Vocera Deployment Models

Shared-Device Model Versus One-to-One Model

The Vocera® communications system allows system administrators to select the best deployment model for their unique business environment. The primary system intelligence—the Vocera system software platform—hosts all user profiles and preference information allowing client devices, such as the Vocera communications badge or the Vocera smartphone, to be shared across shifts.

Depending on deployment needs, Vocera customers have the option to implement a shared-device model or a one-client-device-per-user model (one-to-one model). Both options have advantages that address specific system adoption needs.

**Shared-Device Model**

Sharing badges across shifts is ideal for organizations looking to minimize initial deployment costs in environments that are relatively low impact, such as hospitality or retail.

- Reduces initial purchase cost
- Provides flexibility based on the needs of the department or shift
- Requires fewer devices to track, maintain, and store

**One-to-One Model**

Deploying a one-to-one model may provide additional benefits to organizations with strenuous or active environments such as healthcare. Although initial deployment costs may be higher in a one-to-one model to accommodate for additional hardware, customer examples have shown that long-term costs for both models remain relatively equal. Findings show that organizations with shared models require additional investments in equipment that has been lost or damaged.

- Quickly identifies and removes lower-performing badges for repair whereas they might be more difficult to remove from service in a shared model
- Ensures “badged” staff is always available, eliminating out-of-service modes while equipment is being returned/checked out during shift changes

Additionally, Vocera customers can deploy a combination of shared-device and one-to-one models for specific departments or specific roles to help minimize hardware costs. For example, ED staff and OR staff have one-to-one ownership whereas lab staff may share devices.

**Customer Examples: Results of a One-to-One Model**

At the State University of New York Upstate Medical University, the facility achieved both soft- and hard-dollar savings by moving to a one-to-one deployment model. After a successful four-department pilot that started with a shared badge model in 2003, the project was ready to go hospital wide.

Led by Dave George of Upstate’s Division of Information Management & Technology (IMT), the system began to show promise during the next year or two but one of the major issues stifling growth was badge availability, which led to questions about system reliability and staff accountability. George knew call volumes would increase if adoption rates were higher.
In July 2005, Upstate moved to a one-to-one badge model and achieved immediate results. Within a month of the transition, there was a reduction in the number of devices that were lost or removed from service due to damage from 2.18% per month to 0.17% per month. One year later call volume increased from 22,000 calls a month to over 70,000 calls per month.

<table>
<thead>
<tr>
<th>Shared-Device Model</th>
<th>One-to-One Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss was 2.18% per month</td>
<td>Loss was 0.17% per month</td>
</tr>
<tr>
<td>Call volume ~22,000 a month</td>
<td>Call volume +70,000 a month</td>
</tr>
</tbody>
</table>

**Logistics of a One-to-One Deployment Model**

Upstate employees are assigned their own badge and attachments, creating a sense of ownership. Batteries and battery chargers are shared. “When we went to one badge per person, that was the beginning of the Vocera movement in the hospital,” said George. “Staff started to embrace Vocera within the ensuing year.”

With funding for a one-to-one model always a concern, Upstate began with several pilot units across the hospital. The pilots showed an immediate increase in system use, improved user satisfaction, fewer help calls, greater staff efficiency, and a reduction of lost and damaged devices. With these statistics, George was able to justify and secure funding under the capital budget for the one-to-one device model.

**Conclusion**

Vocera is now deployed throughout Upstate to clinical staff and key auxiliary departments such as Pharmacy and Food and Nutrition Services. “It’s so much more convenient for a nurse to speak directly to the person in charge of the patient’s care when a last-minute request has been made or is needed,” said Jamie Nicolosi, Senior Director of Food and Nutrition Service. “It’s better service for the customers—our patients—and that creates a better hospital experience,” he said. As a result of the new one-to-one model, Upstate now averages approximately 275,000 Vocera calls and broadcasts per month.