

# MONITOR ARM SOLUTIONS:

Enhancing Employee Productivity and Workstation ROI

## CONTENTS

Page 4 EXECUTIVE SUMMARY

Page 5 INDUSTRY CHALLENGE

Page 7 SOLUTION

**Increased Ergonomics** 

Flexibility and Ease-Of-Use

**Enhanced Comfort** 

**Enhanced Productivity** 

More Work Surface Enables

Greater Productivity

Privacy and information sharing

Multi-Monitor Capacity

Laptops

Reduce Workstation Footprint,

Maximize Office Space

Save money

Page 14 CONCLUSION

Page 15 ABOUT CHIEF

Page 17 REFERENCES

Page 18 CONTACT US

### EXECUTIVE SUMMARY



In today's modern workplace, everyone from employers and architects to installers and facility managers is looking for innovative solutions to increase employee productivity and workstation return on investment (ROI). Whether it is through densification projects, open-office layouts, eco-friendly buying decisions or refacing legacy facilities to attract top-tier leasers, the business community is requiring more out of the workstation environment than ever before.

Improvements in workstation technology have helped businesses realize a healthier workstation ROI through more productive employees and ergonomic office spaces. With the computer and monitor acting as the heart and soul of workplace technology, it is no surprise that many businesses have upgraded workstations to better integrate technology and user comfort. Extended desktops with multiple monitors that include flexibility for laptop users are becoming the latest trend for workplace upgrades.

In the end, businesses rely on innovative advancements, such as adjustable monitor arms, to streamline work environments. Creating dynamic workspaces that can ergonomically adjust to multiple users maximizes workstation ROI through increased productivity.

## INDUSTRY CHALLENGE



There have been some pretty remarkable technology advances recently that have led to more productive, ergonomic and cost-effective workstations. Chairs, keyboards, mice and even footrests are more ergonomic than ever before. Thus, one would think that workspace issues of the past are resolved and we are much more healthy, productive and cost effective, right? Not exactly.

Many work environments still have not reached maximum ROI, and monitors are to blame. For the most part, workers still leave their flat panel monitors stationary on their desk surface, which doesn't allow them to take advantage of the abundant free space around the monitor. This prevents employees from achieving efficiency and comfort in daily multitask projects.

The proliferation of computer programs and the need to switch between multiple layers of open windows to perform work tasks has also created more need than ever for efficient multitasking that multi-monitor systems can provide.



Another example of ROI shortfalls deals with densification issues. More and more businesses no longer need their existing large work surface footprint. The five-sided corner work surface is a holdover design from the days of bulky cathode ray tube (CRT) monitors. Open-office and multi-use environments have begun to address the various preferences of individual employees. So, to realize maximum ROI, the workstation itself must be further streamlined. This can be accomplished with the addition of a cost effective, durable and easily adjustable monitor mounting solution.



In addition to increased employee productivity, better ergonomics and more useable desk space, mounting solutions can offer rewarding cost-saving benefits to employers, IT and facility managers. According to the U.S. Department of Labor, "Repetitive stress injuries cost American employers up to \$20 billion annually in workers' compensation claims and more than \$100 billion in lost work, reduced productivity and rehabilitation time." And that study was from 1996, the last year any cost studies were released on this issue!

### SOLUTION



### **Increased Ergonomics**

End user comfort and well being are important considerations with any workstation set up. The enhanced ergonomic benefits of monitor mounts help workers avoid injury and allow for flexible monitor configurations to meet the differing needs of multiple users.

#### Flexibility and Ease of Use

Many workstation ergonomic benefits center on monitor arm flexibility and ease of use. The Human Factors and Ergonomics Society notes the following requirements when considering the monitor support surface and viewing angle:

- Allow users to adjust the tilt and rotation angle
- Allow users to adjust line-of-sight distance
- Locate the screen's center 15 to 25 degrees below horizontal eye level<sup>2</sup>

Monitor arms provide far superior flexibility for monitor tilt and distance adjustment than standard desk stands. Monitor arms also enable customization per the user's needs for ease of movement or maximum adjustment. This flexibility is extremely helpful for a variety of user populations, including:

- Multi-user requirements
- Special work injury/ergonomic needs
- Aging workforce
- Bifocal wearers



When it comes to flexibility, monitor arms provide users with a wide range of tilt and swivel options for the side-to-side, front/back and up/down movement that today's workforce requires. For instance, mounting solutions allow bifocal users to tilt the monitor and/or drop the bottom of the monitor all the way down to the work surface. This means no more leaning back and tilting the head up or looking down to read the screen.

In addition, dynamic articulating mounts allow for quick height adjustments up to 13 inches with no knobs or levers, which creates an ideal situation for sit/stand or multi-user environments. Some mounts provide up to 23 inches of height adjustment. Monitor mounts can also be used with height-adjustable tables to enable even more user flexibility.

#### **Enhanced Comfort**

A key to increasing employee productivity is end-user comfort and well being. Mounting solutions are designed to help users adhere to the latest industry ergonomic standards. The Human Factors and Ergonomics Society describes the proper placement of the screen as a compromise between minimizing visual discomfort and musculoskeletal discomfort of the neck and shoulders<sup>2</sup>. Lowering screens tends to ease eye strain, but increase neck strain.

This end-user focused design allows users to customize their monitor positioning in order to find the middle ground for minimal strain. Adhering to these important ergonomic standards means that users no longer have to continually struggle with a monitor that is either too high, too low, or in the way of multitasking. Eliminating monitor placement challenges promotes a more comfortable and healthy work environment.



### **Enhanced Productivity**

One of the most important benefits of an adjustable monitor arm solution is the amount of increased productivity it brings to its user. How is that possible? Simply put, an adjustable monitor arm greatly enhances the user's ability to comfortably multitask.

#### **More Work Surface Enables Greater Productivity**

The key to a well-designed monitor arm is one that can dramatically increase work surface area, workstation performance and user comfort.

With the new found space under the monitor, users can now use every inch of their work surface for multiple performance tasks (such as writing, making phone calls, reviewing documents, etc.) directly in front of the monitor — all while keeping the monitor out of the way and optimally positioned for viewing. With an articulating monitor arm, users can extend their monitors out more than 20 inches and collapse it to a minimal depth of about 4 inches. This ability to extend and collapse the monitor position as-needed provides users with a much larger functional area in which to multitask while positioned at a traditional 24-inch deep work surface.

#### **Privacy and Information Sharing**

Some work environments demand screen privacy, while others require information sharing. Monitor arms can be easily positioned for viewing from any angle. The value of this is felt in the "paperless" office, allowing co-worker or client discussions across a desk while using the monitor screen as a presentation tool in real time. Or, value can come from not having to worry about passers-by when opening

attachments that contain personal information. Adjustable mounts can change easily from portrait to landscape configuration, which enables "smart" software applications that dynamically change the display properties with monitor configuration. So, rather than cropping a page layout or picture in halves to read on the screen, the user can swivel the screen to portrait mode and use all the screen real estate.



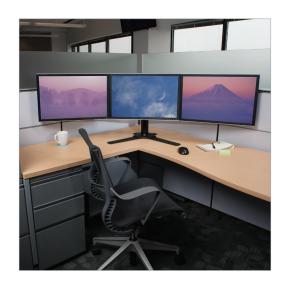
#### **Multi-Monitor Capacity**

The workplace today requires juggling through many programs to check email, spreadsheets, Powerpoint reports, social media accounts, word processing programs, internet reports and PDF attachments. It isn't uncommon to have a dozen windows open on a single monitor. Often a single work task requires transferring data from one program to another, which quickly becomes time-consuming when working on a single screen.

In a New York Times article, "In Data Deluge, Multitaskers Go to Multiscreens," journalist Matt Richtel notes, "There is a growing new tactic for countering the data assault: the addition of a second computer screen. Or a third." Indeed, in 2011, tech firms sold 179 million monitors worldwide and only 130 million desktop computers<sup>3</sup>.

In many multi-monitor work environments, continuous productivity is a key to both bottom line and customer service success. One way to enhance productivity in such multitask environments is through mounting solutions that enable users to integrate from two to twenty monitors in a customized workstation. One Utah study found that using multiple monitors raised productivity in every measure and that "multi-monitor users got on task quicker, did work faster and got more work completed with fewer errors than persons using a single monitor<sup>4</sup>."

In fact, multi-screen users in the study were "6 percent quicker to task, 7 percent faster on task, generated



10 percent more production, were 16 percent faster in production, had 33 percent fewer errors and were 18 percent faster in errorless production<sup>5</sup>."

Mounting solutions better facilitate multiple monitor workstations through optimal space utilization and easy monitor alignment to minimize impact of monitor bezel and spacing when mousing across monitors. This option helps increase monitor viewing area and efficiencies, while reducing user errors and health issues.

#### Laptops

Another often forgotten multi-monitor environment is the growing number of laptop users. Laptops increase user mobility and convenience; however, the ergonomic benefits of a standalone laptop are sub par at best. To minimize poor workstation ergonomics when in use for extended periods, users should elevate the laptop screen and use a separate keyboard and mouse. Users can maximize productivity and ergonomics by using a secondary flat panel monitor with a monitor arm/laptop mount combination. This unique mount solution helps seamlessly position the monitor and laptop for an "extended desktop" environment that allows users to run their desktop over two monitor screens — meaning they can mouse and scroll from laptop to monitor screen. This enables users to keep multiple windows open to drag and drop information across applications, all without minimizing or maximizing applications. Once again, such a multi-monitor environment has been found to improve user productivity no matter how you measure it.



#### **Reduce Workstation Footprint, Maximize Office Space**

An increase in effective work area not only enhances employee productivity and well-being, it can also help decrease the traditional workspace footprint without a reduction in usable work surface area. New benching systems tailor workspaces to individual clients, and monitor mounts help to increase the useable desk space without the "close quarters" side effect that come with some benching systems. Thus, office designers and builders can now tailor workstation footprints to the specific needs of their clients — saving valuable space and money.

In addition, densification projects help promote ecoconscious business practices. For example, businesses that streamline their workstation footprint consume less building materials (i.e., furniture, wood, metal, etc.), save energy by using energy-efficient flat panel monitors, and minimize heating and cooling costs due to smaller office space needs. Additionally, this space saved becomes available for other uses, including collaboration spaces, conference rooms, traditional offices and more.

On top of the space savings, monitor mounts from a certified manufacturer can also help your project earn important credits toward LEED certification. Many monitor mounts qualify for credits in Materials & Resources or Innovation in Design, taking your building design closer to achieving this designation.



#### **Save Money**

The end result of increased employee productivity, enhanced ergonomics and a reduced work service footprint is real cost savings for everyone in the buying cycle; including integrators, architects, designers, installers, and IT and facility managers. Cost saving can come in many forms. For example, mounting solutions can foster more productive and healthy employees, which can lead to an increase in business, less downtime due to workplace injuries and a lower risk of workman's compensation claims. In addition, monitor arms promote more efficient use of workstation design that leads to smaller office footprints and savings through:

- Reduced building costs
- Less expensive furniture costs
- Decreased maintenance costs
- Potential reduction in rent

## CONCLUSION

Even with the recent improvements in workstation environments, businesses still must close the gap between advancing technology and employee productivity, unused desktop space and important ergonomic issues.

Through the use of Chief's articulating monitor arm solutions, businesses can close this gap by unlocking vast unused desk space and allowing the traditional work surface to finally transition into a fully functional multitasking environment. In the end, Chief's monitor arm solutions can greatly enhance employee productivity and workstation ROI through increased ergonomics, more usable desk space, and streamlined workstation footprints.

### ABOUT CHIEF

Chief, a brand of Milestone AV Technologies, has more than 35 years of proven product and service excellence. Committed to responding to industry needs in the Pro AV, Residential and Office markets, Chief offers a complete line of mounts, racks and accessories for TVs, monitors, projectors and other AV components.

Our adjustable monitor arms greatly enhance any workstation where productivity, space, ergonomics, collaboration and/ or privacy are at a premium. Backed by proven product and service excellence, we offer the largest line of standard and customized mounts, lifts and accessories in the world.

Chief leverages its multiple product awards and patented designs to provide a full line of mounting solutions to fit virtually any workstation situation and monitor weight. These flexible solutions include single, dual and multi-monitor array mounts in standard and customizable configurations. We are recognized worldwide for delivering quality products that incorporate our patented Centris™ Technology for superior fingertip monitor positioning, one-of-a-kind cable management and installer-friendly design. All of our products are solidly constructed, are quick and easy to install, and promote fluid end-user flexibility in movement and design — making them one of the top choices in mounting solutions for integrators, architects, designers, installers, and IT and facility managers.

With custom mounting solutions for furniture system manufacturers and many system connectors, we have an extensive range of solutions to fit a variety of unique workspace challenges. All of our products and accessories are backed by award-winning technical support and customer service. From large corporations to small business and from traditional cubicles to multiple monitor environments, we continue to break new ground with next-generation products that help end users increase productivity and ergonomics, maximize office space, and save money.

Milestone AV Technologies, home to the Chief, Sanus, Da-Lite and Projecta brands, has offices in U.S., Canada, Europe and Asia Pacific, supporting a global network of dealers. Distribution centers are located in Minnesota (US), California (US), Indiana (US), Ohio (US), Hong Kong and the Netherlands. For more information about Chief, please visit www.chiefmfg.com.

#### References

- U.S. Department of Labor (1996). "Preventing Repetitive Stress Injuries." Retrieved from <a href="https://www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=SPEECHES&p\_id=206">https://www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=SPEECHES&p\_id=206</a> on February 7, 2014.
- 2 ANSI/HFES 100-2007. "Human Factors Engineering of Computer Workstations." The Human Factors and Ergonomics Society.
- 3 Richtel, Matt. "In Data Deluge, Multitaskers Go to Multiscreens." New York Times. February 7, 2012. Retrieved from http://www.nytimes.com/2012/02/08/technology/for-multitaskers-multiple-monitors-improve-office-efficiency.html on February 7, 2014.
- 4 InfoSystems. "Dual Monitors: Is Two Really Better than One?" July 16, 2012. Retrieved from <a href="http://www.infosystems.biz/news/blog/item/70-dual-monitors-is-two-really-better-than-one.html">http://www.infosystems.biz/news/blog/item/70-dual-monitors-is-two-really-better-than-one.html</a> on February 7, 2014.
- 5 Colvin, Janet; Nancy Tobler and James A. Anderson. "Productivity and Multi-Screen Computer Displays."
  Rocky Mountain Communication Review. Volume 2:1,
  Summer, 2004. Retrieved from http://www.os400.org/imagesap/utahdisplaystudy.pdf on February 7, 2014.

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