

# What type of phone system should I buy?

*Despite the buzz, VoIP or non-VoIP is not the most important consideration*

When considering a new phone system, small business owners will be confronted with an avalanche of information about the benefits of Voice over IP (VoIP) telephone systems versus traditional digital or analog. While choosing an appropriate signaling technology is certainly important, many small businesses ignore a very basic--but in many ways *more important*-- decision: Should I purchase a **Key System or PBX?**

The Key-or-PBX decision has a much greater impact on the day-to-day operation of the phone system than VoIP vs. Traditional. The processes used to perform even the most basic functions on a PBX are very different from those of a Key System. Determining which option best fits its organization requires small businesses to understand the differences between the two.

On a **Key System**, each telephone set has buttons or keys that represent each outside telephone line. If a business has four lines, for example, lines one through four would be programmed to appear on corresponding buttons on every phone. When one of the lines is in use, a red light on the button illuminates. Making an outside call requires pressing a line not in use (i.e., not red). Routing incoming calls to the appropriate end-user is a simple but somewhat manual process. If Joe, for example, answers an incoming call for Bob, Joe places the call on hold and pages or, in some cases, yells, "Bob, line two!"

One issue with Key Systems is that they offer limited room for expansion: What happens when our example business with only four phone lines grows to 20? Does it need to equip all end-users with expensive 20-button phones? A PBX system solves this problem.

The main purpose of a **PBX (Private Branch eXchange)** is to route a large volume of incoming and outgoing calls in the most efficient, albeit less personal, manner. On a PBX, calls are typically answered by an operator or an automated attendant (i.e., "Thank you for calling ABC Company. If you know your party's extension..."). Once answered, the call is transferred to the appropriate extension and not monitored by the person or machine who originally answered it. Many PBX systems also have direct inward dial (DID) capability that allows outside phone numbers to route directly to extensions. If the direct or transferred call is not answered by the end-user, it will follow a preprogrammed *coverage path* that tells the system how to handle the call. The usual coverage path is to forward to voice mail.

On a PBX, phones do not have buttons to

## **Consider a key system if your business...**

- **Has fewer than eight outside lines and 24 extensions**
- **Consists of employees frequently away from their desks**
- **Shares phone answering responsibilities among multiple staff members**
- **Has an overhead paging system**
- **Wants every call to be handled by a "live person"**

represent every outside phone line because a PBX was originally designed for systems with more phone lines than buttons. Instead, all of the outside phone lines are consolidated into a "line pool." To make an outside call, end-users don't have to

search for a line not in use. They just "dial 9" and the PBX gives them the first available outside line from the pool.

For companies with employees who reside at their desk most of the day, a PBX can be an excellent fit. Incoming calls are quickly delivered to the appropriate person, while phone lines for outgoing calls are assigned automatically as needed. Coverage paths automate most of the manual processes of a key system, which can result in increased efficiency. A potential problem occurs, though, when an important call arrives and an exception to the normal call coverage is necessary.

For example, an incoming call is transferred to Mary, who doesn't answer. When the caller receives Mary's voice mail, he/she decides to press zero to return to the operator and have Mary paged. The operator can't put the caller on hold and tell Mary to pick up line ten. On a PBX, with no buttons on the phones to represent the phone lines, neither the operator nor Mary has any idea which line the call is occupying. To resolve this situation, PBX systems use *call parking*. Parking places the call on hold by assigning it a code that can be dialed from any phone on the system to retrieve the call. The typical operation involves pressing a Park Button, then listening for the system to speak the park code (the system actually says, "Call parked on 9001", for example) or display the code on the phone itself. The operator would then page for Mary to "pick up 9001." Mary can dial the digits 9001 from any phone to retrieve the call.

Imagine the potential end-user frustration if an employee has to learn the Call Park operation of a PBX after using the "pick up line two" method of a Key System for many years. Even a much less drastic change in operation, such as dialing 9 instead of pressing a line key to make an outside call, can result in an employee revolt. In the worst case scenario, a highly advanced PBX that would have provided reliable service and great benefit for several years is removed from service just days after implementation.

Despite some of the challenges, a business with a Key System should not rule out a PBX as a possible replacement. Many businesses have made the transition from Key System to PBX quite gracefully when the implementation is planned carefully and comprehensive training is provided by the system vendor. Once the new processes are mastered, organizations find that the streamlined operation and the use of call

coverage capabilities of a PBX can greatly improve their employees' overall efficiency. Additionally, since the PBX was originally designed for larger organizations, many businesses are finding the feature set of these types of systems to be more robust than that of a Key System (of course, there are many exceptions).

Some simple practices can avoid potential problems when choosing a new phone system: Businesses should decide which *operation*

(Key System or PBX) best suits their needs before evaluating the *technology* to purchase (VoIP, digital, or analog). If a decision is made to change from the existing operation, the impact of the change should be communicated to employees,

customers, and vendors well in advance of the installation.

Choosing a competent vendor to assist in evaluating and implementing the solution can make a world of difference. A skilled telecom professional will spend more time discussing how the operation of the phone system affects or enhances business processes than listing the features of the system or espousing the benefits of VoIP over analog or digital. Top vendors have a clearly defined process for assisting their customers in finding the ideal phone system for their specific needs and implementing it in a manner that seeks to satisfy all the parties involved.

#### Consider a PBX if your business...

- Has more than eight outside lines and 24 extensions
- Values the quick and efficient processing of calls over "high touch"
- Employs administrative or professional staff members who are typically at their workstation
- Designates an operator or automated attendant to field incoming calls
- Desires dial access to some or all employees



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