Business Lessons Learned as a Result of COVID-19

Best Practices for Vending & Coffee Business

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Contents

Introduction

Many vending operators are gathering data from their vending machines and payment systems manually for years and thus have collected a considerable amount of statistical data. You might think that based on this data; they would be able to predict what will happen on their machines. So why would they even need a telemetry solution capable of real-time information, except for gathering technical errors?

Real-time data is a smart way of doing vending. Telemetry is great for getting the data, but what you do with it is called smart vending. What this means is that data should be used in creating cost savings algorithms, predicting future sales, and flagging unwanted activities on the machines in real-time.

These are just some of the reasons why you need the new modern online way of doing business, vs offline as in traditional vending. Asides from the regular activities, there are always unpredictable situations that occur, such as the COVID-19 pandemic. In situations like these, all that we know flies out the window. Being agile is the most important thing and adapting to change daily becomes your new modus operandi. In high stressful situations like this, with low access to the information, you need all the help you can get, which leads us again to real-time data and other digital improvements the new era of vending has brought us.

Challenges during COVID-19

Think about what makes a machine profitable? Location, product selection? Sure, these are all important factors in determining the volume of sales, but what makes a machine profitable is more day-to-day factors, such as:

- **Machine Availability** – is the machine available to use or experiencing downtime?
- **Machine Functionality** – is the machine working properly? E.g., is the cash system working, are spirals working properly, etc.
- **Product Availability** – does the machine carry the products people are interested in?
- **Product Stock** – does the machine carry enough products that users are looking for?
- **Product Delivery** – can the users purchase the product by using all types of payments?

In normal circumstances, not having enough product or the right product, machine downtime, or errors, happens often, especially if you are not utilizing the power of real-time data. Of course, with having real-time monitoring enabled, the process is optimized, and extra costs are avoided.
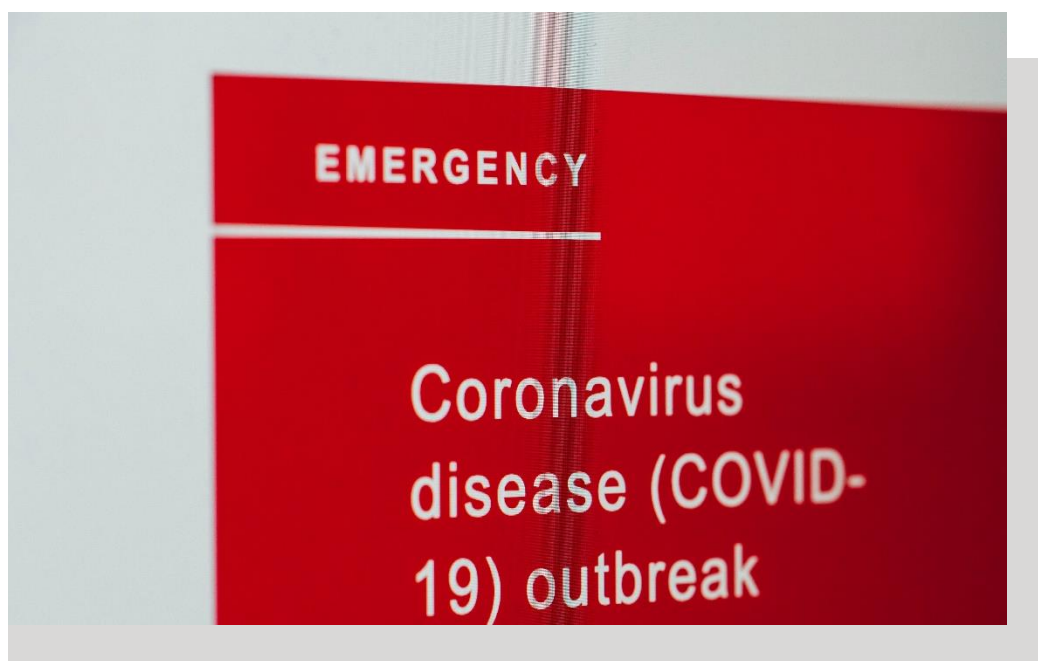
Even if you are using traditional vending you can still be profitable, although you are experiencing some losses due to the previously mentioned opportunities for improvement that you might not be taking advantage of. This is what happens in normal circumstances

when the world is not facing a major crisis like the COVID-19 pandemic right now. The current circumstances are, for a while now, far from normal. And many businesses are unfortunately sinking because of it.

There are so many things that are beyond our control. Offices and public places getting closed, curfews, and other restrictions could affect the vending operators greatly, especially if they only focused on one segment of the business, e.g., closed environments, such as an office. Not being able to expose your machine to customers will unmistakably reflect on the revenue. **An average operator can experience a drop of up to 99%**, due to the fewer machines being in regular rotation. To keep up with the operations costs that won't stop accumulating, the remaining machines must take over the burden, of the lost revenue that the unused machines are accumulating. Based on the 2020 EVA report 58% of operators saw a reduction in turnover in April 2020, of between 61-99% compared to the same period in 2019.[1] Multiplied by the 9 months or a whole year, some businesses may indeed, go out of business. It's even reported that only one in five suppliers expect growth in turnover by Spring 2021, compared to 2019.[2]

As sad as it is, **there is a silver lining**. There are changes in customer behavior that are happening, as well as openness to digitalization in the usually very traditional realm of vending. Utilizing real-time telemetry can lessen the burden that lower consumption is currently imposing. Read more about the challenges and opportunities COVID-19 brought, in the next chapters.

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[1] https://www.vending-europe.eu/eva-publishes-report-on-the-covid-19-impact-on-vending-ocs/
[2] https://www.vending-europe.eu/eva-publishes-report-on-the-covid-19-impact-on-vending-ocs/

Best practices to respond to COVID19 challenges

Make Sure Machines are Available

How would you know if your machine is working or not in the traditional mode of operation? You would not. In the best-case scenario, somebody would call, you would go to your car and visit a machine that you are suspecting is facing a problem. The person that called, probably was not the first customer that tried using the machine. Maybe she was the 51st, meaning 50 sales lost beforehand.

Think about the special case, like a COVID-19 pandemic, when fewer people are using machines. It can be a couple of days before one realizes that a machine is down. And how long was it out? You will never know unless you pull out the EVA DTS data, what is reacting too late to a situation that could've been prevented, by reacting as soon as the error was flagged.

To get the status of your machine park in real-time, companies use real-time monitoring solutions, such as Televend Cloud. What real-time monitoring does is it allows you to know the real-time status of each of your machines. So, if a machine is down, you'll know immediately. If there is an error on the machine or the cash system is not working properly, again, you get notified instantly, which helps you resolve the problem in the shortest time.

Track Sales in Real-Time

One of the first benefits of real-time data is the ability to know how each machine is selling at any point in time. Some locations might be more successful than others, and some seasons might be more fruitful than others. But sometimes there are unexpected situations, like the COVID-19 pandemic, which messes up all our plans, and any previously patterned behavior becomes unpredictable and useless.

Knowing which machine sells more and which products are more popular, allows better planning. Calculating the most profitable machines to visit tomorrow optimizes the routes and allows operators to supply the machines that need a filling only. The result is always up-to-date stock in the machine, allowing for more sales. If there is a demand, supply should always be available. Especially when one depends on a lower number of machines that are still getting enough visits to generate revenue. Small optimization like this can be a lifesaver in situations like a pandemic. Especially if combined. The result may decide between a sink or swim scenario for a vending operator.

Get Better Visibility to React Faster

When the planet is facing big health and economic crisis such as COVID-19, companies that react quickly adapt themselves to the impact smoother than others. Usually, the ones that adapt faster, are the ones that use modern digital solutions that provide good visibility of what is happening to their business.

Depending on different factors, demand for vending products can rise or fall. We see how during the COVID-19 crisis in some areas, sales of vending machines drastically reduced, but in some other areas, they increased. A system with real-time data will give you instant visibility on this unusual behavior - to catch on to the positive, but also ride out the negative trends.

Which areas are still selling good, which not? Knowing this, one can easily adjust her planning and implement savings. Otherwise, you would need to visit every machine to inspect the situation, which is additional costs.

Get Notified When Stocks are Low

The same goes for products that go fast. In traditional vending, fillers, bring all different things in their van, without knowing what needs to be filled. Let's say Cola drinks are selling fast, but a filler doesn't have enough bottles to fill in all of the spirals. What he'll probably do is fill some Fanta or other same costing drink into what was supposed to be Cola spiral. In our case, Cola sells 100%, and Fanta sells only 40%. You get the math, if there were 20 Cola's, we'd sell all of them. Now with only having 10, we'll sell 10 Cola's, and 4 Fanta's, losing the revenue of other 6 Cola drinks. Multiply by x machines, days, or spirals, and it becomes obvious that having an adequate filling, generates more revenue for the vending operator.

Knowing not only our sales results but also what improves sells, helps vending operators to plan tomorrow's activities better, such as route planning or warehouse management. Planning is a crucial part of any business, and especially for a business that is experiencing difficulties in a market, such as the COVID crisis. As mentioned previously, any optimization one can make to their operations, during the times when sales are restricted, will directly determine how well a business runs.

Plan Routes in Dynamic Way

There aren't a one size fits all rule of which says what to do when the pandemic hits. But being in one in 2020, thought us, that the most important thing is to be agile, and responsive to change. The Vending industry is lucky enough to be able to "work" when the restrictions hit but isn't lucky enough that it works without people. So, in case of restrictions we've seen with COVID-19, the most important thing is to manage your costs.

One of the biggest costs is unnecessary machine visits. To plan for routes better, some vending management systems, developed a dynamic routing algorithm that predicts the necessary visits and products needed for each machine.

Not everyone will be keen on changes in the operations but changing the routing to a more optimized workflow will lead to savings which are crucial in the post-pandemic situation. In the end, the results will be beneficial for each member of the team.

For operations, having real-time data allows optimizing entire routing workflow, regardless of whether the operator is pre-kitting in the warehouse, or uses picking from the van where the vehicle is a moving warehouse or a hybrid model.

One of the hardest people to convince to change are probably Field Operators, fillers, and technicians. If a vehicle is a moving warehouse, real-time data will help optimize picking from the van. In this mode, fillers will have rea-time data about the stock in the vending machine they are about to visit. They can check what to bring to the machine, before entering the building, or vending machine area. This is eliminating a double visit to the machines, and hard manual entries in handheld, saving a significant amount of time to replenish the machine and put in half of the physical effort for fillers.
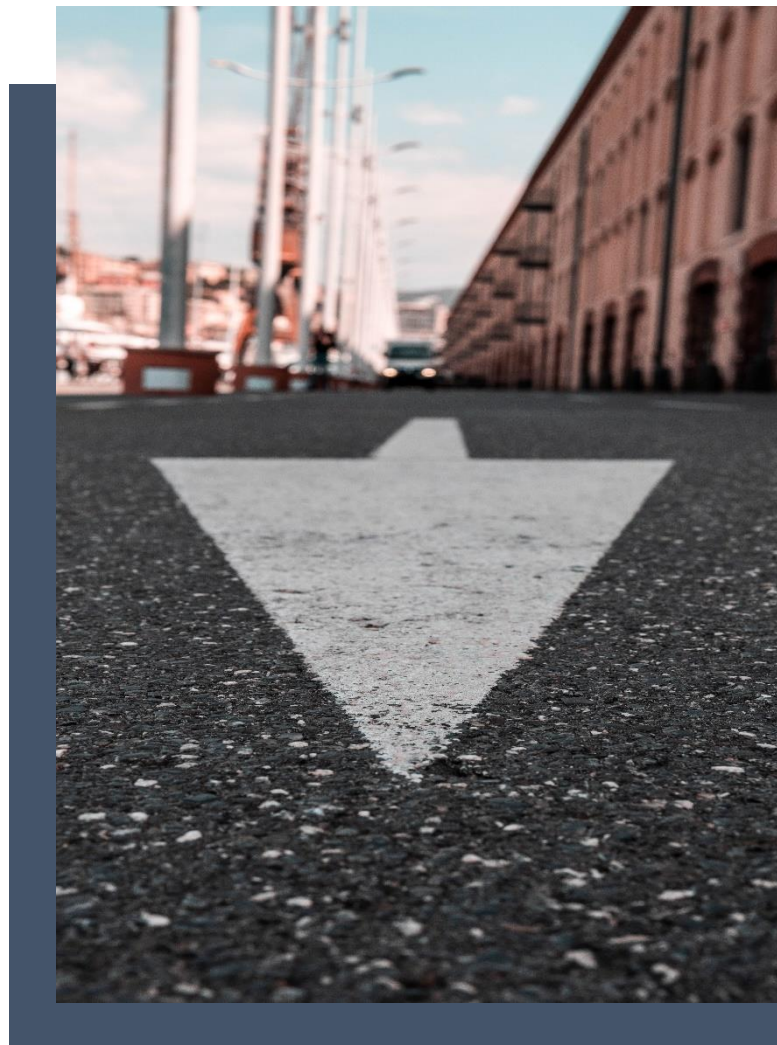
If an operator is using prekitting, their fillers will know what routes they need to visit every day, and warehouse workers will know what to pack in advance considering the stock they have available. With real-time data, operators are essentially enabling just in time management, resulting in the cut of costs, so desperately needed when a crisis is dooming on us. This type of management will reduce the stock in the warehouse and vehicle because you know exactly at any moment in time, what is missing in the machines and what is available in the warehouse. This means operators can pack lighter and fill the machine with the exact products that are missing. And on the other end, the warehouse can plan their supply better, based on the sales predictions of a vendor's machine park.

By using real-time data, you are switching to dynamic planning, instead of static. Static planning is a result of slow data flow and lack of visibility of what is happening on the machines. Fixed planning schedules are the biggest enemy of a business, because they increase workload, are prone to errors, and subsequently lead to loss of sales. Real-time data allows you to move to dynamic planning, automate it, and reap the benefits, so very needed in a critical situation, like the one we are currently facing.

Opportunities that came out of COVID-19

Newfound Importance of Vending

When the biggest problem humanity is facing is, in fact, the threat of human contact, the benefits of unattended businesses are obvious. No contact with cashiers or workers as in standard stores. The products consumed are individually wrapped, and nobody else has touched them before you, other than the fillers who are using all necessary protection measures.

> *Automatic Vending Association says Vending Machines are a Safe Option[5]*

United States' Federal Emergency Management Agency (FEMA) reports on some of the best practices observed in the vending industry, such as:

- Hospital cafeterias are closed to limit COVID-19 spread but vending machines are providing a contactless food purchasing option by selling plastic jars of fresh foods like salads and wraps in hospitals in New York City and Chicago. [4]
- Poland's two largest cities have installed street vending machines selling face masks, gloves, and sanitizers.[5]
- As a result of requirements for passengers to cover their faces, the city of Bangkok has installed cloth mask vending machines in several train stations.[6]
- Some vending machines allow for contactless payment through near-field communication (NFC), where consumers can tap their phones on a payment terminal to complete transactions. [7]

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[3] https://www.twinfm.com/article/vending-machines-the-future-of-post-covid-catering
[4] https://www.fema.gov/sites/default/files/2020-07/fema_covid_bp_contactless-delivery-and-vending.pdf
[5] https://www.fema.gov/sites/default/files/2020-07/fema_covid_bp_contactless-delivery-and-vending.pdf
[6] https://www.fema.gov/sites/default/files/2020-07/fema_covid_bp_contactless-delivery-and-vending.pdf
[7] https://www.fema.gov/sites/default/files/2020-07/fema_covid_bp_contactless-delivery-and-vending.pdf

Street vending is back in Bejing, and there might be many more countries to follow. Based on reports from Asia News there are even talks of expansion on more cities in the upcoming months, due to the positive impact on spending and employment. [8]

Another report states a growing number of businesses in Japan are turning to vending machines to sell their products as the COVID-19 pandemic lingers on.[9]

Fact of the matter is, vending came back in focus, because of it's unique nature: low maintenance and convenience. 70% of operators consider that the crisis will lead to changes in consumption behavior at vending machines, states EVA in their July's 2020 report. [10] Combining the new focus on vending with the changes in consumer behavior, vending could be on the rise in the upcoming years. Although a negative situation, COVID-19, served as an accelerator to many positive improvements.

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[8] http://www.asianews.it/news-en/Fighting-the-effects-of-COVID-19:-street-vending-is-back-in-Beijing-51332.html

[9] https://www.nippon.com/en/news/ntv20200918001/

[10] https://www.vending-europe.eu/eva-publishes-report-on-the-covid-19-impact-on-vending-ocs/

Expand Product Selection With PPE

As with everything in life, with challenges, come opportunities. The increase in the use of Personal Protective Equipment (PPE) has risen tremendously in the last few months. The WHO requested the production to increase by 40% to accommodate the new demands.[11] It is reported that this market will generate a revenue of $93.5 million by 2026.[12] We've seen the need for PPE in public transportation, schools, offices, stores, and pretty much every public place. Since masks became mandatory for any kind of activity during these challenging times, it is important to keep up with the demand and make protective equipment broadly available.

Hard situations may bring some new opportunities as well. Expanding one's product selection to include face masks, single-use gloves, or bottles of hand sanitizer, may help ride off the COVID-19 wave more easily. Not to mention that after the crisis the world just had, and the consequences we suffered, wearing preventive equipment, may become a standard when you are under the weather, as it already is in some Asian countries.

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[11]https://www.who.int/news/item/03-03-2020-shortage-of-personal-protective-equipment-endangering-health-workers-worldwide#:~:text=The%20World%20Health%20Organization%20has,coronavirus%20and%20other%20infectious%20diseases.

[12] https://www.prnewswire.com/news-releases/increase-in-demand-for-ppe-products-owing-to-rise-in-covid-19-cases-to-impel-the-growth-of-global-personal-protective-equipment-market-301060682.html

Cashless Payments

In recent years, cashless payments have become almost a standard, however, some vending operators did not follow the trend. Due to the lack of knowledge or lack of effort, there were still machines available that only supported coins or banknotes, as a payment option. As more and more people don't rely on cash anymore, and they prefer paying via their card, phone, or even smartwatch, the potential revenue lost increased too. And pandemic is not a situation, where one needs extra revenue lost. According to the EVA report, 60% of suppliers see higher demand for cashless payment.[13]

Planet Vending reports how Coronavirus might mark the real beginning of the end of cash and announces digital payments so-called COVID winners.[14]

The benefits of cashless vending are obvious, supporting more payment options means less sales lost. Vending machines are often used in hurry, and having your cash out counting it in front of the machine, doesn't fit the bill anymore in the modern world. Not to mention, machines can be used by tourists or other types of visitors, that do not necessarily bring local currency with them.

Touchless Mobile-First Solution

Mobile-first experience is one of the answers to the current pandemic.[15] The pandemic accelerated some technical improvements, such as touchless vending. Touchless vending is completely touch-free, from selection to payment, meaning the entire process is done via smartphone. Multiple vendor solutions are now in focus, due to the increasing need for touchless transactions.

Cashless payments were suggested to be used in all stores, and for all transactions, when that is possible, however touchless vending brings it to a higher level, as there isn't a need to even touch the machine.

We've seen that companies that transform their business around their customers, grow more sustainably and build a business that will last for the long haul. Interacting with customers and following their needs of a completely touch-free transaction, might be the future of vending. Mobile transactions are necessarily linked to a mobile app, which allows vending operators to interact with these customers better than ever, which also affects how they decide to run their business in the feature. Consumers are more open to leaving their feedback and wishes, on an app, and vendors even negative feedback can have a positive impact. E.g., negative feedback on product selection, and lack of vegan options, may push the vendors to enrich their offering, which will in the long run bring more health-conscious users, and higher sales.

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[13] https://www.vending-europe.eu/eva-publishes-report-on-the-covid-19-impact-on-vending-ocs/
[14] https://www.planet-vending.com/vending-insight-48-is-covid-19-the-beginning-of-the-end-for-cash-vending/
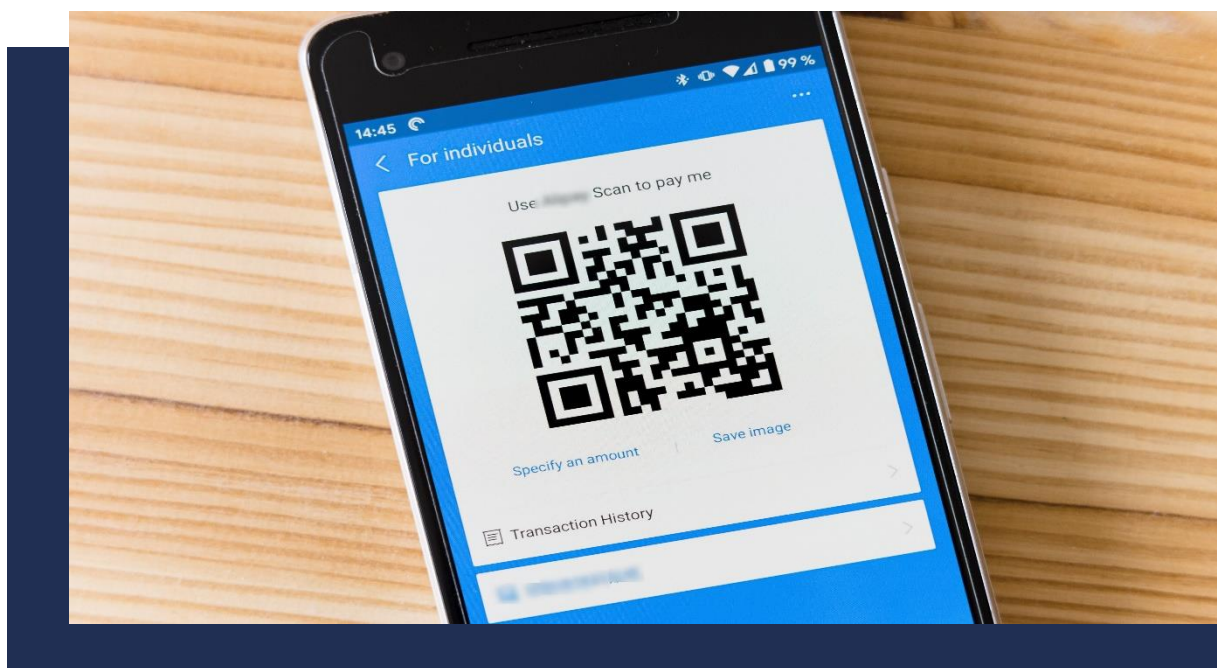[15] https://www.twinfm.com/article/vending-machines-the-future-of-post-covid-catering

A Light at The End of The Tunnel

It is also reported that the global vending machine market size is set to grow at a CAGR of over 11% throughout the forecast period of 2020-2024, according to the latest report by Technavio.[16]

Although the hits that vending was dealt with in 2020 were real, and in some cases very hard, there is a light at the end of the tunnel. The changes that technology brought, and an obvious fact that digital advancements are needed, might result in a boom in the upcoming years, after the pandemic.

AP News reports: „The *increasing adoption of vending machines to improve customer shopping experience is one of the key factors driving vending machine market growth. Vending machines do not require the intervention of salespeople, support staff, and other executives. Therefore, vending machines prove to be a one-time investment that enables cost savings with 24/7 operations throughout the year.*"[17]

What the future hold in store for us, is yet to be seen, but what is sure is that there will not be going back to cash payments. Cashless options will prevail in the future. Furthermore, vending may become more available, and the age-old debate of allowing vending machines in the streets might get some new arguments for, after all.

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[16]https://apnews.com/press-release/business-wire/virus-outbreak-technology-business-retail-and-wholesale-lung-disease-0f6a587e686243049dda9c7e7227c955

[17] https://apnews.com/press-release/business-wire/virus-outbreak-technology-business-retail-and-wholesale-lung-disease-0f6a587e686243049dda9c7e7227c955

Conclusion

Everything we know about vending faced a challenge in the COVID-19 age. How to adapt to the changes in the industry and the lack of consumption brought on by government restrictions.

To adapt to any changes, the first one needs to have all the information, which real-time telemetry provides. In a pandemic like situation, it's important to stay agile, and adaptive to change, making a smart but fast-paced decision. Real-time data, allows us to do that, making the most of our business, especially in hard and unexpected situations like this one.

Some opportunities arise from a problematic situation. Pandemic served as an accelerator to drive, vending, traditionally not open to change the industry, to embrace the benefits of digitalization, such as cashless vending, touchless transactions, and real-time data.

With COVID-19, or similar unexpected external factors we may face in the future, there is a lot of uncertainty. It is hard to take control over your business, needed to keep you afloat.

As a result, you need to be more agile and have full visibility in your operations. By adapting to the new technological advancements, such as real-time telemetry, cashless payments, and touchless vending, you are on a good way to adapt to the COVID-19 or any other crisis and come out as a winner.

About Televend

This Whitepaper is brough to you by Televend, the leading IoT solution provider for unattended business. Televend Platform is a unique solution for Smart Vending, consisting out of Televend Cloud, Vending Management System and Televend Wallet, combined mobile and web solution for customer engagement and cashless payment.

Televend Cloud

Televend Cloud is a modern Vending Management System (VMS) that relies solely on real-time data. It is a single platform that solves all your vending needs. Televend reports on machine status in real-time, keeps track of sales data, and provides accurate forecasts for the feature. The tools boost a smart routing algorithm that saves you a lot of time and money when planning out your on-field operations. Use our own filed staff app, to optimize your workflow even further, and simplify your teams' daily work.

Televend Wallet

Televend Wallet is a combination of mobile app for cashless and touch free payment, and an office web app which allows you to engage with your customers, through different actions. Wallet allows you to manage users and track their activity, create promotions, vouchers, and other deals your customer will appreciate.

Visit televend.eu to learn more about the Televend Platform or contact us to learn more.

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