



# COMPENSATING FOR INDUSTRY SHORTAGES THROUGH AUTOMATION AND COMMUNICATION: HONING THE MANUFACTURING CALL CENTER



Manufacturers perform **53%**  
of all private sector R&D.<sup>1</sup>



Over half of call centers  
support remote work to cater to  
global talent and reduce costs.<sup>2</sup>



49% of manufacturers say that  
cybersecurity is a big concern  
for the next several years.<sup>3</sup>



By 2034, **3.8 million**  
manufacturing jobs  
will likely be needed.<sup>1</sup>

The United States is a nation built with the hands of manufacturers. While we are looking at shifts, the significance and importance of this industry is decades strong, representing over 10% of the total US GDP on average. Manufacturing impacts jobs even outside of production. For every \$1 spent in manufacturing, \$2.69 is added to the US economy.<sup>1</sup> As technology and globalization advances, we're seeing the manufacturing trajectory shift. In the 1950's, manufacturing jobs were 30% of our US workforce. Now they're around 9%,<sup>2</sup> with the majority of firms in the US having fewer than 500 employees.<sup>4</sup>

Today, manufacturers are navigating supply chain disruptions from shortcomings exposed by, but predating Covid that are still causing product

shortages and supply chain bottlenecks. The industry is seeing labor shortages with 603,000 open manufacturing jobs in the US in May 2024.<sup>1</sup> While some regulatory strains do improve sustainability, majority slow output and squeeze profits. It can be a struggle to comply with regulations governing taxes, distribution, and financial oversight, let alone how customer data is stored. Those sustainability regulations do improve company image and perception, but collecting and reporting the data is a process in and of itself. Advanced automation technologies have dramatically improved efficiency, but can be difficult to implement while maintaining the full-scale operations required to meet demand. ***What improvements can be made to address these challenges without impeding operations?***

# INTRODUCING VIRTUALPBX

VirtualPBX is a user-focused, award-winning idea leader, driving human connection in the virtual communication industry for nearly three decades. We help to build relationships virtually, anywhere, empowering businesses to scale smoothly and quickly with intuitive execution through a product family and feature suite to meet your unique needs. We look forward to the opportunity to earn your trust and your business.

Productivity *p 3*

Collaboration *p 4*

Digital Transformation & Cybersecurity *p 4*

Data Insights *p 5*



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## PRODUCTIVITY

US manufacturers struggle to fill open positions, but in particular skills shortages create an acute pain point. While national organizations are working to institute programs to attract more people to the profession, the industry is projected to see 2.1 million unfulfilled jobs by 2030.<sup>5</sup> In turn, manufacturers are constantly looking for ways to compensate for the shortages, from increasing other staff to leveraging technology and automation in all areas of the business for improved productivity and communication.

Nearly 70% of our workforce would be more productive with effective communication processes and when employees are offered better communication technology and skills, productivity can grow by 30%. That productivity pays in dividends, with businesses 50% more likely to have lower employee turnover and 4.5 times the employee retention when there is effective internal communication and collaboration.<sup>6,7</sup>

The right manufacturing call center software can help capture data automatically, dedicate lines for quick assistance, and focus and flex the workforce you do have.

### Real-Time Data and Task Automation

Inside your call center, software with live dashboard technology can put numbers to your communication and let you see your outlay in real time. Automate simple tasks and processes to “set it and forget it.” Experiencing high call volumes without the ability to staff up? Enable overflow queues to tag in your secondary teams when all agents are busy.

### Callback and Call Tagging Features

A simple callback feature can give a caller the option to receive a return call rather than waiting. And with the ability to automatically and manually tag calls, your customer experience teams can help alert you to specific product issues and successes faster, with the recorded customer feedback and captured data to address them quickly. These features can preserve the time and focus of your highly skilled employees by filtering interruptions and distractions, ensuring calls come in and are directed quickly and appropriately, and making every micro-interaction an opportunity for efficiency.

## COLLABORATION

Manufacturing is a worldwide industry, with facilities around the globe. Teams across sites often need to work together to bridge that geographic distance not only to ensure product consistency, but to coordinate production methods, goals, and scheduling, for consistent functionality as well as comprehensive company and customer information. Effective, real-time communication throughout is key for efficient collaboration.

Remote and on-site employees, facilities, and suppliers in locations throughout the world helps to balance supply chain fluctuation, job openings, and weather patterns. The right cloud-based contact center communication tool can help bridge that geographic distance.

### Training and Oversight

Blended work environments expand the talent pool significantly while fast-tracking productivity, reducing turnover, and improving employee wellbeing, but training and oversight need to meet those distance demands. This doesn't need to mean more training. With auto provisioning through your contact center, you can ensure that new devices are set up and ready to go live in seconds. Specific training and feedback tools like whisper and barge and call recording offer a supportive, guided way to provide oversight, share real-time feedback, and accelerate time to competence. Supervisory roles can even schedule reports to arrive to their inbox, consistently and at their convenience for timely review.

### Integrated CRMs and Shared Knowledge Bases

Leveraging cloud-based platforms allows for seamless data sharing and collaboration from any location. This is particularly useful for remote or hybrid work environments, ensuring that all team members can access and work on the same documents and systems in real-time. Best of all, companies can integrate their own preferred CRM to make company data and information comprehensive and accessible in one place, anywhere, anytime.

### Feedback Loops

Establishing robust feedback loops between the call center and other departments ensures that valuable

## Enhance operational efficiency, streamline communication, and improve customer service while providing real-time data with no downtime.

customer feedback is heard and acted upon. This can be achieved through regular reporting, surveys, and feedback sessions, helping to drive continuous improvement in products and services.

### Inception and Onboarding Speed

At VirtualPBX all of this uniquely comes with the speed and agility of a privately-owned business and the white-glove customer support experience to do as little or as much of the setup for you without the additional fees.

## DIGITAL TRANSFORMATION & CYBER SECURITY

Call centers are attractive targets for cyber criminals because they handle sensitive company and personal data. As this industry evolves into smart manufacturing Industry 4.0 to collect and analyze that data, reduce security threats, and coordinate processes across supply chains, your contact center communications must evolve securely and effectively without impacting access, user experience, or cost. In fact, you can often reduce expenses by replacing multiple tools like VPNs and password managers with an integrated, all-in-one solution.

Addressing cyber security in manufacturing call centers involves a multi-faceted approach to protect sensitive data, ensure compliance, and maintain operational integrity. VirtualPBX Contact Center puts a range of customizable security controls at your fingertips through an intuitive interface, with features and options to personalize communication security specifically for your environment. Manufacturing call centers can address cyber security through several key strategies:

### Security Policies and Advanced Technologies

Highly customizable features allow your call center to encrypt data and create conditional access with last-mile controls, data boundaries, and device posture enforcement. By deploying safe browsing with web filtering, classification, and risk scoring your call center software can continuously help monitor for suspicious activities, malware, and phishing. Use comprehensive endpoint protection to safeguard call center agent devices regardless of location.

### Regular Audits and Compliance Checks

Regularly audit systems and processes to ensure compliance with industry standards and regulations like GDPR, CCPA, HIPAA, and PCI DSS. Engage third-party security experts to conduct vulnerability assessments and penetration testing to identify and address security weaknesses.



### Zero Trust Architecture

Adopt a Zero Trust model, which assumes no user or system is inherently trustworthy. Continuously verify identities and limit access to network resources through micro-segmentation and browser-based SSH, reducing the impact of potential breaches.

### Regulate PCI/PII Data

Utilize last-mile controls, secure storage, and application boundaries, final and browser DLP, and data masking to protect sensitive customer data immediately and automatically.

By integrating these strategies, manufacturing call centers can significantly enhance their cyber security posture, protect sensitive data, and ensure compliance with relevant regulations.

## DATA INSIGHTS

In the beginning of this article we introduced a key statistic: manufacturers perform 53% of all private sector R&D. Manufacturing in the US drives more innovation than any other sector. Communication is a driving force for that research and development, with manufacturers consistently running inbound and outbound feedback channels. And with federal regulatory costs falling disproportionately on this industry (averaging \$29,100 per employee to comply<sup>8</sup>), research, development, and assessment is critical.

Feedback from call centers is an integral part of manufacturing research and development in several key areas:

### Product Improvement and Innovation

Call centers collect valuable data on customer complaints, suggestions, and frequently asked

questions through tools like call surveys and reporting. This feedback can highlight common product issues, desired features, and areas for innovation that R&D teams use to guide modifications, improvements, and to develop new or better positioned offerings.

### Quality Control and Assurance

Call center feedback provides insights into defects, reliability issues, and quality concerns. By simply tagging calls issues can be flagged and evaluated well in advance. Analyzing this data, R&D teams can identify patterns and root causes of product failures, leading to more stringent quality control measures and higher product standards.

### Regulatory Compliance and Safety

Feedback about product safety concerns or regulatory compliance issues reported through call centers is vital for R&D and your call center can establish dedicated phone numbers and answering systems to handle and channel this feedback. Excellent examples here are automotive recalls. This information ensures that products meet legal standards and helps in implementing necessary safety enhancements.

### Market Trends and Competitor Analysis

Call centers often capture information about customer preferences and emerging market trends that identifying gaps in the market, help to benchmark against competitors, and spot opportunities for differentiation.

By systematically incorporating call center feedback, manufacturing R&D can ensure that product development is closely aligned with customer needs and market demands, ultimately leading to more successful and competitive products.

1. <https://nam.org/manufacturing-in-the-united-states/facts-about-manufacturing-expanded/>
2. <https://www.oracle.com/industrial-manufacturing/industrial-manufacturing-pain-points/>
3. <https://www.webfx.com/industries/industrial/manufacturing/statistics/>
4. <https://converged.propelsoftware.com/blogs/american-manufacturing-statistics>
5. <https://www.brosix.com/blog/workplace-communication-statistics/#:~:text=Businesses%20with%20effective%20internal%20communication,employee%20retention%20by%204.5%20times>
6. <https://www.census.gov/library/stories/2023/09/manufacturing-faces-labor-shortage.html>
7. <https://www.forbes.com/sites/mikekappel/2022/09/02/5-reasons-we-went-remote-and-stayed-that-way/>
8. <https://nam.org/manufacturing-in-the-united-states/facts-about-manufacturing-expanded/>

# VIRTUALPBX CALL CENTER FEATURES

<b>ACD QUEUES PRO</b>	Automatic call distribution queues impart insights through live monitoring. Watch calls as they enter, see who picks up, and how long the call lasts. Advanced features like whisper and barge, hold treatments, and agent routing strategies make scaling and managing your business convenient and informative.
<b>ADVANCED CALL REPORTS</b>	Organize company data into manageable reports, generated on a schedule or on demand, with VirtualPBX advanced call reporting. Flex your data with multiple workspaces, 40 built-in reports, customizable filters, and SLA tracking all available to deliver to your inbox on the schedule you create.
<b>BUSINESS AND HOLIDAY HOURS</b>	VirtualPBX offers the most intuitive business hours options available. Set your hours and our interface will help you route calls for business, lunch, and personal hours or any scheduled time you need. Input anything from holidays to after hours services and never worry about a missed call again.
<b>CALLBACK</b>	Callbacks are a simple way to eliminate long hold times. Allow callers to schedule a call to a preferred number at a preferred time, and customize this feature with personalized messaging, agent availability detection, and call order tracking.
<b>CALL RECORDING</b>	Create a steel trap for the information that flows into your business with call recording. Employees at all levels can harness its power, from call center representatives often required to record their interactions with customers to C-suite executives needing to reference pivotal conversations.
<b>CALL SURVEYS</b>	Data gives you one side of the story. Let call surveys give you the other. Collect direct caller feedback in real-time after each interaction for accurate customer impressions and actionable insights.
<b>CALL TAGGING</b>	Call tagging allows you to categorize calls systematically, based on topics, segments, outcomes, and more. Organize your customer database quickly and consistently, never miss a follow up, and identify pain points and preferences for effective and precise action.
<b>CRM INTEGRATION</b>	<p>VirtualPBX integrates natively with Salesforce, Freshdesk, Microsoft Dynamics 365, Zoho, Clio, Zendesk, and Microsoft Teams. Just because you don't see your CRM doesn't mean we don't have something in the works.</p> <div>        </div>
<b>CALL ROUTING</b>	VirtualPBX Contact Center puts you in charge of how calls are handled and distributed. Custom call flows allow you to advance the way you route calls through your system—skill based, direct dial, sequential, and more. It's your call!
<b>CUSTOMIZABLE GREETINGS</b>	Highlight your company's true brand identity from the moment a call is placed with our custom greetings manager. No one-size-fits-all solutions with VirtualPBX, change your greeting as often as needed or use branded franchise recordings, it's entirely up to you.
<b>LIVE DASHBOARDS</b>	The result of our direct customer feedback, VirtualPBX live dashboards allow users to customize views with real-time data from their phone system, including the option to call or monitor right from the dashboard.
<b>WHITE-GLOVE SERVICE</b>	As always, VirtualPBX provides all of its clients with white glove service. Simply put, this means exemplary customer service and support. VirtualPBX can configure everything for you.
<b>ZAPIER, WEBHOOK, &amp; API INTEGRATION</b>	In addition to our native CRM and Microsoft Teams integrations, we boast over 6000 integrations through Zapier, webhooks, and API.

Display, report, and review data insights in real-time while safeguarding customers and employees alike through advanced security measures.

# THE VIRTUALPBX DIFFERENCE



## SMALL BUSINESS APPROVED

At VirtualPBX we swiftly navigate barriers and offer exceptional support for *businesses of all sizes* with zero added fees.



## PERSONALIZED PLANS

We understand that every business is different, which is why we customize our plans to *meet your needs*.



## APPS THAT WORK ANYWHERE

With clients in *over 40 countries*, remote, on-site, hybrid, or abroad, we have apps that work seamlessly right where (and when) you do.



## SIMPLE SCALABILITY

From a single device to hundreds, our platforms are *designed to match your growth and structure* seamlessly.



## INCLUDED 24/7 SUPPORT

Our customer experience is like no other, with guided support and next-level ideas to move your business forward, and *at no extra cost*.



## PRIVATE U.S. BUSINESS

*We are a privately-owned and founder-based, U.S. enterprise* with 6 geographically distributed data centers, including one in the UK.

VirtualPBX leads the market in customer care, providing dedicated onboarding and configuration to fine-tune your setup, workflow, and reports.

"I am pleased with the customer service that I have received with PBX. I have come upon some issues, but they have been very proactive in correcting them. Kathy and David have been amazing; they have been extremely helpful in making sure that my phone system is working correctly."

– Verified User, Hospital & Health Care

"I have had Virtual PBX since the early 2000 and it has grown with my business over the years. They have been very helpful and the technology has grown as my business has grown and changed. Thank you for such great service!"

– Andrea Taylor, Azuree Talent



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