

Study Shows RFID, Auto-ID Firms Will See Early Losses, Potential Growth This Year

To navigate 2020's economy now, and with the eventual reopening of business output, agility and transparency will be critical differentiators, according to a report from [VDC Research](#). That's just one of the findings from the company's new study, "AIDC Solutions and enterprise mobility technologies for 2020." For the purposes of the study, automatic-identification and data-capture (AIDC) technologies comprise data-collection technologies including RFID solutions, as well as barcode scanners, label printers and mobile computing.

The report's results were gathered based on conversations with original equipment manufacturers (OEMs), technology solution providers and, in some cases, end users, according to David Krebs, VDC's executive VP. Feedback was provided to VDC predominantly from OEMs, their partners and customers, he says, adding that responses were more upbeat than expected. "Although short-term disruption is inevitable," Krebs says, "several target market segments are exhibiting resilience in demand for these solutions."



VDC's
David
Krebs

The economy's trajectory has changed drastically for RFID and other technologies during the past few months. While AIDC mobility technologies were experiencing some mixed growth in 2019, everything changed overnight in 2020 with the onset of the COVID-19 pandemic. While the global economy has dropped precipitously, Krebs says, the study's research focus was on the role AIDC will play as the economy adjusts and recovers.

VDC Research, a technology market intelligence and consulting company, provides reports for technology vendors, end users and investors. The firm develops five-year forecasts for the technologies it covers and updates them annually. "However," Krebs states, "the current climate is unprecedented, making even near-term forecasting especially challenging."

The question was whether the global pandemic and resulting economic recession will have long-term effects on AIDC technology, or whether a faster "V-like" rebound will take place later this year, once businesses presumably resume normal activities. Secondarily, the research examines the ways in which the AIDC industry can serve what will be a different market with different objectives than those of 2019. Such differences may include the need for greater agility by manufacturers that must adjust operations or lengthen worker distancing, as well as a better view into logistics, with a goal of improved customer service as consumers increasingly request delivery to homes and offices.

Companies reported that AIDC technology is still being manufactured and delivered with only minor delays. However, the study found, customers that were buying AIDC solutions have been postponing orders and previously planned projects. And while plans are being pushed out or purchase decisions postponed, Krebs says, "We are not seeing significant cancellations of orders and projects."

However, fewer new opportunities are entering the pipeline.

“We came out of it with feedback that certainly most of the retail markets and manufacturing were being significantly impacted,” Krebs says. Among those organizations, the researchers found that “It’s not cancellations—it’s delays.”

The loss being experienced by those using AIDC technologies varies according to industry. Almost eight in 10 manufacturers indicate they will see a financial impact from COVID-19, with an overall drop in product demand of 15 to 20 percent. Similarly, retailers are reporting a 10 to 15 percent decline. At the same time, transportation and logistics, utilities, and the public sector are each expecting little impact or potential growth.

That equates to overall reductions in demand for AIDC solutions of 19.3 percent from industrial and manufacturing, 9.5 percent reduction for retail and 10.8 percent drop for professional services (insurance adjustors, for instance). Other areas, such as healthcare and utilities, will potentially see a growth in AIDC technology demand.

To navigate the year ahead, Krebs says, the research team identified four key areas in which solution providers need to focus: exceptional customer service and support, increased operational agility, improved supply chain efficiency, and address-shared device models to prevent contamination between multiple users. He notes, however, that the drop in new product development will mean a gap in the pipeline.

In the public safety and logistics sector for last mile, such as delivery services, Krebs reports, “We’re still seeing some buoyancy and business as usual in demand,” with enterprise mobility computing for frontline workers. The research outlook errs slightly on the optimistic side, he says, adding, “It assumes an opening in mid to late Q2 and a rebound in Q3.”

Industrial output is one of the hardest-hit segments, ranging from automotive to aerospace and other industrial operations.

The silver lining may be the movement toward Industry 4.0 and the digitization of parts of the manufacturing process. Companies can use auto-ID solutions, such as RFID, to better understand the locations of people and equipment, so as to potentially improve social distancing within a factory setting. That may not affect the AIDC industry early on, Krebs notes, though in the long run, auto-ID solutions could play a significant role in manufacturers' growth.

From a supply chain perspective, the study found, visibility is expected to become increasingly important—even more so than in the past. Consumers have greater expectations for goods to be available as soon as demand arrives, and for those goods to be delivered to specific customers, and auto-ID technologies could play a key role. “That’s not just the case in identifying products,” Krebs says, but also can be complimented with sensing conditions that could affect product quality. RFID tags with temperature, vibration or moisture sensors, for instance, could help to identify problems in the supply chain.

Retailers will also be seeking technology-based solutions to ensure they can respond to product demand in a much more agile way, Krebs says. In fact, VDC found that some large projects, with rollouts of mobile computing to service providers, are now being launched. “We’re still seeing investment in that last mile of delivery to customers,” he states, and the quarantine may be prompting new shifts in food purchasing that will remain after the pandemic has passed.

While online sales of garments and household goods have been on the rise, grocery items have been slower to follow suit. At present, many consumers are ordering food online and expecting delivery at their door. The change could become permanent. “Is this the jolt that groceries needed?” to provide delivery of products to homes or curbside, Krebs posits.

Healthcare demand is initially reduced since healthcare

providers do not have the time or resources to focus on new technologies. However, the demand for disinfectable handheld scanners is rising, and some companies are selling more handheld devices this year than last year as a result of COVID-19. "These guys are under extreme pressure" to serve the flow of patients, Krebs says. As such, technology companies may benefit from providing them with solutions in the future that can help with specimen management, as well as asset or patient tracking.

In addition, there may be growth for mobile device manufacturers as companies order a dedicated device for each worker, thereby reducing the potential transmission of disease when tools are shared. Companies are showing an interest in providing one handheld device per employee, the study indicates.

Ultimately, one lesson from the pandemic may be the need for greater agility and visibility to ensure companies can quickly respond to improve safety and provide the required products. "No one is prepared for this kind of thing," Krebs says, "but there are degrees of ability to respond more efficiency. It has to do with how agile your operation is and how transparent."

VDC developed its findings, in part, by comparing its data against other economic downfalls, such as the 2008 Great Recession recovery. Krebs sees reason to be hopeful, given the conditions around the 2020 downfall. "One thing we kept coming back to is that the underlying economy was sound going into this," he states. As the economy went into a very rapid shutdown, "it did so from a moderately strong standpoint." Based on that understanding, he says, the VDC analysis focused on whether there will be a V-style rebound.

Analysts do not expect the economy or the AIDC industry to rebound as quickly as it shut down, however. "We do see Q2 will be rough," Krebs says, "and there's reason to expect a

significant rebound in Q3.” The caveat is Q4, he adds. That may depend on how well the COVID-19 threat has been addressed by that time. “We still don’t have an answer to that.” The company plans to put together an annual and five-year forecast during the next few months.