Operation digital transformation

A guide to critical display technology for government facilities

What is digital transformation?

Digital transformation is the process of implementing new technologies for operational excellence. It's a customizable, strategic process that has been adopted across industries— from healthcare, to manufacturing, retail, finance, and even the government sector.

According to a January 2024 Gartner study, 72% of digital government programs were put into action as part of the pandemic response plan.[1] Today, most government organizations continue to optimize their existing programs and services with digital options.

Despite this growing improvement, Gartner reports that "55% of digital government programs are failing to scale the impact of digital across their organization."[1] In other words, more than half of government agencies have implemented digital programs and services, but aren't using those digital advancements to fully transform their organization. This leaves room for incredible opportunity to innovate—to the benefit of employees and citizens alike.

In this guide, we'll explore the emerging trends Chief Information Officers (CIOs) in government can use to modernize technology and pursue true digital transformation across their organization. Plus, we'll highlight the importance of digital strategic planning, the innovative technology that can help activate your plan, and how to get started.

In this guide

THE OBJECTIVE

Digital transformation & modernization

The impact of digital transformation extends far beyond IT workstations or the walls of a server room. And the process involves much more than upgrading to the latest software version. A true digital transformation for your government control room or facility will include everything you need to power successful operations—including high-performance computers, secure data management programs, reliable communications software, and crystal-clear display technology.

Modernizing technology can help any government or public service CIO improve security, surveillance, sensitive data management, and more across their organization. And according to Gartner research , five technology trends have surfaced in 2024 that can also help you improve these operations—while increasing public safety and delivering optimized services to all.

Tech trends for government CIOs

Adaptive security ▶

By 2028, Gartner predicts that AI implementations related to cybersecurity will rise from 5% to a staggering 70%.[2] What's the reason for the spike? As cyber threats evolve, AI evolves along with them—providing government CIOs with the opportunity to build an adaptive network that responds faster.

"An adaptive security model merges and continually adjusts cybersecurity tools, techniques, and talent to the changing threat landscape." — Gartner, April 2024

Digital identity ecosystems

In the government sector, digital identity is expanding to include user authentication, unique identifiers for citizens and organizations, and credential verification. Gartner predicts that 500 million smartphone users will use a digital identity wallet for verification by 2026.[2] For government CIOs, this elevates the importance of having reliable technology in place to process and validate all identity claims.

Digital platform agility

By evolving from antiquated systems to more agile cloud-based and low-code application platforms, government organizations can deploy capabilities with speed and risk mitigation in mind. This allows CIOs to be more flexible and scale services to citizen needs, while also maintaining better cost control and faster time-to-value.

Programmatic data management ▼

As reliable data collection methods expand, government leaders require more data-based decision making across sectors. As a result, Gartner estimates that more than 60% of government organizations will prioritize process automation investments by 2026. In 2022, this number was at just 35%, indicating a steady upward trend.[2]

AI for decision intelligence

Generative artificial intelligence (AI) and machine learning are on a path to maturity, which will allow government CIOs to leverage new technology for improving service delivery. In line with this evolution, Gartner predicts that over 70% of government agencies will enhance their administrative decision-making with generative AI by 2026.[2]

"Programmatic data management is the systematic and scalable approach to enable enterprise-wide use of data assets; being advanced by automation platforms that incorporate AI."

— Gartner, April 2024

THE MISSION

Develop a strategic plan

Capitalizing on these trends starts by developing an effective strategy. And to activate that strategic plan, CIOs must first consider their organization's short and long-term goals for digital transformation.

For example, how should your organization respond to risk? Do you need to accelerate response times, build a team dedicated to risk monitoring, or elevate security across departments? Look deep within your organization to answer key operational questions like these.

Once you've identified the challenges you want your new strategy to solve, turn words into action with this seven-step checklist, inspired by Gartner[3]: ▶

High-powered flexibility

Your new strategic plan should have the fortitude to be executed successfully, yet respond to change quickly and easily. Just like any essential operation—flexibility, reliability, and clarity are crucial. You need to know that your digital solutions will perform when you need them most. That they'll always respond quickly. That they'll hold a strong firewall against security breaches. And that they'll deliver essential information with the utmost visual precision.

This mission can only be achieved with the right combination of hardware, software, and display technology.

Activate your strategic plan

○ **Focus on flexibility**
Adaptable organizations are 198% more likely to realize the benefits of external opportunities.[3]

○ **Pursue compatibility**
Stay relevant, convenient, and practical with a business-compatible strategic plan.

○ **Illustrate the full initiative**
45% of strategic plans fail due to lack of funding. Bring your full plan to the table to secure support.[3]

○ **Promote team transparency**
Specify team roles and responsibilities to ensure proactive response to risk or priority shifts.

○ **Flow your plan horizontally**
Plan to flow objectives from side-to-side, to 2x the impact of a successful strategic plan.[3]

○ **Align with performance metrics**
Base performance metrics on your strategic plan to encourage team alignment throughout implementation.

○ **Test your plan**
Create possible future scenarios to put your plan to the test—and give your team the chance to see it in action.

Choose your technology

Control room technology has advanced in epic fashion since the world's first projector (the Woodville Latham Eidoloscope) was introduced in 1895.[4] And LG has been a proud contributor to this advancement for more than 70 years.

LCD vs. **LED** vs. **DVLED**

Vibrant displays: An LG history

Projectors

Provide vibrant brightness, sharp image quality, and enhanced color accuracy to deliver effective messages and create new opportunities.
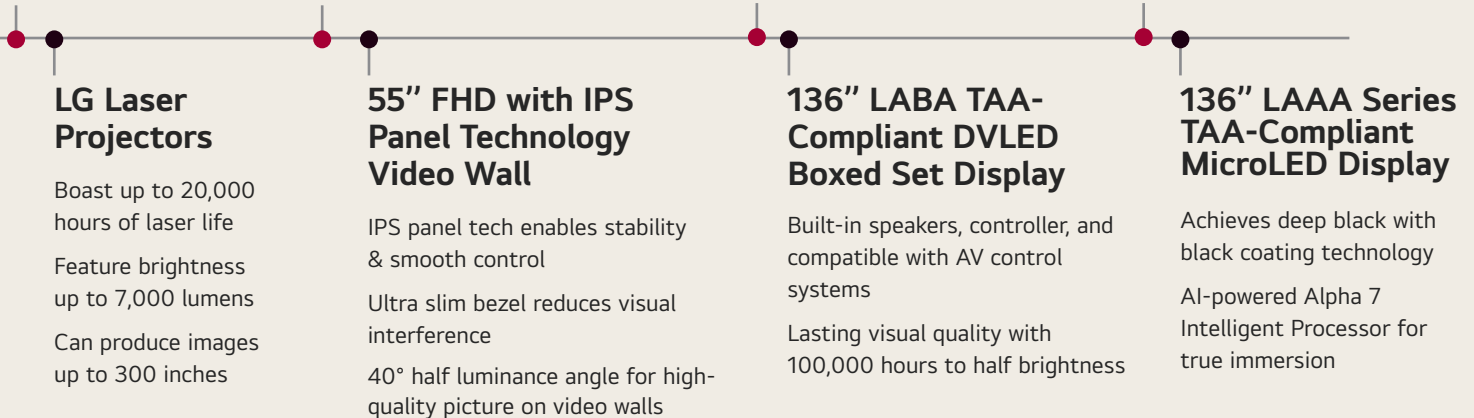
Liquid Crystal Displays (LCD)

Offer bright, high-resolution images perfect for organizations looking to make a lasting first impression.

Direct View LED Displays (DVLED)

Feature incredible contrast ratios, color vibrancy, and brightness levels several times the power of LCD displays.
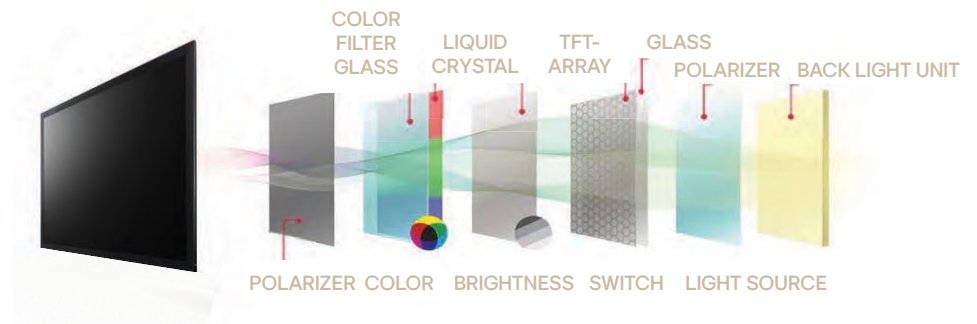
MircoLED Displays

Advanced MicroLED chips deliver remarkable visual precision

LG Laser Projectors

Boast up to 20,000 hours of laser life

Feature brightness up to 7,000 lumens

Can produce images up to 300 inches

55" FHD with IPS Panel Technology Video Wall

IPS panel tech enables stability & smooth control

Ultra slim bezel reduces visual interference

40° half luminance angle for high-quality picture on video walls

136" LABA TAA-Compliant DVLED Boxed Set Display

Built-in speakers, controller, and compatible with AV control systems

Lasting visual quality with 100,000 hours to half brightness

136" LAAA Series TAA-Compliant MicroLED Display

Achieves deep black with black coating technology

AI-powered Alpha 7 Intelligent Processor for true immersion

Mission-critical performance

Display technology is essential to your government control room or facility. And that means you need display solutions that deliver enhanced color accuracy, unparalleled visual precision, and reliable operation. Understanding your options and their ideal applications before implementing your strategic plan can help turn your control room into a hub of secure digital innovation.

LCD

COLOR
FILTER   LIQUID   TFT-   GLASS
GLASS   CRYSTAL   ARRAY   POLARIZER   BACK LIGHT UNIT

POLARIZER COLOR   BRIGHTNESS SWITCH   LIGHT SOURCE

DVLED

MODULE

INDIVIDUAL
RGB PIXEL

The DVLED difference

Understanding your display options

LCD versus DVLED—with so many display options on the market, how can you know what's best for your new digital strategy? Allow us to help you make the distinction.

At their core, Liquid Crystal Displays (LCD) and Direct View Light Emitting Diode (DVLED) displays are very different. LCD panels depend on a light source located behind or at the edge of the glass. Most are backlit by

LEDs, which provide a white light that passes through a shutter—tinting to display color on the screen.

DVLED displays, however, eliminate the LCD panel and use a surface array of LEDs for direct light with no filter. With the elimination of the LCD "middleman," DVLEDs deliver incredible contrast. Unmatched by LCD alternatives, this high contrast ratio produces more vivid, crisp images with deep black levels for bold, vibrant color.

Why DVLED?

LG's Direct View LED Displays are ideal visual solutions for any control room, conference space, or briefing center. With incredible brightness, seamless picture, and virtually unlimited size configurations, these screens are designed to support critical operations. Plus, they offer features and benefits including:

- Fast and easy installation in just a few hours*
- TAA compliance and seamless integration with control room systems
- Panel access from the front or rear for quick maintenance
- Optional remote monitoring through LG ConnectedCare DMS
- Responsive LG sales consultants; always here when you need them

Efficient display technology and durable pixels are a big part of the DVLED module. However, attaining the right specs—such as pixel technology, pixel pitch, brightness, IK, and IP ratings—can make the DVLED display even more powerful. But don't just take our word for it. Keep reading for examples of our vibrant displays and control room tech in action.

Statement based on previously documented successful installations. Actual times may vary.

Attaining the right specs—such as pixel technology, pixel pitch, brightness, IK, and IP ratings—can make DVLED displays more powerful.

Government display use cases

Where could LG's reliable, secure display technology be most useful? Here are some examples:

Military command and control rooms

The Armed Forces need to react to tactical scenarios with complete confidence, sometimes in mere seconds. Innovative display technology can help support these tense moments by delivering sharp image quality and enhanced color accuracy from combat cameras and drone footage.

Situation rooms

After the Bay of Pigs invasion in 1961, President John F. Kennedy required intelligence to be fed directly into the White House from a secure facility. This 24-hour, seven days a week crisis-support intelligence delivery was critical. And in 2024, situations like this can be better handled through secure technology that enables faster information delivery and real-time video conferencing.

Data supervision and management systems

The Supervisory Control and Data Acquisitions (SCADA) control room monitors real-time data for several public sectors, including power plants, oil & gas refineries, transportation, water treatment, and more. The extendable nature of our LAAA series displays can provide more screen area—allowing operations like SCADA to ensure public health and safety by monitoring essential data in one place.
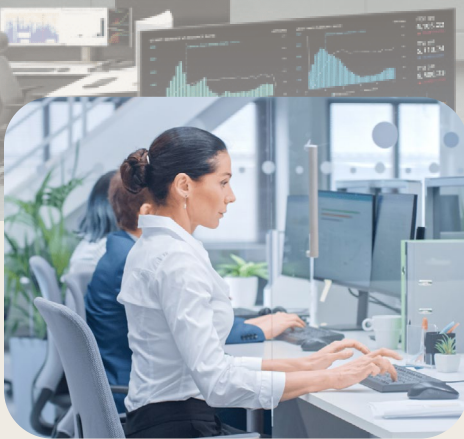
Video surveillance and security

Security personnel at government facilities need to remain vigilant and alert to protect leaders, officials, and visiting citizens. With high-quality vibrant displays, these teams can constantly watch for threats throughout monitored areas inside and outside the building. This empowered vigilance can also allow them to quickly trigger emergency responses such as breach warnings or fire alarms.

Transform with LG

We offer secure and vibrant display solutions for every inch of your control room.

TAA-Compliant Monitors

Over two dozen models, ranging from 17'' Medical Monitors to 34'' Ultrawide® Monitors

Resolutions available from Full HD up to 4K Ultra HD for precise viewing of critical detail

IPS technology with models that boast 99% coverage of the sRGB color spectrum

HDR compatibility helps render areas with more vivid color representation

TAA-Compliant Signage

Over two dozen models, ranging in size from 22'' to 98'' diagonal to fit any indoor space

Brightness options from 250 nits up to 4,000 nits for easy viewing in full sunlight

Outdoor fully enclosed options provide bright exterior signage

IPS LCD and OLED options for captivating viewing experiences
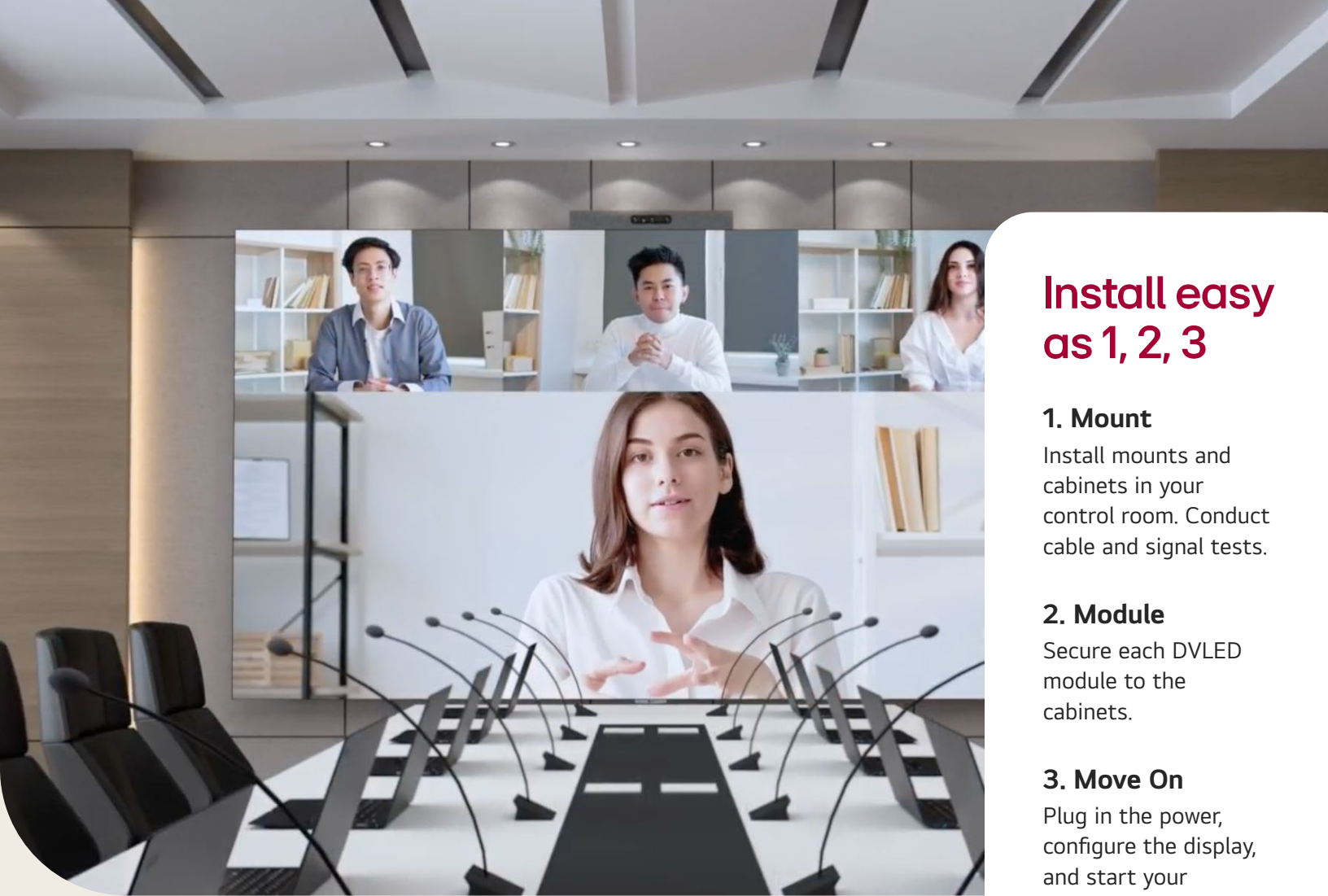
TAA-Compliant Direct View LED Displays

Boxed Set Displays provide everything in one box (including sound) and are easy to install

Our Ultimate Business Display boasts dozens of options, including Full HD, Dual 2K, Ultra HD, Dual 4K, and 8K resolutions

Boxed Set and Ultimate Business Displays include traditional DVLED and MicroLED package options

Basic wall mounts included. Also compatible with advanced wall mounts from premium vendors

Install easy as 1, 2, 3

1. Mount

Install mounts and cabinets in your control room. Conduct cable and signal tests.

2. Module

Secure each DVLED module to the cabinets.

3. Move On

Plug in the power, configure the display, and start your presentation.

TAA-Compliant LG DVLED and MicroLED Displays

Control. Clarity. Compliance.

Take control in stunning clarity with with TAA-Compliant Displays from LG. Whether you choose the LABA Series DVLED Boxed Set or LAAA Series MicroLED Display, you'll experience visually stunning and impressively flexible display solutions. Designed to support mission-critical and video surveillance-enabled government control rooms, our displays install fast—delivering seamless integration and precise visuals with minimal disruption.

All systems go

Installation is a breeze when everything comes in one box. Thanks to their innovative design, it's easy to get LG's TAA-Compliant DVLED or MicroLED displays up and running in just half a day.* Mount the five cabinet units in your desired location, connect them, and secure them together. It's that simple.

Statement based on previously documented successful installations. Actual times may vary.

Install with confidence

By partnering with one of our LG PRO partners for installation, you can minimize the risk of installation errors and ensure a straightforward experience.

Your chosen expert can visit your site before installation to identify and resolve any potential issues before your new display arrives. Plus, their expertly streamlined installation process means you'll have more time for critical testing and calibration—and to ensure the display is everything you envisioned.

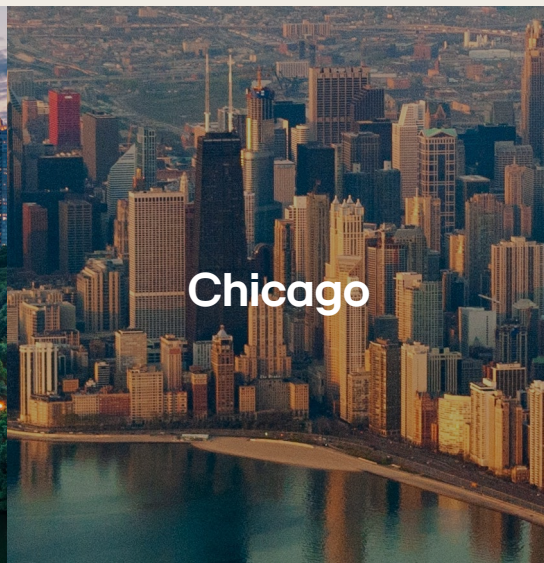Contact your local LG sales rep for a list of LG PRO installation partners in your area.
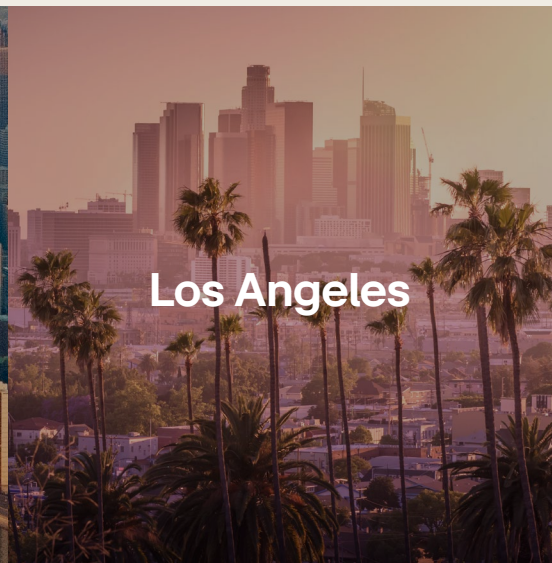
Seeing is believing

Some displays are simply too brilliant for words. Visit an LG Business Solutions Innovation Center showroom to see our full lineup of Direct View LED and MicroLED solutions for yourself.

Atlanta

Chicago

Los Angeles

New Jersey

Start Planning Your Visit Today

Washington, D.C.; Corporate Affairs Office

Sources

1 Gartner. "Transitioning to Digital Government." Roadmap. January 2024.

2 Gartner. "Top Technology Trends in Government for 2024." Report. April 2024.

3 Gartner. "Strategic Planning Essentials Guide." 2023.

4 LG Business Solutions. "LCD, Direct View LED, and OLED Explained." Ebook.

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