MIDWEST CARWASH ASSOCIATION



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FROM MONEY BELTS TO AI AND AUTONOMY

By Ken Allmacher, Director, MCA

ver the last five decades, the car wash industry has seen a lot of advancement in technology, especially when it comes to car wash controllers and point-of-sale (POS) systems.

≥ In the 1970s the POS system was a person walking around with a money belt and coin dispenser. If there was a cash register, it was used primarily just to hold money. The controller was basically an on/off switch to operate the tunnel equipment.

➤ The 1980s era brought with it advancements in tunnel controller technology. Conveyors used magnets to generate pulses and magnetic loops were used to read car lengths, allowing for precise turning on and off the dispensing arches and other equipment.

> Toward the end of the 1980s and the beginning of the 1990s, PCs were introduced as tunnel controllers. This was a great innovation, as the tunnel controller was also acting as a POS system. Sales could be tracked by salespeople and labor costs could be tracked as well.

In the 2000s, car wash operators moved from loyalty punch cards and paper wash certificates to plastic barcoded cards, improving security and enabling the start of storing and tracking customer data. Wireless handheld devices allowed attendants to walk the parking lot and accept all forms of payment, including credit cards. At the end of the 2000s, radio frequency identification technology was starting to be employed, although it was in its infancy.

➡ From 2010 to 2019, there was an explosion of advancement in POS technology. POS systems were now loosely integrated with phone apps and social media sites. The car wash could create customer profiles and have a direct link to the customer. The introduction of license plate readers cameras happened, as well.

➤ In the 2020s, POS technology has continued to improve. LPR cameras are getting better. Managing customer data is more prevalent. POS systems have more information, which allows an operator to manage daily operations more efficiently and to do some long-term strategic planning.

The future is still in the process of being defined, but AI will be prevalent especially when it comes to car washes and their equipment and operations. Future controller/POS systems will be able to communicate directly with a vehicle's infotainment system because auto manufacturers will embed unique IDs into each vehicle. This will enable car wash systems to recognize an autonomous vehicle and instruct it to load itself into the car wash.

Also, there will be apps that will communicate with the car wash and the vehicle, for example to schedule days for the car to take itself to the car wash. Using AI, the controller will create work schedules for the employees and order chemicals/inventory as needed. AI will manage lights-out operations, meaning there will be no need to have lights on where people are not present, saving energy. AI will also regulate heat to optimal temperatures when people are not present. AI could also open and close the site accordingly. And when all cars are required to be autonomous, there will be no need for a conveyor, as an autonomous vehicle will be able to move with precision through the car wash, and not bump into the vehicle

in front of it.