![Promethean logo]

How to use interactive flat panel displays in your workplace

Effective ways to elevate training, collaboration, and design

How to use interactive flat panel displays in your workplace

Now more than ever, it's important to have easy ways to increase productivity in the workplace. Whether your team is in the office, at home, on the road, in the lab, or on base, interactive flat panel displays (IFPDs) can be used to boost engagement and teamwork in industries including manufacturing, engineering, architecture, construction, health care, and the military.

Flat panel technology not only benefits business and government environments, but also supports hybrid work, design, simulation, data capture, process management, and real-time planning and monitoring for the entire team. IFPDs are a flexible solution for many different industries, but the high-level benefits are similar:

- **Peace of mind:** Feel secure that personal data is protected with multiple sign-in options, account-only access, passwords, and frequent security updates.
- **Seamless meetings:** Present visual information without interruption to keep teams interested.
- **Increased engagement and productivity:** Interact with teams across the room, country, or globe.

Learn how you can help make your employees' day-to-day tasks easier by providing the right technology for the right job.

Getting the most out of IFPDs

IFPDs significantly enhance communications across a business, including facilitating a hybrid working environment, increasing the opportunity for remote and cross-site collaboration. They also make it much easier to keep a record of meetings, plan activities, and distribute documentation among team members in a consistent and effective manner. Networked IFPDs allow for the coordination of business-critical reporting across multiple sites, enhancing the efficiency and cost-effectiveness of remote collaboration.

Let's take a deeper dive into a few different ways IFPDs can help streamline your workplace.

Connection and collaboration

The simplest way to incorporate IFPDs into a work environment is to use them for whiteboarding. Typically, offices and meeting rooms will have dry-erase boards or flip charts for brainstorming and recording notes during meetings. In both cases, the laborious process of transferring the written notes from the boards or charts to digital is needed to ensure that the information is captured in a form that can then be easily archived or distributed.

Whiteboarding functionality offers unlimited canvas space without the need for anything to be erased or digitally transferred. Whiteboarding can be used for notes that may be sensitive, as they can be saved to a secure location and removed from the IFPD at the end of the session or in real time. The actual process of whiteboarding is also expanded as participants can easily grab resources on the local network or from the internet to incorporate in notetaking.

Using interactive panels for virtual whiteboarding also allows for the inclusion of remote workers and teams in the brainstorming and planning process, opening the process to a hybrid working environment.

Incorporating interactive panels into corporate communications introduces an additional valuable level of interaction. Using enhanced collaborative video-conferencing solutions that allow for physical brainstorming directly on the IFPD means that hybrid meetings no longer simply involve the addition of talking heads on a video wall. Instead, in-room participants and their remote colleagues can interact at the panel for more dynamic and productive meetings. Interactive flat panel displays like those offered by Promethean support a wide range of operating systems, so any software used in a business environment can be displayed and interacted with on the panel.

How can IFPDs improve sales?

Perfectly suited for in-person or virtual sales presentations, IFPDs create fluid integration of different resources and assets with far greater flexibility and engagement compared to standard slide-based presentations.

Whether you're in the office, on the road, or at home, IFPDs make interacting with your customers, achieving company milestones, and organising project plans easier with innovative ways to present and share information. Stand out from the competition with more dynamic demonstrations to prove why your product or service is the right choice.

Design and visualisation

High-resolution panels that incorporate pen, touch navigation, and input are perfect for enhancing design and visualisation. Combining touch gesture functionality with precision pens allows for mathematically exact work that avoids the physical constraints and awkwardness of individuals or groups working with tablets on a desk. It also opens the possibility of collaborative team design, both in-room and via hybrid environments across multiple sites.

When combined with visualisation software, object and architectural designs can be immediately rendered into 3D objects and environments that can then be manipulated, annotated on, and, in the case of architecture, subject to different simulated environmental conditions and/or walkthroughs.

In fashion and creative design, panels can be utilised as mood boards, soliciting real-time feedback with instant access to visual, typographical, and design elements.

IFPDs also allow for the creation of interactive dashboards for data logging and monitoring in real-time environments (e.g., in the energy industry). This information can be used for immediate analysis, the identification of issues, and timely intervention. Finally, IFPDs can be used to display and annotate diagnostic information, for example, spectrographic or X-ray information in medical, geo-physical, and forensic situations.

Productivity and monitoring

Kanban and Six Sigma process are control processes used to monitor and improve performance and quality. Specifically, the Kanban system organises workflow and provides a comprehensive inventory and task management tracking protocol that is displayed on one or more physical boards in a factory or product design and development environment.

A Kanban board is divided into columns, usually a to-do/backlog column followed by one for each stage in a task's progress, such as code, document, test, release in software development. Historically, Kanban boards are dry-erase whiteboards or corkboards with tasks represented by cards or sticky notes. The Kanban system has proven to be an extremely powerful organisational tool at all levels, from individual to company wide.

Replacing traditional physical boards with interactive panels allows Kanban systems to be networked for ease of access and the generation of analytics for more accurate monitoring and governance. There are several software systems that create virtual Kanban boards (for example, Trello). These can be combined with interactive panels to provide remote participants access to in-person planning sessions.

> "There are so many technicians or veterinarians monitoring different aspects of the animal. The information is now in one visible place. Ultimately, it has streamlined their communication."

Samantha Pencar

Zoo Miami Foundation board member
and former Zoo Miami zookeeper

Industry use cases

Knowing how to use an IFPD and taking advantage of the extensive features is just the first step in maximising productivity and engagement in the workplace. Employees in certain industries may realise IFPDs can enhance or even replace traditional ways of collaborating, presenting internally and externally, and increasing productivity in virtual or remote settings. Industries that use IFPDs include museums and public buildings, film, training, and public services.

Museums and public buildings

IFPDs can be used in museums and other public buildings to provide interactive games and activities for visitors. For example, an installation displaying objects from a specific era like Ancient Egypt can be supplemented by interactive multimedia content giving the historical background and more detailed information about the objects themselves.

In addition, museums often must keep many of their objects in storage to ensure preservation or because of a lack of display space. Interactive displays can show images of archived objects and allow visitors to interact and learn about them. Museums can feature "objects of the month," and content displayed on IFPDs can be mirrored on the institution's website or social media.

IFPDs can also be used for visualisations. For example, an interactive 3D model on a panel makes it possible for visitors to "walk through" a reconstructed version of an archaeological site. Finally, in the case of subject lectures, many historical sites are not suitable for projector-based presentations because of the difficulty of achieving the proper lighting needed or the fact that strong light can damage delicate artifacts. An IFPD is an ideal, and far more engaging, substitute.

Film production

Interactive flat panel displays are perfectly suited to film and TV, from pre-production to post-production. Prior to film shooting, the current process is for virtual sets to be created with camera angles, lighting, and VFX using a software program called Unity. Directors and their teams use tablets as the main input device for navigating through the scenes and checking shot setup.

Interactive panels with a minimum 4k specification (ideally HDR OLED) would allow for greater ease of visualisation and the opportunity for team collaboration among different functions in the original pre-production planning process (lighting, camera, VFX, director). They make virtual set walk-throughs and annotations much easier.

Interactive panels can also be used in post-production. Once the initial composition of VFX elements into each shot has been done, the director checks the footage and requests changes. The ability to do this collaboratively on an IFPD makes the process much easier.

Writing notes and comments about each shot directly onto the screen for distribution to the post-production team is far quicker and more efficient than compiling them in a separate document.

Technical and vocational education and training

One of the challenges for vocational education is access to workshop facilities and systems that can be used for training purposes. Bulky and expensive, the equipment requires significant space and infrastructure. IFPDs can be combined with simulation software covering a wide range of practical and experiential situations. Students can use them to learn and experiment with different configurations. This has practical applications in mechanical engineering, hydraulics, plumbing, and electrical. Not only can the software provide practice to students and apprentices in working with the systems, it also gives real-time feedback and assessment.

A typical example would be software that simulates the clutch and transmission systems of a motor vehicle. Students can interact via an IFPD, make diagnostics, and attempt adjustments and repairs with immediate real-time feedback and coaching.

Practical simulation with the use of IFPDs can also be used to train nurses, medics, and forensic scientists in X-ray and spectral diagnostics.

Whereas previous equipment for practical learning would require separate installations for each specialty, the use of virtual tools via IFPDs frees up space for those physical and practical learning tools that can't be replicated virtually.

"A lot of us have been teaching so long in the same way. So to get this infusion of new technology and new possibilities of how to really connect with students is very exciting. We're all very much looking forward to learning more."

Ed Becker
Lead Instructor
NCR

Emergency services

IFPDs can be used for emergency and disaster monitoring and analysis in real time (e.g., chemical spills and forest fires) based on geographic and meteorological data. For example, in the case of a toxic leak, current meteorological and maritime maps can be displayed on the panel, and the emergency team can

plot the spread of the dangerous material dependent on water currents, delta layout, and coastal features.

Interactive panels can be used for managing and coordinating large multi-agency events where a single overall command unit is used, either from a central gold command hub or in a mobile command vehicle on site equipped with IFPDs.

Historically, firefighters have used physical tag boards to log their entry and exit from a disaster area. Panels can be used for real-time personnel tracking on site, with the added benefit of incorporating live bodycam feeds.

Police

In addition to whiteboarding, conferencing, and planning functions, IFPDs can monitor large-scale events and incidents that require policing. One example is the policing of festivals and parades. Maps of the area or route can be displayed on one or more panel in a central control room or command vehicle and combined with real-life video via bodycams or police drone footage. The interactive functionality allows for notetaking and planning directly on the maps in response to the developing situation. IFPDs can also be used to replace traditional evidence or link boards in ongoing investigations.

Military

IFPDs are ideal for situational analysis and monitoring in a similar way to fire and emergency. Typical examples include tactical planning and simulation wargaming with the use of bodycams linked to direct feeds incorporated into maps, and operational planning incorporating sensor feeds for modern land, air, and sea operations.

Conclusion

IFPDs are easy and straightforward tools to help increase productivity and employee engagement. They have a wide range of effective uses to enhance systems and processes at all levels in the corporate and government sectors. These include, but are not limited to, virtual and in-person collaboration and conferencing using whiteboarding, dynamic presentations, design and visualisation, and productivity and monitoring. Many different industries and dynamic teams can benefit from implementing IFPDs depending on current business needs.

Learn more about how our interactive displays can transform the way your team works and collaborates.

For the new way we work

Book a demo to see how the ActivPanel LX can transform your workplace

Book a demo

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