there is another call for that agent to handle, resulting in increased efficiency and higher occupancy. With a bigger volume of calls, each agent has the opportunity to process more calls each hour. Each agent spends less time in an idle or available state, waiting for a call.

Agent occupancy is calculated by dividing the amount of workload by the staff hours. In the previous table, with 12 staffers handling 8.33 hours of workload, agent occupancy is only 69%. At double the call volume with 21 staffers in place, twice the workload (16.67) is being handled without doubling the workforce, so each person is busier. In this case, occupancy has increased to 79%. As the volume of calls grows, increased economies of scale come into effect, meaning occupancy goes higher and higher.

While it is desirable for staff to be productive and busy, asking staff to stay occupied at a 94% rate is not realistic.

Most call centres aim for the 85% to 90% range since occupancy rates higher than that lead to undesirable call handling behaviours and a high staff turnover rate.

Although the 85% range is desirable, not every call centre or agent group can reach that number. Small centres that wish to deliver an 80/20 service level and have sufficient staffing in place may not be able to achieve occupancies above 70% or 80%. Larger centres have the opposite problem. Their large group efficiencies may allow them to staff for the same 80/20 service level and have occupancy numbers over 95%. In such cases, these providers have to add extra workers to bring occupancy down to a tolerable level.

Some ACDs supply direct occupancy numbers, but others do not. If occupancy is not provided, it can be calculated by dividing workload hours by the number of agents on the phones.

Monitoring your Operations

Once the right Key Performance Indicators (KPI's) have been defined based on the business objectives of each agents, teams and overall call centre, it is important to operate in a way where those objectives will become a reality.

Measuring how well Agents meet qualitative standards is typically done through a quality-monitoring process. Some call centres want to know if the agent said the organization's name in the greeting; used the caller's name appropriately; used the correct tone, pitch, and volume; and closed the call appropriately. Each of these items can be observed by using a manual or automated process with a quality-monitoring solution as provided by the Nixxis Contact Suite.

Silent Call Monitoring

Silent call monitoring allows an observer to access a call in progress, listening to both sides of the conversation without either the caller or the agent knowing that someone is listening. There are two major drawbacks to silent monitoring.

One is that the monitoring must be conducted when a call is happening in real-time. Call volumes fluctuate, making it difficult to accomplish a certain number of observations per shift. In addition, catching a call at the beginning is tricky. Listening to a partial call and then waiting for the next one to begin can waste the observer's time. Another drawback is that there is no record of the call except in the observer's mind and notes. During the review with the agent, the agent may deny having said something, or may not understand what the observer means by an "unenthusiastic manner," for example. This lack of a record can be particularly problematic if a performance improvement plan or disciplinary action is being considered.



Typical toolbar that can be used by Supervisors to monitor Agents

Call Recording System

Remote monitoring and recording of the calls are typically accomplished through a call-recording system. While some organizations record every call for business purposes, most do not. The call-recording system is usually programmed to record all or part of each agent conversations at different times of day and week to ensure a fair sampling. Generally, the programming calls for a specific number of calls or minutes to be recorded per agent.

The system may also record entries the agent performs during the calls so the review can include exactly what keystrokes he/she entered as he/she processed the call. This information will be displayed on screen as the call is reviewed to help determine if the agent is navigating through the system in the most efficient way, making appropriate notes in the customer files, and accessing the right information to solve the customer's problem.

The call recordings generated by the system can be stored for future use or deleted immediately after review. The random selection process supports a fair and unbiased review, which can be important when disciplinary issues arise or accusations of bias are made against call centre managers. If the system instructions are to gather the same number of calls or minutes for each person sometime during the shift, there can be little risk of the process unfairly targeting one individual or group of agents.

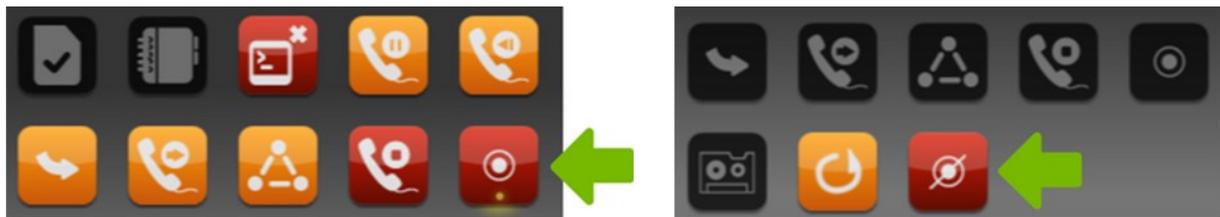
Most of these systems are able to selectively record a specific agent or calls to a particular group, but this is the exception rather than the rule in actual practice. Some centres choose to record all calls handled by trainees, for example, or those that come from a high-value customer group.

Another real benefit of having a call-recording system in place is the ability to review calls along with the employee. Many call centres have a practice in which the supervisor and agent listen to a call together and score it independently. This allows the agents to observe their own calls for self-evaluation purposes in addition to the feedback that the supervisor provides. With this tool, agents cannot deny certain behaviours because the evidence is recorded.

An additional capability of call-recording systems is the ability of an agent to record a call-in progress. This feature was originally intended to record abusive or threatening calls, but it is being used in many centres as a voluntary self-assessment tool. One call centre uses this feature to have a “Worst Call of the Week” contest in which agents can record a particularly difficult call to demonstrate how they used proper call-handling techniques to handle it.

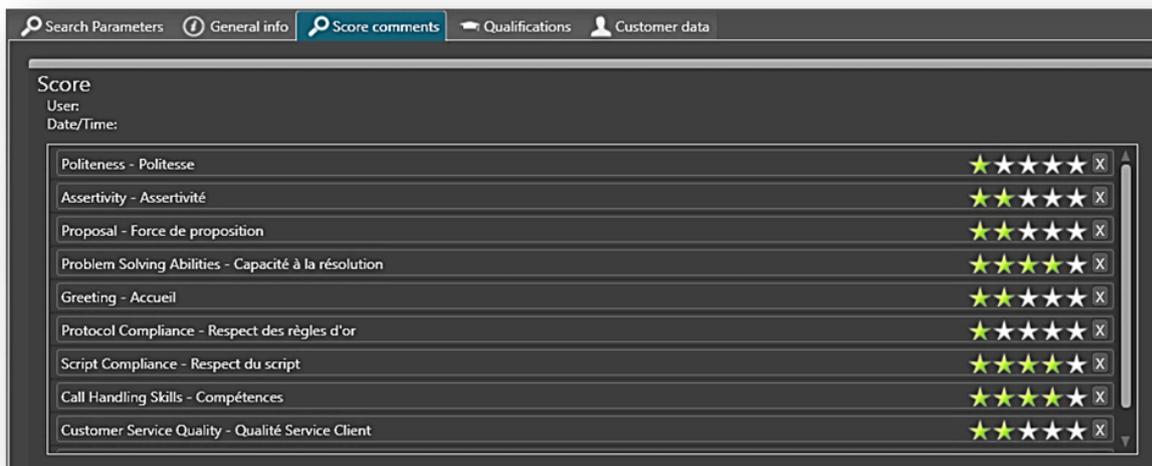
Date/Time	Originator	Destination	Campaign	Activity	EndReason	Com Dur(sec)	Type	FirstName	LastName	Account	Extension	Disposition	Positive	Argued	Setup duration
3/14/2019 12:28:23 PM	0003223494117		Démonstration	Concession Renault Douais FR	Preview	0	Outbound	Luc	Jacobs	100	10002		0	False	0
3/14/2019 12:30:38 PM	32475929981	3228085706	Démonstration	IVR Simple	Ivr abandon	5	Inbound						0	False	0
3/14/2019 12:30:44 PM	32475929981	3228085707	Démonstration	No IVR	Abandoned	5	Inbound						0	False	0
3/15/2019 2:40:56 PM	0033144547874	023057777	Démonstration	Youraited Credit FR	Agent	79	Outbound	Luc	Jacobs	100	10002		0	False	1
3/16/2019 8:41:53 AM	0032 475929981		Démonstration	Concession Renault Douais FR	Preview	0	Outbound	Luc	Jacobs	100	10002		0	False	0
3/16/2019 8:41:53 AM	0032 475929981		Démonstration	Concession Renault Douais FR	Preview	0	Outbound	Luc	Jacobs	100	10002		0	False	0
3/27/2019 6:43:13 AM	32475929981	3228085707	Démonstration	No IVR	Abandoned	24	Inbound	Luc	Jacobs	100	10000		0	False	0
3/27/2019 6:44:46 AM	32475929981	3228085707	Démonstration	No IVR	Abandoned	2	Inbound						0	False	0
3/27/2019 6:44:52 AM	32475929981	3228085706	Démonstration	IVR Simple	Abandoned	22	Inbound	Luc	Jacobs	100	10000		0	False	0
4/12/2019 2:32:42 PM	3247632731	3228085706	Démonstration	IVR Simple	Abandoned	30	Inbound						0	False	0
4/19/2019 11:57:58 AM	32475929981	3228085707	Démonstration	No IVR	Agent	81	Inbound	Luc	Jacobs	100	10000	Rappel Cible	0	True	0
4/23/2019 3:42:15 PM	32475929981	3228085707	Démonstration	No IVR	Agent	68	Inbound	Luc	Jacobs	100	10000	Liste noire	-1	False	0

The Recording tool should let you search records on any parameter of the call



Agent Recording button

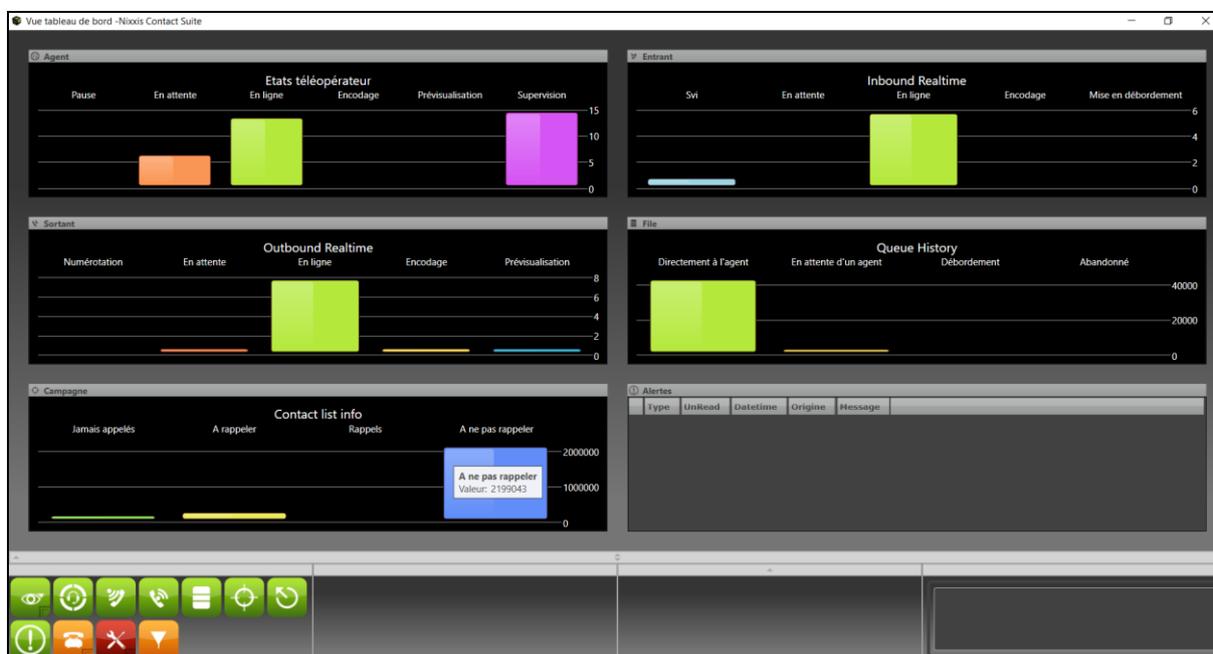
Forbidden Recording button



Your Recording tool should also include scoring module for Call (self-)evaluation

Real-Time Monitoring

The primary reason to have real-time data is to be able to make a change as quickly as possible. One such change that consumes a great deal of energy in nearly every call centre is ensuring that the number of agents available to handle the workload is matched to the actual workload as it arrives. The real-time displays provided by the ACD give supervisors and others in the call centre information that can be refreshed as frequently as every few seconds. This data will inform the staff if there are calls in queue, how long they have waited, whether there are agents available, and what work state each agent is in at that moment. If the delay is longer than the centre’s goal, the supervisors can identify agents who need to be encouraged to pick up calls, or even log in themselves to handle calls and reduce the wait time for customers.



Supervisor’s screen includes all the necessary data to manage the pool of agents efficiently

Many call centres use wall-mounted displays or alert boxes on the agent’s screen to provide access to these real-time statistics. This allows everyone in the centre to see the status of the queues and other important information. This empowers agents to take responsibility for logging in to handle calls when the queue backs up, and allows supervisors to keep an eye on the situation even when away from their desks and real-time monitoring terminals. These displays can also provide real-time information in a text message to handle the calls appropriately. For example, a cellular service provider may have a technical problem in one area and

may expect calls from customers regarding dropped calls or other failures. By informing all agents in the centre via a text message on the wall display or on the text message area of the agents' desktops, these calls can be handled knowledgeably and quickly.

Performance reporting

An effective reporting strategy will provide a complete review of the current state of performance in the call centre and should provide the means to identify gaps in performance, evaluate strengths and weaknesses, and suggest steps to improve call centre operations. The reporting strategy should include what information will be presented, the frequency, the format, and the reporting medium. For example, agents may need to see their performance statistics daily, and those could be provided via the company's intranet or in an e-mail. Other statistics, such as service level, may need to be communicated on a real-time basis to the centre as a whole, so reader-boards might be used. Revenue reports might go to senior managers monthly and be delivered via a paper report.

Reporting		Agents/Team	Management
Service Measures			
Accessibility	<ul style="list-style-type: none"> • Blockage • Hours of Operations • Abandons • Self-service availability 		<ul style="list-style-type: none"> ✓ ✓ ✓ ✓
Speed of Service	<ul style="list-style-type: none"> • Service level • Average speed of Answer • Longest delay in Queue 		<ul style="list-style-type: none"> ✓ ✓ ✓
Quality Measures			
Call-Handling Process	<ul style="list-style-type: none"> • Telephone etiquette • Knowledge and competency • Error/Rework rate • Adherence to Protocol 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 	
Resolution	<ul style="list-style-type: none"> • First-call resolution rate • Transfer rate 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
Efficiency Measures			
Contact Handling	<ul style="list-style-type: none"> • Average Handle time • After-call work time • On-hold time 	<ul style="list-style-type: none"> ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓
Resource Utilization	<ul style="list-style-type: none"> • Agent occupancy • Staff shrinkage • Schedule efficiency • Schedule adherence • Availability 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓
Cost efficiency	<ul style="list-style-type: none"> • Conversion rate • Cost per call 	<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none"> ✓ ✓

Table of the typical KPI's used in Reports to Staff and Management

Reporting on Agents

Reporting to agents involves not only the information regarding job performance metrics and achievement of goals, but daily operational data and the constant barrage of changes that must be assimilated each day. Ensuring that agents on all shifts, along with those who may be absent on any given day, receive the important data is a challenge that requires a thoughtful plan and consistent execution.

There are many performance measures that apply to the call centre as a whole, some that apply to teams, and some that apply specifically to the agents. The measurements that apply to an individual agent include quantitative measures as well as some qualitative measures.

There are some measures over which the agent has little or no control. It is essential to consider that aspect of each measurement so that agents know whether a measure is within their control and how they can affect it. Sharing other measures with the team to ensure broad focus on the bigger issues is useful even though it is not reasonable to hold agents responsible for them. For example, one metric that agents have little control over is the service level. If the agents are adhering to their schedules and available when they are supposed to be, they cannot be responsible for an unusual call volume or an inaccurate workload forecast. The agents need to know how well the centre is performing against that goal since it is important to the centre overall, but it should not be a metric on the agent’s performance expectations.



Inbound topic detail by agent report

Date: 12/19/2011
 Campaign: [redacted]
 Activity: [redacted]

Description	Topic			Duration			Percentage	Graph
	Count	Quantity	Amount	Boolean	Average	Maximum		
100565,	19	0	0.00		5m 19s	11m 16s	1m 32s	19.6 %
Demandeur emploi -	13	0	0.00		5m 22s	8m 53s	1m 32s	68.4 %
Etudiant	2	0	0.00		9m 33s	11m 16s	7m 50s	10.5 %
Fun Call	1	0	0.00		1m 55s	1m 55s	1m 55s	5.3 %
Hors contexte	3	0	0.00		3m 27s	3m 51s	2m 38s	15.8 %
10384,	16	0	0.00		7m 27s	13m 05s	3m 02s	16.5 %
Demandeur emploi -	15	0	0.00		7m 15s	13m 05s	3m 02s	93.8 %
Fun Call	1	0	0.00		10m 25s	10m 25s	10m 25s	6.3 %
10067,	17	0	0.00		4m 04s	7m 59s	50s	17.5 %
Demandeur emploi -	15	0	0.00		3m 54s	7m 59s	50s	88.2 %
Travailleur - formations autre que BF	2	0	0.00		5m 20s	7m 13s	3m 27s	11.8 %
100813,	26	0	0.00		4m 52s	13m 00s	1m 06s	26.8 %
Demandeur emploi -	24	0	0.00		4m 59s	13m 00s	1m 06s	92.3 %
Hors contexte	2	0	0.00		3m 26s	3m 27s	3m 26s	7.7 %
10396,	11	0	0.00		8m 34s	20m 01s	3m 55s	11.3 %
Demandeur emploi -	6	0	0.00		10m 06s	20m 01s	4m 03s	54.5 %
Demandeur emploi - Inscription seance info	3	0	0.00		7m 00s	12m 19s	3m 55s	27.3 %
Employeur - formations BXL Formation	1	0	0.00		8m 37s	8m 37s	8m 37s	9.1 %
Hors contexte	1	0	0.00		3m 56s	3m 56s	3m 56s	9.1 %
100812,	8	0	0.00		5m 32s	8m 05s	25s	8.2 %
Demandeur emploi - formations autre que BF	1	0	0.00		8m 05s	8m 05s	8m 05s	12.5 %
Demandeur emploi -	4	0	0.00		6m 40s	7m 33s	5m 37s	50.0 %
Fun Call	3	0	0.00		3m 12s	4m 40s	25s	37.5 %
	97	0			5m 43s	20m 01s	25s	100.0 %

Agent performance by topics is a standard reporting format

Reporting on Teams

Reporting on teams and supervisors generally include summary results for the agent group that is included in the team. The supervisor needs to see the individual results for each member of the group and the group averages to make comparisons. In addition, a report that shows the team’s position relative to the overall centre goals and to other teams may be useful, especially when some competitive spirit will encourage improved performance.

In general, group summary reports are less likely to create an emotional response than the reports that communicate individual agent performance. Since the individual performance of each person is hidden in the totals for the team, no one is singled out as a great or poor performer. These reports are commonly communicated electronically, posted on an intranet, or printed and posted on the wall of the centre. Some centres post the reports with the agents’ names and individual data; others use a code so that each agent can find his or her own data and compare it with others’, but everyone’s privacy is protected.

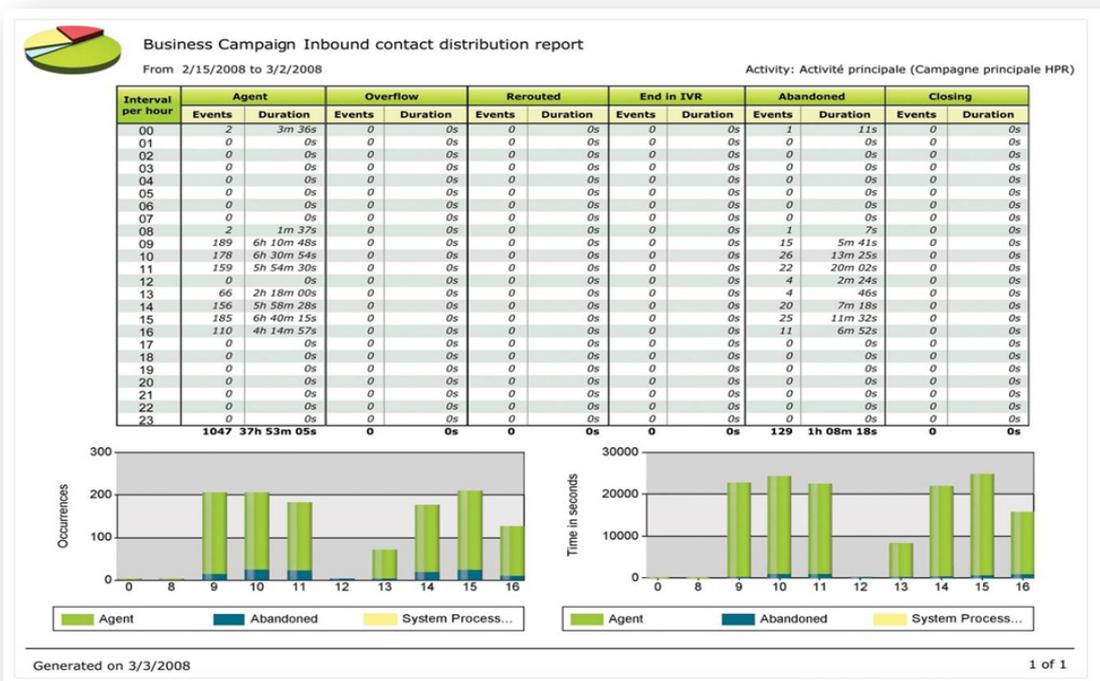
It is also appropriate to share centre-wide information with the supervisors and teams to indicate how well the centre is doing in achieving its overall goals. This information might include ASA, abandon percentage, cost/revenue per call, and customer satisfaction survey results. While individual agents should not be held responsible for these goals, each person plays a role in

meeting them. Keeping everyone informed about how well the centre is meeting its overall goals helps to build the spirit of teamwork that is essential to the call centre's success. To the extent that an entire call type or work type is controlled within a single team, it is especially appropriate to provide the summary data on that work to the supervisor for that team.

Reporting for the Management

As the reporting and communication process moves to the overall call centre level, the data that was provided in detail for teams and individuals is summarized one more time. The data may be sorted in a number of ways, including by call or contact type, by shift, by day, by supervisor, and so on. The manager will see the reports sorted with an overall summary for each team or data type and the totals/averages for the entire centre. In multisite operations, the director may see each centre separately and a system-wide view. At this point, trend analyses with charts are generally useful to give a graphical overview of the data in a quick-to-read format. Trends over a 12-month period are common, but daily data may be needed to ensure that the details are not buried in the averages. Any change that will affect the statistics (such as implementation of a new technology) should be noted on the reports to ensure that its impact can be correlated with the trends.

Reporting accessibility goals, such as call blockage and self-service option availability/usage, is appropriate at the centre level. In addition, speed-of-answer goals, such as service level or ASA, delay percentage, and longest delay before answer or abandon, are appropriate reports on a centre-wide basis. Overall speed of answer, delay experiences, and abandon percentages are also typically reported at the centre level for each call or work type separately. As more centres take on electronic work, such as e-mails, response time on these transactions will be tracked in much the same manner as the call service levels are today.



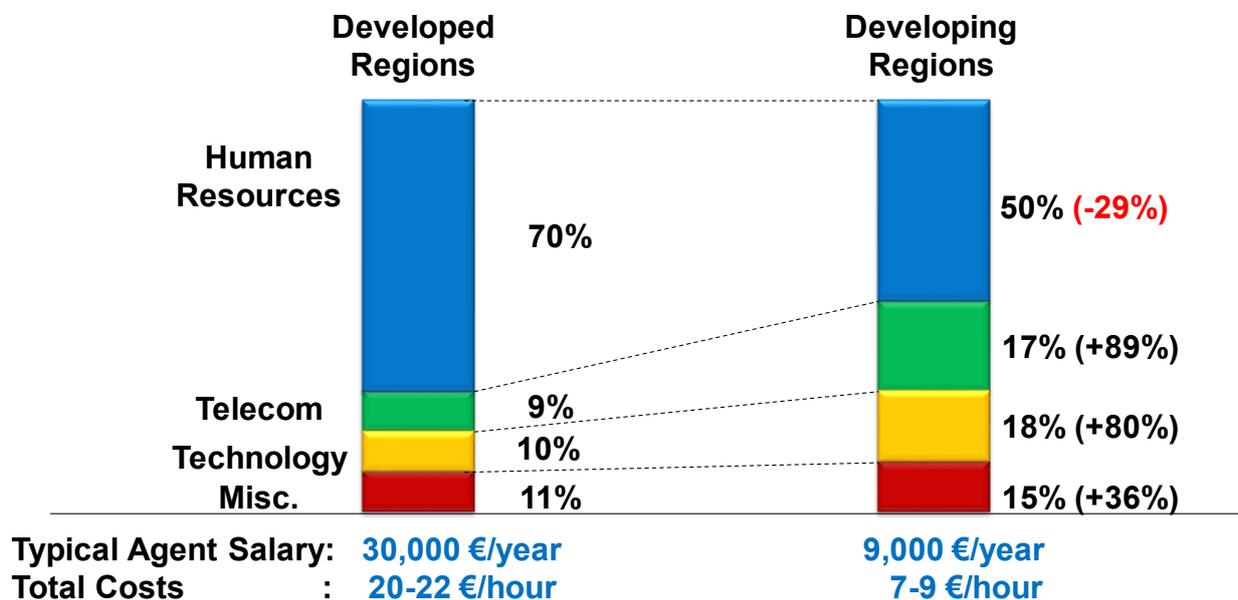
Inbound Campaign call distribution is a standard reporting format

The centre tracks its overall compliance with the operating budget on a monthly basis at a minimum, and capital budgets are tracked to ensure that the projected return-on-investment results are actually achieved. Many centres track their staff in terms of full-time equivalents because staffs are the single biggest cost component for a centre. This involves calculating a forecast of workload for several months and analysing the utilization of full-time, part-time, contract, and outsourced personnel, along with potential overtime. The number of staffs on vacation and the overall shrinkage estimates are included in the analysis along with forecasts of training classes and the workload that they may be able to handle.

Self-service utilization is generally tracked at the call centre level to determine the trend of IVR and Web usage because these technologies are designed to do some of the agents' work. Correlating the shift in work volumes as these self-service tools are used allows managers to see the impact, they have on the average handling time of the calls that agents handle.

Improving your Operations

As a call centre is still a very people intensive operation, the first thing to realize is that one of the main cost expenditures of your call centre is the human resource.



Cost structure comparison between Developed and Developing Regions

As some of you might consider to Outsource their operations to Developing regions, it is important to take into account that even there, the cost of salaries is around 50% while it will be around 70% in Developed regions. And if the hourly rate is still 50% cheaper in Developing economies, one need to take into account the Quality provided and the possibilities to improve the efficiency of Developed regions workforce.

So, as soon as your Call Centre will operate, you will see that several actions and technology mechanisms can help you to improve the Return on Investment (ROI) made and the Operational efficiency of your Call Centre. Here we will list just a few.

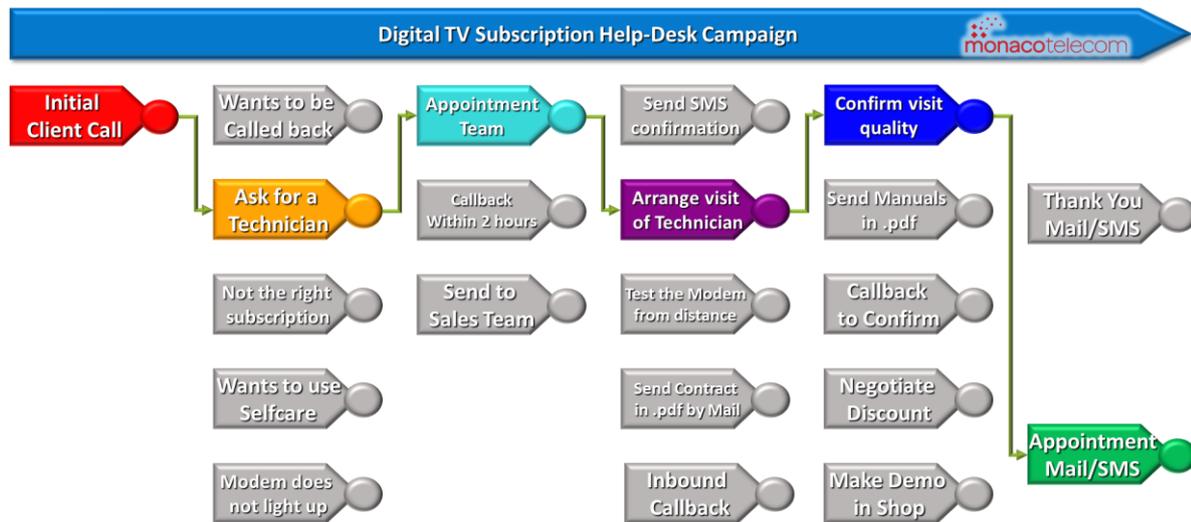
Workflow based approach (Campaigns & Activities principles)

One of the main cause of delays, efficiency loss and errors generation in Call Centre is the fact that a lot of data has to be ported from one system to another or moved from one Campaign to another.

One solution to that situation is to make sure that all the necessary data needed for one defined Customer Business objective is stored in one single place. This place, normally called a Database, can then be used further to share this data amongst all the Activities requiring is in order to operate.

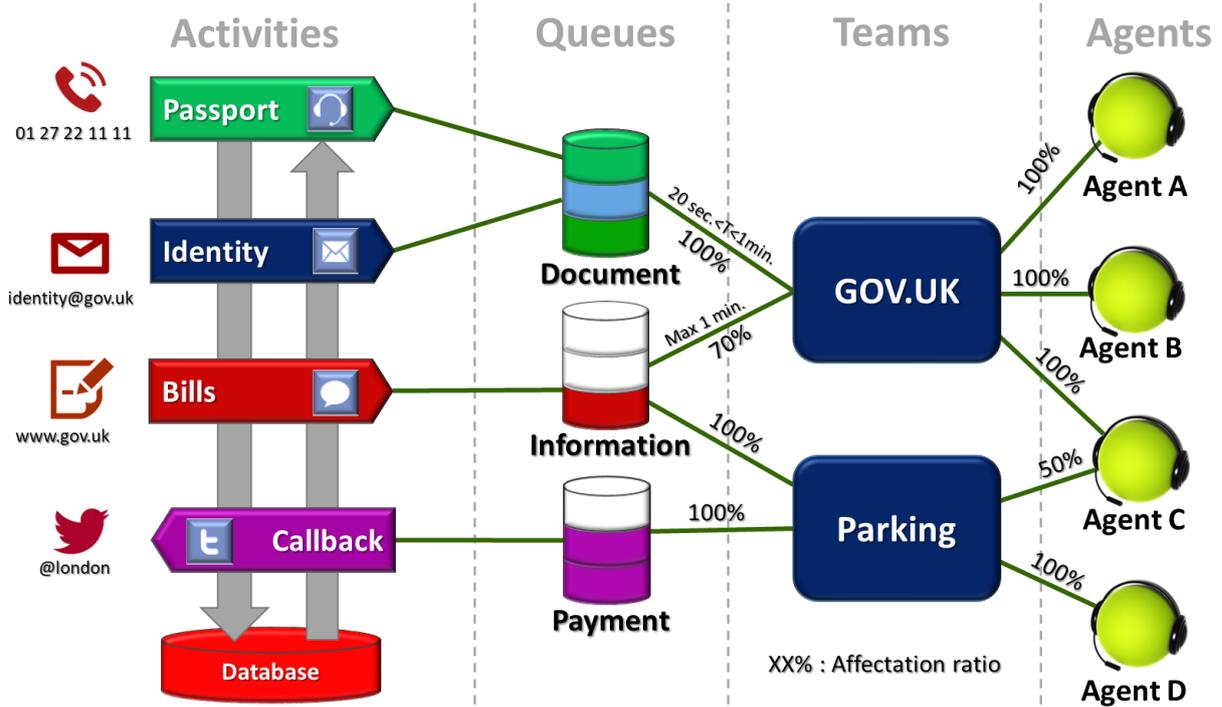
In this way, as all the needed data is centralized in one single place, no time is lost by re-encoding data already present somewhere else. Also, no time is lost for correcting mistakes due to multiple entry or too frequent human intervention. One will soon realize that the Human factor in Call Centre is often the main source of errors.

This approach is also often called a Workflow based approach where the interaction engine of your Call Centre is Workflow oriented.



Workflow based approach example for a Digital TV Subscription Helpdesk campaign

The previous picture shows 21 activities being part of the same campaign and sharing the same database. If your Call Centre is not workflow oriented, you will need to Extract and Re-inject all the necessary record into a specific campaign database, leading to numerous manipulations, risk of errors and waste of time.



Multiple Activities campaign combined with Multiple-Queues, Team and Agent processing

Inbound/Outbound/Media blending

As we have already seen above, doubling the amount of Calls does not require doubling the number of workers. This is due to a statistical traffic spreading principle known as “Trunking”. Actually, one can say that larger call centre can benefit from economies of scale that are difficult to get for smaller call centres.

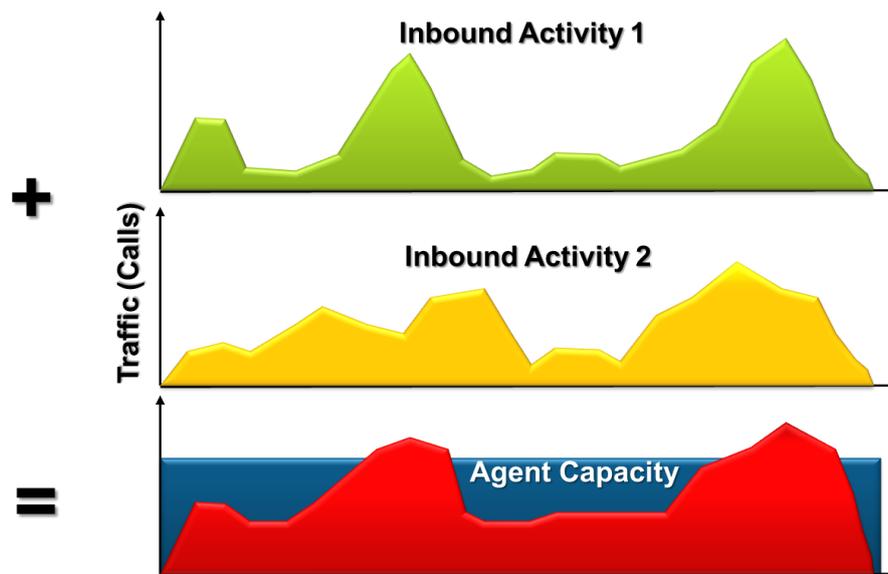
One of the solutions that have been found in order to benefit from this “economy of scale” even for campaign with low traffic is to do what is called “Blending”. That means mixing traffic from several campaigns to the same pool of agent.

On modern days Call Centre solutions, you can basically have 4 type of Blending:

- Multiple Inbound blending
- Multiple Outbound blending
- Inbound/Outbound blending
- Media blending

Multiple Inbound blending

In this case, the traffic of several inbound campaign is blended to the same pool of agent, increasing the amount of calls per hour and automatically benefitting from the same trunking efficiency as seen above.

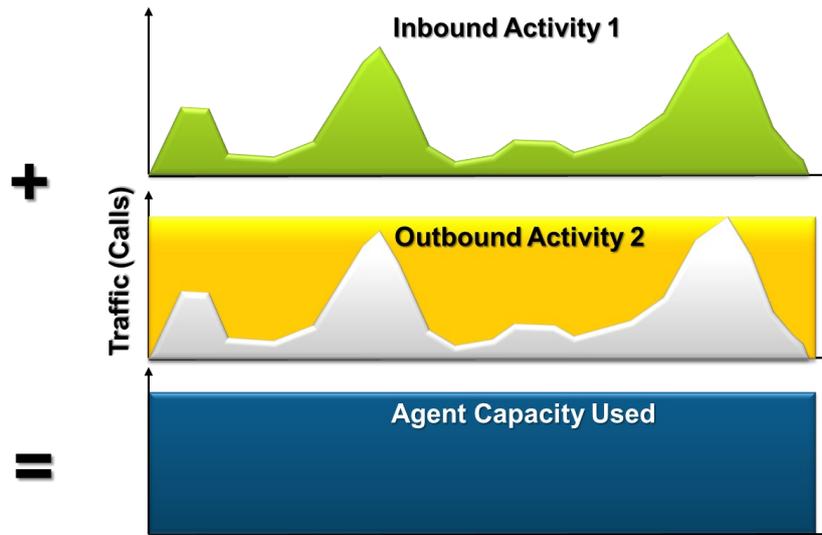


Multiple inbound activities can be blended to the same pool of agents

Of course, as a result of this, the agents must be trained to work on several campaigns, but when managed well, this can decrease their stress level and improve their motivation at work, reducing the agent job rotation consequently.

Inbound/Outbound blending

For agents that are mainly affected to Outbound campaigns, there might be times where the dialer is not generating outbound traffic or traffic conditions on the inbound side that require extra workforce to intervene.



Multiple inbound and outbound activities can be blended to the same pool of agents

This is then the ideal situation because the dialer will automatically stop to dial when the inbound traffic activity requires it. In terms of call distribution, it is important at this level not to have only a basic “Round Robin” distribution (circular distribution of all the calls with an equal priority for each) also sometime known as a FIFO (First In First Out) distribution but really to use the importance of each interaction to prioritize, this is sometimes referred to as the MIFO (Most Important First Out) distribution.

Media blending

As Call Centres are using more and more multiple media to interact with their customers (they are then called Contact Centres) it is also possible to blend/mix several media with each other, this is then called Media Blending.

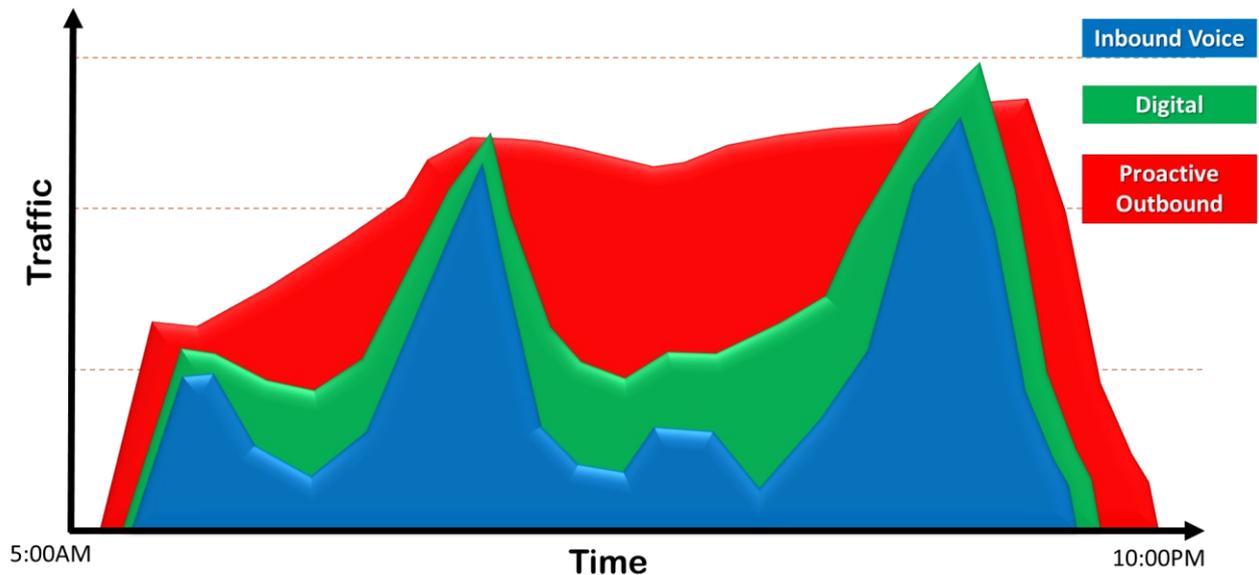


Multiple Media channels are blended to the same pool of agents

In the case of Media Blending, different kind of skills might be required from different agents as writing skills are similar but not the same as speaking skills.

Also, when Media blending is used together with Inbound and Outbound blending, it is important to give each media a specific priority. Normally, the media that requires the highest speed of interaction has the maximum priority, which means that Inbound calls have priority on Chat session that has priority on e-Mail management.

Finally, although the fact that blending different media with various priorities and synchronicity to the same agent seems to be interesting from a productivity point of view, it is important to realize that emails and social media need completely different kind of skills compared to a voice media. And so, multitasking an agent between various media and skills might not be the best productivity idea.

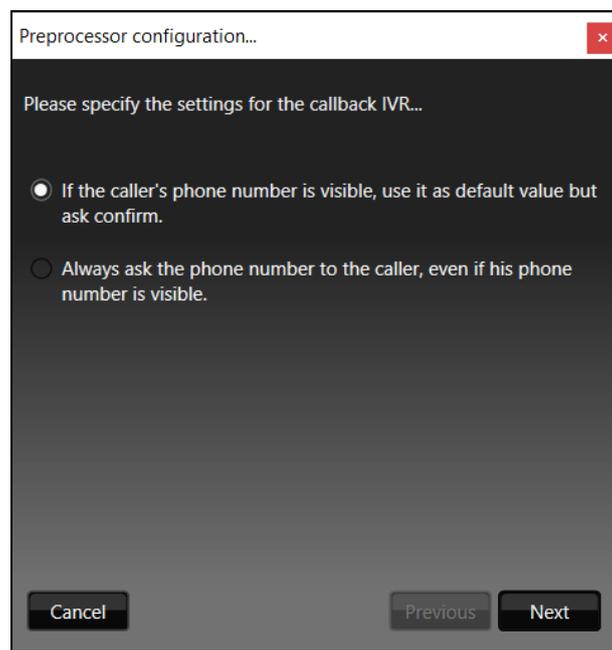


Proactive use of outbound helps smooth the workload with inbound and digital media.

Preferred Agent, Call-back IVR, Planning and Listening for History

There are many features to automatically and efficiently handle incoming traffic before or while it is queued. We will give you some examples here.

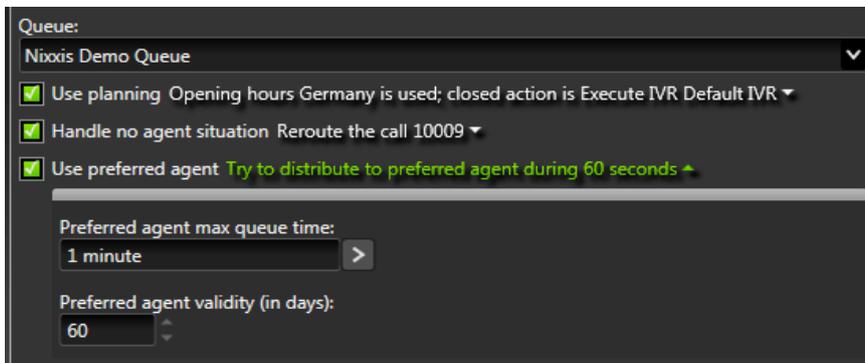
The first one is the call-back IVR. This is an IVR that will offer your queued customers a call back as soon as one of your agents becomes available. The client's record will simply be inserted into a call-back activity on which you can decide to set specific call-back times or according to the time the customer has encoded in the IVR. This IVR may also allow the customer to specify a different number than the one it used to reach you. In NCS, an integrated wizard will allow you to configure your call-back IVR in a matter of minutes.



The call-back IVR wizard will allow you to configure this one in a few minutes.

Another interesting feature is to keep in memory that a specific customer has called you before or that you called him or her with a specific agent. Therefore, you can enable the Preferred Agent feature so that the system tries to transfer the call from that customer to the same agent that it has spoken to before.

This will of course prevent him or her from repeating itself. Conditions of validity duration and length of the queue on this routing towards this preferential agent are also defined.



Knowing a customer called you before allows switching the "Preferred agent" function.

Finally, another nice usage of keeping track of previous customer interactions is to allow agent to listen to previous conversations while the customer is on the phone. This allows avoiding back and forth discussion with colleagues or system request in order to find out what was said during previous interactions. All in all, this improves your First-call resolution rate, the efficiency of the call centre and the service to the customer.



While a customer is on the phone, one should be able to listen to previous conversations with that same customer.

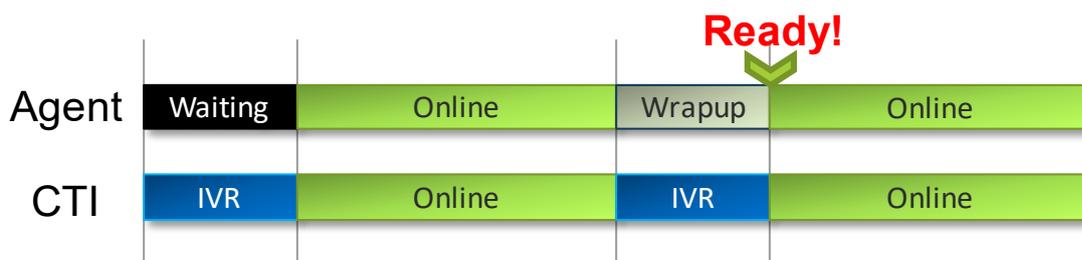
Auto-Ready During Wrap-up & Preview

At the end of each Customer interactions, Agents get some Wrap-up time in order to fill-in any specific info's in the script or database. In Special Peak Traffic conditions (Queue length, etc...) the agent might decide to take the next call while he/she is still in wrap-up mode for the previous call. He/she will then be able to close and eventually qualify the previous call by toggling between contexts at a later stage.



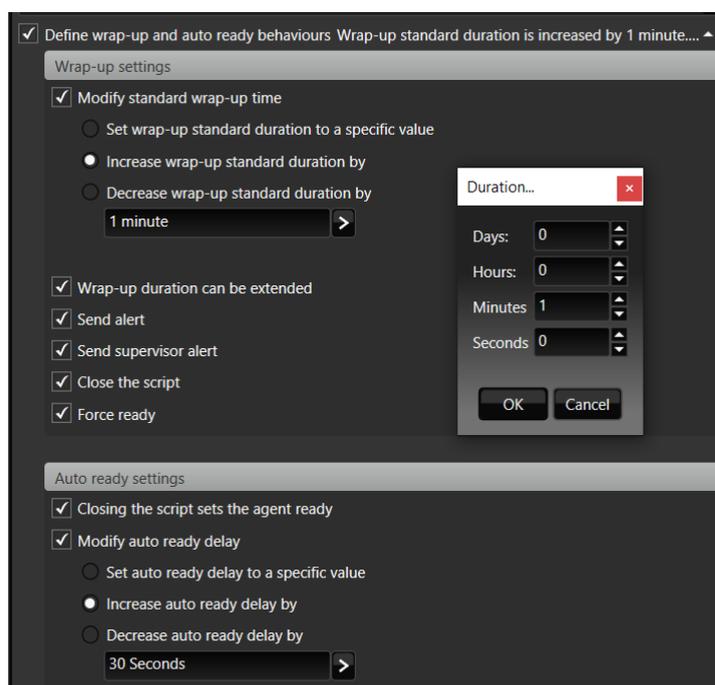
A built-in timer will tell the agent how much time they have left before Auto Ready / Dialing the next customer.

The same phenomenon will occur in the case of a call with preview that allows to view a customer record before calling. This phase can also be a waste of time and significant productivity if it is not controlled effectively.



Ready During Wrap-up allows agent to take the next call before closing and qualifying the previous one.

The “Auto-Ready during Wrap-up” or Preview setup needs to be flexible enough to allow various level of alerts to the agent and the supervisor, as well as allowing to force the closing of the script of becoming ready to answer the next calls. Those settings should be available not only at campaign and activity level but also at the user profile level so that more junior agents can get more time to preview a customer record or wrap-up their conclusions after a call.



The Auto-Ready parameters should be extensive enough to allow to be specified both at Agent and Campaign level.

Managing Team overflow

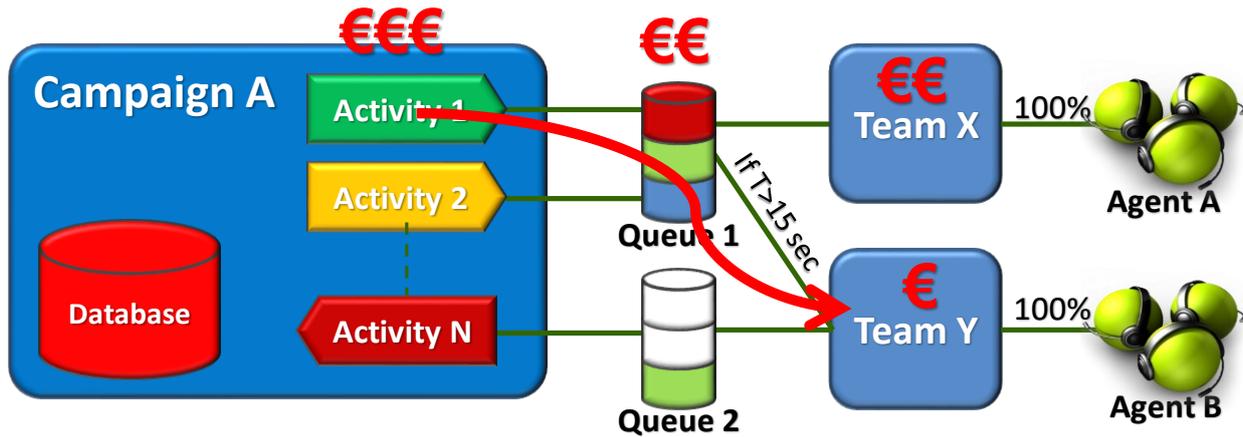
Often, Call Centre systems are limiting themselves to the management of Queue overflow. That means that when the waiting time in a certain queue is getting too long (say 120 seconds), the traffic is “overflowed” to another queue.

Team overflow is not only looking at the overflowing parameter in terms of waiting time but much more in the importance of traffic. In fact, when you assign certain team of agents to treat the traffic in a queue, the system might simply want to keep the traffic in that same queue but simply get, under specific conditions, other team to treat that same traffic.

This allows in the end a much better spread of the traffic between teams (some might be distant teams or even other call centres) and also better statistics of the Service Level Delivered.

Priority & Profit based routing

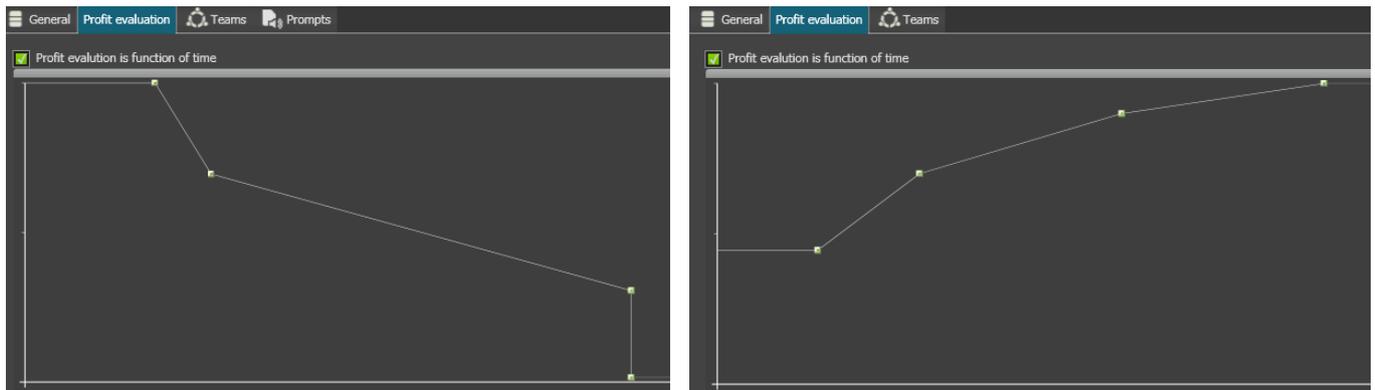
As soon as multiple activities, multiple teams, multiple queues and multiple SLA’s are assigned to a call centre, there will be a choice to be made on which activity to allocate resources in case of traffic increase.



Highest profit routing is made based on Activity, Queue, Team and Transport costs and profit.

Profit based routing is not only what is sometimes call “Least cost routing” it is more than that; A profit level is assigned to each activity of a campaign. All the traffic coming from this activity and fed into a queue has a certain cost profile. It is important to understand that the cost profile in a queue can change with time. So, it is a dynamic profile that will take into account the time spent in the queue. Then that interaction has to be assigned to an agent part of a team and via a certain telecom link, each of these three elements having their own cost structure.

So, the system should be in real time able to calculate the best allocation of resources based on the interactions to be treated and allocate in an optimal way, what will bring the highest profit to the call centre operation while keeping the SLA under control.

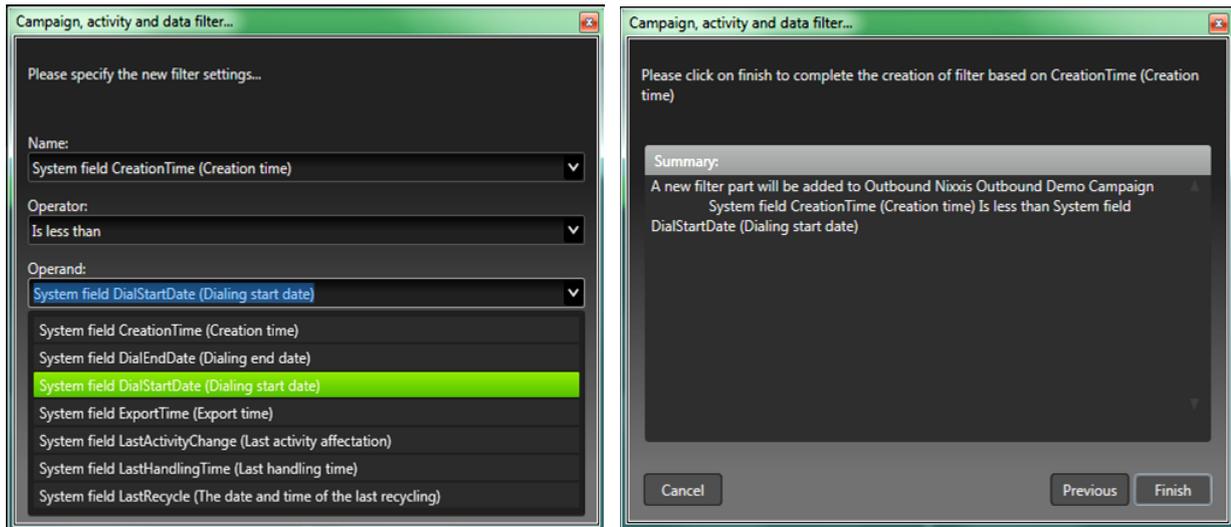


Example of various dynamic profit profiles assigned to different queues.

In this case of a decreasing value of the interaction in function of time, one can see that the next interaction that will be treated might not be the one waiting for the longest time but the one that has the highest value.

Profiling your Customers

Call Centre databases are the heart of any Call centre activity. Therefore, this is where the right customer can be found for the right activity/campaign. This activity on finding the right customer to start the next activity is called Customer Profiling.



All fields of the database should be available for testing and profiling in order to prioritize activities.

Therefore, the system must accept fairly advanced data filters to be able to extract exactly the information that is needed and feed it into the next activity. This allows multiple types of targeting and making sure no customer is forgotten between activities.

Use a Real Predictive dialer

One of the most daunting tasks for managing an Outbound traffic in a call centre is to make sure that the flow of calls going to agent is smooth and controlled. One of the technological solutions to this was the invention of the “Predictive dialer”. This dialer is normally taking into account the time it takes for an agent to complete a specific type of interaction and then, based on various parameters, the system tries to present the next call when the agent should become ready to take the next call.

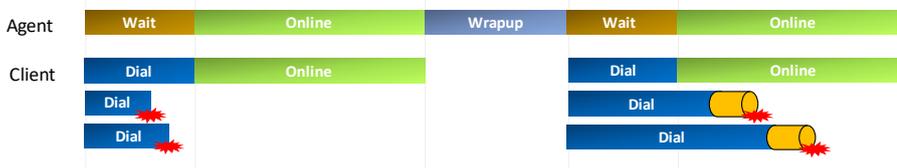
Preview dialing



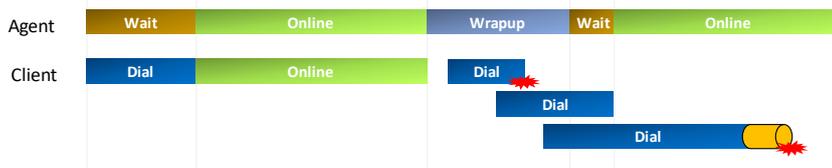
Progressive dialing



Power dialing



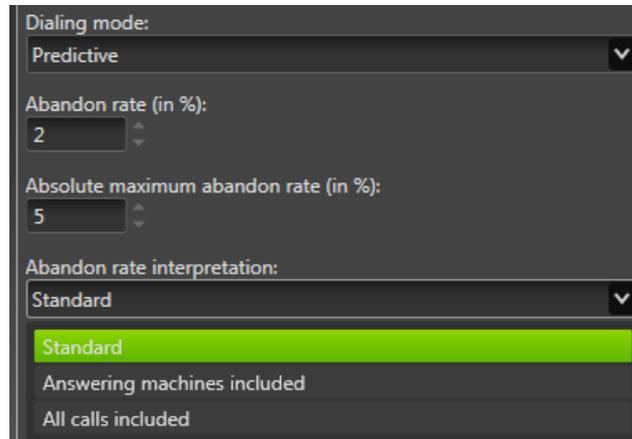
Predictive dialing



Predictive diallers can increase the productivity of the agents by 30-50% but abandon rate must be managed.

For a good predictive dialer to work, it should take into account the real average time needed to complete an interaction on a “per agent” level and also the performance of that specific campaign.

As too many systems today are not real predictive diallers but fake power diallers (numbering all the lines at the same time and see what comes out of it), the regulators have obliged the call centres to respect a certain amount of abandon rate (calls that have been answered but no agent is available to take them). In the UK, Ofcom requires that predictive diallers abandon less than 3% of answered calls on a daily basis.



The screenshot shows a configuration panel for a predictive dialler. It includes the following settings:

- Dialing mode:** Predictive (selected from a dropdown menu)
- Abandon rate (in %):** 2 (input field)
- Absolute maximum abandon rate (in %):** 5 (input field)
- Abandon rate interpretation:** Standard (selected from a dropdown menu)
- Standard** (highlighted in green)
- Answering machines included** (checkbox)
- All calls included** (checkbox)

Predictive diallers should take care of Instant and Absolute abandon rate and have multiple setup parameters.

Automatic import on data entry

As we have already seen above, when a customer is calling a call centre or a call centre is calling a customer, this should be the start of multiple activities and not the end of it.

Therefore, it is important that any measures that can be taken to make the life easier of the call centre manager are taken. One of these measures, is the Automatic Import on Data entry.

Is it on Calls or Emails, it is important the system is starting to build a database of any type of customer interaction it has had in the past? This is important from a business perspective but also from a quality control perspective.

Databases of all the numbers that have called a specific call centre must be made in order to allow afterward managing the history of that contact but also the next actions to be taken.

Managing your End-of-call-files efficiently

For Call centres generating outbound traffic (for telemarketing, telesales, credit collection, fund raising purposes, etc...) there is often the challenge of managing "end of file" traffic. Those files that have been used for a while are often full of important information and a number of records that could still deliver something but are too small in numbers to start a specific campaign.

One of the solutions there is to use a Call centre system that is giving to each record a priority level based on the history of that record in the database. This means that this record will remain in the database but each time the call doesn't go through, this one receives a lower priority level and will be dialled again at a later time.

This means that "fresh" records just need to be added on top and that sooner or later the "old" records will be dialled again when the system gets to their level of priority.

Further calculation on the improvement on Return on Investment of these functions can be made using the Nixxis ROI Calculator available from Nixxis on simple demand to info@nixxis.com.

Conclusions

We hope that this short introduction on establishing your call centre was interesting for you. As for any business, you need to carefully define your business objectives before setting up your call centre and then you will see that all the other decisions you have to take, will come by themselves.

Is it for a centralized call centre, a network of distributed call centres or calling for external outsourcers performing from near-shoring regions, the most important objective today is your **Quality Objective**.

Too many poorly designed call centres and processes have damaged the image of the industry while at the same time; it is your single best way to generate loyal customers when it is properly done.

At Nixxis, we are believers of quality in the call centre world as a philosophy behind everything we do, is it a script development or a technical function implementation. We hope it will be the same for you.

Do not hesitate to come back to us with your experiences and help us improve this short document and this via mail (info@nixxis.com) or via our website forum (www.nixxis.com/forum).

We wish you a nice, fruitful and dedicated customer contact centre future.

Some References



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