



The State of Physical Access Control in Latin America and Brazil Businesses **2022 Report**

Introduction

The world of access control technology and system management continues to evolve rapidly. Latin America (LATAM) and Brazilian organizations battle system threats continuously to ensure their access control systems respond to the challenges of today's requirements. Ultimately, access control consultants and system managers work tirelessly to provide their companies with secure and efficient access control systems that protect employees and assets.

Today, there are multiple ways to manage access control with state-of-the-art technologies available using smart cards and open technologies to help access control managers. System managers fight an uphill battle trying to meet the needs of their organization while working within the budget dedicated to access control. In many cases, the budget isn't there to support ongoing system hardware or software upgrades.

Over the past three years, LATAM countries were impacted by one singular event that affected the world. The global pandemic. Reacting to their access control systems to meet the challenges of the pandemic and their impact on the changing work rules has been an additional battle. With increased requirements for touchless tools for access control and workers that perform their duties remotely, today's security manager is bombarded with challenges in managing an effective access control system.

Respondents to the 2022 survey recognize multiple improvement options for their access control infrastructure. They understand that without ongoing vigilance facing the threats to their systems, the long-term risk is the potential failure of their current access control program, which negatively impacts their organizations.





Yet, the survey shows there's a reluctance on the part of the security managers to embrace new technologies and upgrades without a security breach or significant security event. They remark that it is difficult to get their organizations to increase annual funding to be more proactive in system upgrades. Respondents said they continue battling limited budgets to maintain and upgrade access control systems.

The survey shows respondents' ongoing interest in embracing the benefits of mobile access control. The technology exists, allowing them to more efficiently manage and adjust the system according to the organization's needs. But the cost is a significant barrier to installing a comprehensive mobile access system. Implementing a mobile access control system is for many companies beyond their reach financially. Security managers are challenged to do their best with the access control tools and budgets they receive yearly.

These are just a few of our initial observations after examining the results of the 2022 survey, and we expect you will find additional revelations as you read this report.

The following report results from a survey we ran among security consultants and facility managers to understand their perspectives on access control today in LATAM and Brazil. The report covers a lot of ground by asking questions about how respondents manage access control within their companies. Their answers cover the current state of their systems, daily threats, available technologies and trends in managing access control. The report offers an up-to-date perspective on how respondents view access control in their companies.

The survey began by asking them to assess their current access control systems and their organization's annual plans for upgrading their systems to protect employees, properties and visitors. The survey asked them about the level of investment in future system upgrades and how they prioritize the changes they believe need to be made.

Respondents provided insights on how their organizations manage decisions regarding system upgrades and who controls the budget. They responded to questions about the access control challenges they encounter every day and the critical drivers for making system upgrades. They reply as well about their prospects for implementing mobile access.







The survey also explores the impact of improving the understanding and managing of building occupancy at all times of day to maximize the benefits of access control. The building occupancy data provides security managers with improved system control to ensure safety and compliance for everyone within their facilities.

The report closes with final comments from responders as they identify the technologies they expect will impact the industry and the trends they believe will forge the industry's future direction.

Within each section of the survey report, specific data points break down the survey responses along with industry expert insights to help clarify the results. We broke out the survey results separately according to professionals in LATAM countries and Brazil.

Survey participants note they are working in a time when access control systems require adjustment to the "new normal" working environment for companies and their employees. The survey reflects the impact of managing access control under these new conditions.

As the access control industry moves forward, it remains to be seen whether system managers in these countries will respond favorably to these work environment challenges and continue to ascend.

We appreciate the time you take to read this comprehensive report on access control in LATAM and Brazil. We hope you find the survey results interesting and helpful.



About HID

HID powers the trusted identities of the world's people, places and things. We make it possible for people to transact safely, work productively and travel freely. Our trusted identity solutions give people secure and convenient access to physical and digital places and connect things that can be accurately identified, verified and tracked digitally. Millions of people use HID® products and services to navigate their everyday lives, and billions of things are connected through HID technology. We work with governments, educational institutions, hospitals, financial institutions, industrial organizations and some of the most innovative companies on the planet. Headquartered in Austin, Texas, HID has over 4,500 employees worldwide and operates international offices that support more than 100 countries. HID® is an ASSA ABLOY Group brand. For more information, visit www.hidglobal.com.



About the Survey Respondents

The 2022 survey contains 24 questions and was conducted by HID in August 2022. HID distributed the survey electronically to all participants, and respondents had three weeks to complete the survey. In total, 555 respondents from 24 Latin countries completed the 2022 survey.

Additionally, the Brazil survey information results from 72 access control professionals responding to the same LATAM questions. The Brazilian professionals responded to the survey in August 2022. Please note the Brazil responses are separated under each part of this report to highlight results specific to respondents working in that country.

The purpose of the survey was to document the answers submitted by industry end-users managing physical access control systems. The survey details:

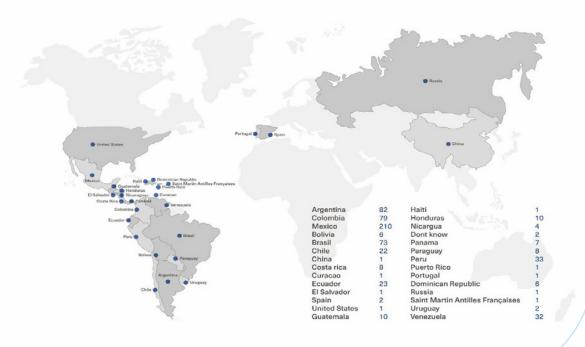
- Current access control technology applications and the systems they work with
- The current challenges in implementing system upgrades
- Expectations regarding emerging trends they believe will shape the future of the physical access control industry.

HID began the survey by asking end-users to identify their role in the organization. The largest group identified themselves as security consultants (27%). Other significant positions included: security managers/directors (24%), chief information officers (9%), and company IT managers (6%). Additional roles included IT Managers/Directors, Information Security Managers/Directors and related IT management positions.





Countries participating in the survey



Over half of the LATAM respondents (53%) said they work in companies with fewer than 100 employees, 23% said their companies had 100-1,000 employees, and 16% said they worked at companies with up to 10,000 employees. The respondents working for companies with workforces greater than 10,000 people accounted for 8%.

In Brazil, 35% of the respondents work in companies with less than 100 people, 17% work at companies with 100-1,000 employees and 31% are employed at companies with 1,000-10,000 employees. Respondents working for companies with workforces greater than 10,000 people accounted for 19%.

Respondents in Brazil identified their top job titles as security consultants or security managers/directors. Each job title was listed by 18% of the respondents. Additional roles identified included IT manager/director (7%) and facility manager/director (6%). From the data, it was interesting to learn that 6% of respondents in Latin America and 19% of the Brazilian respondents said they had no role in security.

Respondents noted that they worked across a variety of Latin American industries. The top identified sectors included software, technology and telecommunications companies (18%), professional services (14%) and manufacturing (13%). The remaining industries identified in the survey were banking, government, higher education, commercial real estate and utility companies.

Brazil's respondents provided similar answers regarding the top industries in which they work. Software, technology and telecommunications (28%), manufacturing (13%), and professional services (10%) are at the top of the list. Other industries in Brazil were government, transportation, retail and banking.

The survey asked respondents to list the LATAM country where they work, and the results showed people working in 24 countries. Mexico was number one with 37%, the second was Argentina with 14%, and third was Colombia with 13%. These three countries comprised nearly 69% of the people responding to the LATAM survey. As noted earlier, Brazil had 72 respondents, and the results of their responses are listed separately in each part of the survey. Additional respondents were based in Peru, Ecuador, Chile and Venezuela. The chart below provides the complete list of countries represented in the study.



Current State of Access Control

- Satisfying Requirements?

To improve our understanding of the current state of access control technology in LATAM and Brazil, we began the survey by asking the respondents to please:

- identify current access control credential technologies supported within their organizations
- list the features built into their systems to improve operational efficiency
- · comment on the ability of their existing system to meet the needs of the organization

More than half of LATAM respondents (51%) said their systems support 125 kHz low-frequency (LF) proximity cards. In Brazil, 125 kHz low-frequency cards are supported by 37% of the respondents. The responses in the 2022 report continue to show the region's commitment to 125 kHz LF technology because it is reliable and cost-effective. However, the technology cannot be encrypted and is easily duplicated, which can be a serious security threat. Implementing modern credential technology would offer current low-frequency users improved security with encrypted technology, customization and enhanced user experience.

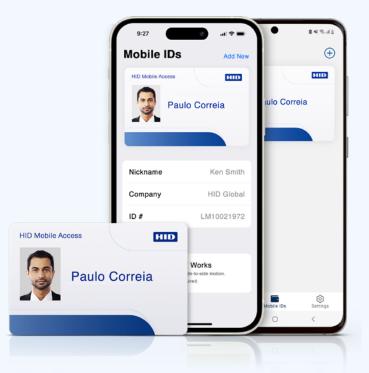
Following 125kHz, QR Code credentials (32%) were the technology most supported by the survey responders. Magnetic stripe and iCLASS credentials at 20% were the following most popular technologies supported in LATAM. MIFARE Classic technology completed the list of the top 5 credential technologies supported by respondents (19%).

In Brazil, the responses were similar, with 125 kHz LF credentials supported by the majority of respondents at 38%, followed by QR Code at 33%, and magnetic stripe at 25%. Both iCLASS and MIFARE Class credentials were supported by 22%.

3

The survey next asked respondents to identify the various physical access control features installed in their systems and the level of active use. Biometric technology was identified as the most functional feature, with 61% noting they actively rely on this technology to manage access control. Photo identification badges followed with 48%, time & attendance management (36%), secure print management (35%), and Logical Access to cloud and web resources (27%).

Participants also responded to the organization's plans for upgrading their systems with active access control features. Mobile access control rose to the top of the list, with 24% indicating their organization planned to upgrade with this technology. Other desirable active features listed by respondents included logical access (23%), security guard tour applications (19%), parking /gate control (18%) and time & attendance (17%).





Respondents in Brazil cited logical access to computer networks and the cloud (72%) as the number one most active feature used to manage access control. Employee Time & Attendance (64%), Photo ID badges (62%), Biometrics technology applications (61%), and Parking/Gate Control (60%) completed the top five active features.

Brazil respondents also listed mobile access control (11%), location tracking of staff and visitors (8%), Biometrics (8%), license plate recognition (7%), and secure print management (6%) as the top priorities for upgrading their security system.

Data from the survey responses show that most of the respondents' companies have systems composed of 3-6 years old components. System components have a longer shelf life, and one would expect their useful life to be greater than software. Today's technology demands that software be refreshed frequently. Survey responses support that idea because many respondents depend on software less than 3 years old.

The survey asked respondents to evaluate how well their current access control system met the organization's needs.

Most respondents in LATAM (55%) and Brazil (52%) believe their existing access control system satisfies the essential requirements of the organization. Also, 29% of the respondents in both LATAM and Brazil say their access control system meets the organization's current requirements. However, both LATAM and Brazil survey responses note that less than 4% of the respondents indicated their existing systems exceed the current and planned needs.

There were four access control system components; the survey asked respondents to age according to the years the components have been installed in their access control systems. The four components were readers, credentials, controllers and software. The table below illustrates the age of each critical component, as noted by the LATAM respondents.

LATAM	Less than 3 years old	3 - 6 years old	Older than 6 years old
Readers	37%	45%	10%
Credentials	32%	28%	24%
Controllers	16%	31%	31%
Software	33%	25%	19%

The table below illustrates the age of each critical component as noted by the Brazil survey respondents.

Brazil	Less than 3 years old	3 - 6 years old	Older than 6 years old
Readers	19%	44%	22%
Credentials	28%	35%	19%
Controllers	24%	39%	22%
Software	33%	31%	24%





The Challenges and Requirements of Upgrading

Regional governments and businesses in LATAM and Brazil face continuous threats to their security systems and battle daily to maintain a safe environment for their employees. People visiting their facilities are also part of the equation, so companies work diligently to ensure a secure and safe experience for all who enter their buildings.

The survey asked respondents to list their top three daily physical access control challenges with round-the-clock threats. Respondents in LATAM said the number one challenge is improving the user experience (22%) by focusing on technology and upgrades that make their systems more convenient. Second, they want an access control system that is easy to manage and administer within their organizations (20%). The third top challenge for companies is protecting their systems and people against security vulnerabilities (14%).

Brazil's top three physical access control challenges were the same but ranked differently. Protecting their systems against threats of security vulnerabilities was listed first (50%), improving the user experience (47%) came next, and making system administration easier was listed third (37%).

Responding to the challenges identified in the previous survey question means that many companies participating in the survey annually prepare a plan for upgrading their access control system. Respondents were asked to share their thoughts about the top three drivers impacting their physical access control system as they prepared their upgrade plans.

In the past 24 months, people worldwide experienced the impact of COVID-19 on their daily lives. Respondents in LATAM talked about their significant efforts to control the spread of COVID-19 in their countries. They said the need for touchless solutions to help control COVID-19 (24%) was their number one driver for upgrading their systems. Improving the user experience (16%) was next, and taking advantage of new technology to improve security (16%) was third.



For Brazil respondents, they identified improving the user experience (44%) as their number one driver, better integration with other enterprise systems (42%) was second, and responding to security breaches within their facility (40%) was third. Implementing touchless solutions in response to COVID-19 was listed as the fourth driver (25%).

Given these responses regarding physical access control challenges and drivers, the survey wanted to know if respondents planned to update or change their current access control systems in 2022. Remarkably, 38% said no. There were no plans in 2022 to upgrade their security solution. Another 34% said they had not yet determined if they would upgrade. But nearly a third of respondents (27%) did say they had plans to upgrade or change their security system in 2022.

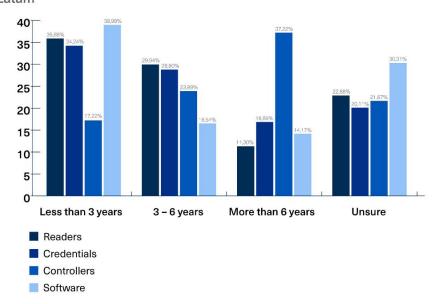
Brazil respondents followed the same path in answering this question: nearly half of the respondents (47%) said they had no plans to upgrade in 2022. The percentage of respondents was higher in Brazil (32%) than in LATAM (27%), saying they intended to upgrade or change their access control system. 21% still had not yet determined if an upgrade would occur in 2022.

Building on nearly one-third of the LATAM and Brazil respondents who said they would upgrade the access control systems, the survey wanted to know the timing of upgrading each of the four critical components in their security setup. In the next three years, 36% said they would upgrade their readers, 34% credentials, 17% controllers, and 39% would upgrade their software.

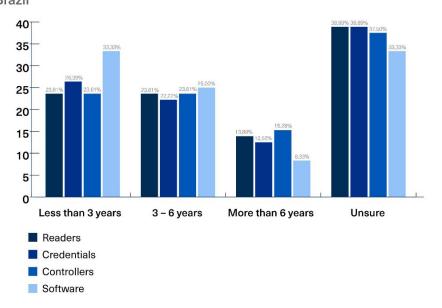
In the next three years, 24% of Brazilian respondents said they would upgrade their readers, 26% credentials, 24% controllers, and 33% software. The table below illustrates the timing for upgrading the four system components within the next 12 months to more than six years.



What is the timing for planned upgrades for each of these components? Latam



What is the timing for planned upgrades for each of these components? Brazil



In LATAM and Brazil, software was selected as the most likely system component to be upgraded. It may be because software can easily be integrated through cloud-based updates without changing hardware. In other situations, a software upgrade may be more budget-friendly when compared to the cost of a hardware upgrade.

Mobile access technology continues to expand its influence over current access control systems installed throughout the world. LATAM and Brazil are taking note of mobile technology's superb capabilities to enhance the user experience, improve system administration and allow customization to meet the organization's needs.

Mobile access has also proven to benefit the bottom line in many cases, offering a solid return on investment (ROI). This financial benefit plays well with C-level executives and security management teams.

The survey wanted to know how LATAM and Brazilian respondents felt about the significance of mobile access technology in their upgrade plans. Over 12% of LATAM and 8% of Brazil respondents said they already have mobile-enabled readers and deployed mobile access credentials. 19% in LATAM and 14% in Brazil will deploy mobile-enabled readers within the next 1-3 years. In addition, 5% of the respondents in LATAM and 3% in Brazil plan to install mobile-enabled readers in the next 3+ years.

From the data, it's interesting that respondents indicate a strong desire to employ mobile access technology. Yet, nearly 36% of LATAM responders said they have no immediate plan to deploy mobile-enabled technology within their systems. The percentage was even higher in Brazil, where 56% of the respondents said there is no upgrade plan involving mobile access technology.

Modern-day physical access control systems are complicated and often require integration with other systems operating within an organization. Security managers making decisions on access control technology and developing plans for upgrading systems require working with the IT department.

The survey asked respondents to identify ways they work with IT departments. Combining technical knowledge and looking for new technologies was identified as the number one strategy for working with IT (40%), followed closely by establishing best practices for the organization with IT (40%). Sharing the budget (6%) was highlighted to illustrate how security management and the IT department must manage budgets together to build a comprehensive system.



In Brazil, the responses were similar, with emphasis placed on establishing security best practices (44%), exploring new technologies together (29%) and sharing a budget (3%). Brazil respondents noted a significant lack of work overlap (24%) versus respondents in LATAM (13%).

In addition to a close partnership with the IT department, security managers must establish a working relationship with other departments operating in their organizations. Managing an integrated physical access control system will involve partnering successfully with other essential departments managing systems that interface with access control.

The survey asked respondents to describe the critical organization departments involved in the decision process to upgrade physical access control. It's not surprising, due to the significant financial impact on the organization's budget, that C-Suite executives had overwhelming final authority (56%) to influence the decision about upgrades to the system. Other departments included physical security (18%), facilities management (16%) and procurement (12%), all of which played a role in approving system upgrades.

Getting to the final solution involved fully consulting with information security (30%), physical security (30%) and the IT department (28%) to determine the process and select the critical solution for the system upgrade.

The survey noted that physical security (25%) took on most of the project cost in LATAM when upgrade solutions involved converging projects with integrated physical and logical access. Respondents said that physical security and IT often shared a technology budget (23%) to pay for upgrades, or the alternative process for financing the upgrade cost became the responsibility of the department that initiated the upgrade ((20%).

Brazil respondents said they fully consulted with information security (43%), IT (39%), and physical security (28%) during the upgrade decision-making process before selecting a final solution. When it came time to choose the solution, the final authority for moving forward came from physical security (21%), C-Suite executives (19%) and the IT department (14%).

Paying for the upgrade project in Brazil fell equally to several departments. Depending on the project scope, 21% of the respondents said that physical security is responsible for covering the upgrading cost. In comparison, 19% said the IT department could co-share the costs. The department initiating the upgrade project (21%) could also be responsible for providing the budget to support updating the access control system.

Revealing the respondents' answers to the previous questions about system upgrades demonstrates a strong desire from security consultants and managers to upgrade their access control systems annually. It raises the question; what is the barrier preventing so many organizations from implementing an upgrade to their access control system?

The answer is provided in the final question of Part 4. What is the biggest obstacle to upgrading your physical access control solution? In LATAM, 43% of respondents said it's cost. The second obstacle was compatibility with legacy systems.

The survey indicated a lack of proper funding to support system upgrades. This obstacle dictates that security consultants/managers do their best with the equipment and budgets they currently manage to maintain a functional system. However, the ongoing lack of system improvements due to minimal operating budgets for upgrading software or hardware eventually leads to system breakdown or failure.

Brazil's respondents to the most significant obstacle question were similar to LATAM. 43% said cost was the number one obstacle to overcome regarding upgrading their access control systems. Lack of compelling ROI (18%) and upgrade compatibility with legacy systems (14%) were additional obstacles to implementing a system upgrade.





The Role of Access Control in Monitoring Building Occupancy

5

Up to this point, the report has focused on survey responses about the current state of access control and the challenges of upgrading physical access control. This next section sheds light on the role of access control in monitoring building occupancy. The survey provides intriguing data to support the importance physical access control plays in helping organizations better manage their buildings and those who work in them.

Since 2019, the global pandemic (COVID-19) impact cannot be overstated when it comes to how today's organizations must manage their workforce and the buildings their employees operate in. Due to the pandemic, workforce patterns and building occupancies have drastically changed. Many companies no longer support a five-day work week where most employees work in corporate-owned buildings. Some companies have moved to a remote workforce while others manage a hybrid approach, where employees work in company offices or from home. We caution readers of this report not to underestimate the positive role access control plays in effectively assisting companies in managing a variety of current workplace options.

The survey's first question related to this section was: "On a scale of 1-10, how valuable is it to have access to the occupancy data for your buildings?" The overwhelming response (100%) from both respondents in LATAM and Brazil was "valuable." Without a doubt, they believe physical access control is an effective tool to assist companies in securely managing building occupancy.

Survey data shows that 38% of organizations can effectively measure the number of employees and visitors plus know their location on-site. 17% replied that they did not know the location or number of employees in their buildings at any given time. A large group of respondents (37%) knew the number of employees and visitors within their walls but not the location. Another portion of respondents said they only knew the location of employees and visitors but did not know the number (8%).



Brazil respondents provided the following answers to the question, "Do you know the number and location of employees or visitors in your buildings?" 21% said yes, I know both the number and location of employees and visitors, 29% said they knew the number of employees and visitors but not the location and 6% said they only knew the location of employees and visitors but not the number. An alarmingly large percentage of Brazil respondents (44%) said they did not know the number or location of the employees and visitors within their buildings.

The data indicates these organizations would benefit by leveraging the capabilities and effectiveness of access control to monitor employee/visitor comings and goings.

We asked respondents to identify the tracking method they used to monitor building occupancy. Electronic rosters for employees received the highest percentage (20%), with 26% using electronic logs to monitor visitors. Not surprisingly, paper rosters were identified for monitoring visitors (20%) and employees (13%).

Time & attendance systems (33%) are rated high for monitoring employees, but the tool is used less to monitor visitors (12%). Access control/badge scanning was selected by 18% of respondents for monitoring both employees and visitors.

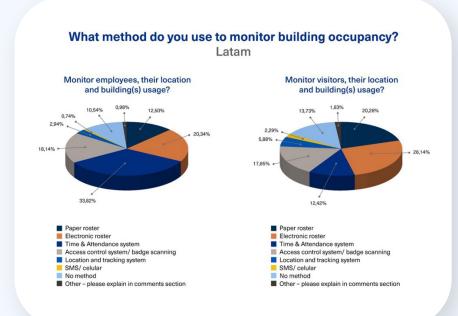
Electronic roster (23%), paper roster (18%), and access control/badge scanning (12%) were rated highest as the methods to account for employees and visitors during emergency conditions. Surprisingly, one-fifth of respondents (20%) replied that they currently have no tracking system to monitor employees or visitors during an emergency.

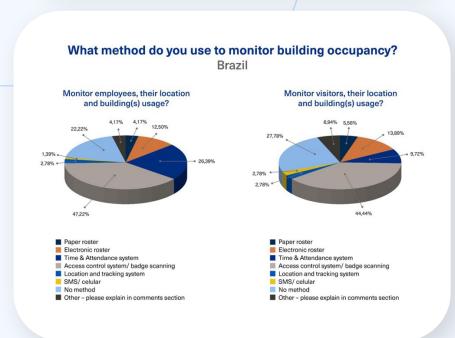
Brazil respondents gave a high percentage to access control/badge scanning as the most prominent tool used to monitor employees and visitors (47% and 44%, respectively). Time & Attendance (26%) was next, followed by electronic roster (13%).

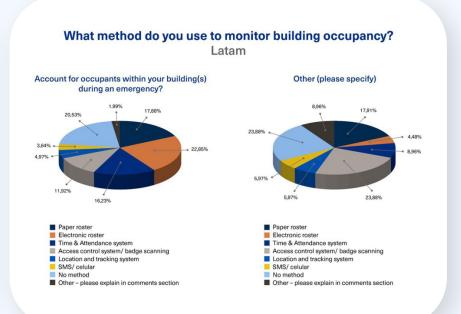
Monitoring employees and visitors during an emergency was best served by access control/badge scanning (35%), electronic roster (10%), and paper roster (6%). Nearly half of the respondents (42%) said there was no method to monitor employees or visitors during an emergency.

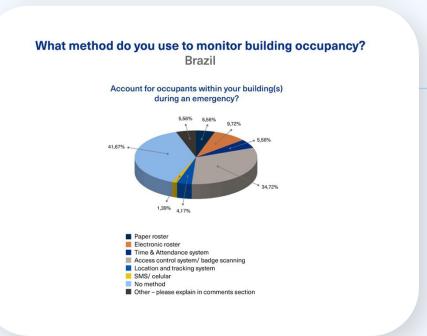


Modern companies
will continue to explore
creating smart buildings
to house their employees
and visitors. Integrated
access control systems
provide benefits to
efficiently manage
facilities and create safe,
secure and sustainable
workplace environments.











Technology and Trends. Looking Ahead.

The last part of this report details responses from access control professionals in LATAM and Brazil to questions related to their physical access control systems. We learned from the respondents about their challenges in maintaining a functional access control system as they battle legacy hardware, complex software, and external security threats and manage inefficient budgets.

In Part 6, we asked the LATAM and Brazil respondents to select the features they require in their systems to make them future-proof and identify the top security challenges threatening the industry in the coming years. The last question in the survey asks respondents to list the top three industry trends they believe will shape the industry in the coming years.

LATAM respondents selected the top three features required in a new access control system. Number one was the ability to add or support new technologies in the future quickly (19%), next was system ease of use (17%), and touchless/contactless capabilities (17%) was third. The desire to include mobile access in their systems was a close fourth (14%).

In Brazil, the top features the users required the most from their new access control systems were ease of use (61%), the ability to add or support new technologies in the future quickly (49%), the easy integration with existing security platforms (46%) and installing mobile access (44%).

We want to elevate the survey responses that show mobile access is prominent in the users' minds going forward as they look for technologies to improve their access control systems. They understand mobile access provides a reliable security tool for their end-users, simplifies managing the system and offers them the opportunity to customize their systems as requirements change.





As they initiate actions to improve their access control systems through technology, survey respondents believe biometrics (25%) will have the most significant impact, followed by touchless/contactless solutions (21%) and integrated physical and logical access control (12%). Mobile access (11%) comes up next, and modern protocols (11%) round out the top five technologies. Security professionals know these technologies make management and evolution of their access control systems better for the organization and the end-user.

The list of top technologies identified by the Brazil respondents that have the most significant impact on the access control systems includes biometrics (45%), integrated physical and logical access control (32%), location service (25%), mobile access (24%) and remote credentials (21%).

When asked to talk about the most significant threat impacting their current access control system, LATAM and Brazil respondents said physical security breaches (29%) are the number one threat. They are also concerned about cybersecurity breaches of their systems (23%) and identity theft (17%).

We complete this report with one final survey question regarding the top three trends shaping the future direction of access control. LATAM respondents pointed to smart buildings (23%), touchless/contactless solutions (21%) and biometrics (14%) as the industry trends directing the future of access control in their countries.

For the respondents in Brazil, they said impactful trends affecting the future of the industry are smart buildings (58%), cloud hosting (46%) and mobile access (39%).

The previous responses complete the 2022 LATAM and Brazil surveys. HID sincerely thanks the access control professionals who took the time to respond to the survey questions.





hidglobal.com

North America: +1 512 776 9000 Toll Free: 1 800 237 7769

Europe, Middle East, Africa: +353 91 506 900

Asia Pacific: +852 3160 9800 Latin America: +52 55 9171-1108

For more global phone numbers click here

© 2023 HID Global Corporation/ASSA ABLOY AB. All rights reserved.

2023-02-14-pacs-state-of-access-control-lam-brazeb-en PLT-06964

Part of ASSA ABLOY