

A close-up, low-angle shot of a person's profile, looking out over a dark, hazy landscape at dusk or dawn. The person is wearing a dark watch with a light-colored dial and a ring on their finger. The background is a soft, out-of-focus horizon line under a pale sky. The overall mood is contemplative and serene.

wearonize

Overcoming the obstacles for payment-enabled passive wearables



Wait? There are different types of wearables?

Wearable technology options (“wearables”) have grown rapidly in the past decade as the world has become more connected. In addition to the increasing pace of modern life and the desire for style options that are convenient enough to meet that pace, the recent pandemic has highlighted a desire for personal safety in our day-to-day interactions.

Wearables meet those needs with an ever-increasing variety of form factors and functions.

Many people view wearables as a broad category with devices differentiated primarily by form factor. However, when it comes to payment-enabled wearables, it’s more helpful to discuss differentiation based on the nature of the payment technology inside.

Active Wearables

(wearables containing active payment technology), such as smartwatches or fitness trackers, pair to a phone via Bluetooth or have direct Global System for Mobile Communications (GSM) connectivity for tasks like making calls, playing media, receiving notifications, and more.

With such an array of activity they require an onboard battery. The secure payment chip is also powered by the battery of the wearable, which puts reliability at risk if the battery is not charged when you need to make a payment.

Passive Wearables

(wearables containing passive payment technology), are typically fashion- or design-oriented wristbands, bracelets, rings, other accessories, or clothing that are enhanced with singular functionality, like making contactless payments.

Their relative simplicity means they do not require a battery to support Bluetooth or GSM connections and thus don’t have the same reliability or replacement concerns as active wearables.

The Challenge: How to payment-enable a passive wearable?!

There's another big difference between active and passive wearables:
how to get a payment card loaded to a wearable for contactless payments.

This process is also referred to as provisioning a payment card token
to the secure payment chip inside the wearable (tokenization).

Tokenization replaces a card holder's sensitive payment card data
with unique identifiers that contain the essential information
for payment without compromising its security.

1 With active wearables you can use the device's Bluetooth or GSM connectivity to load a payment card. This makes payment setup fast, easy, and able to be done anywhere.

2 Because passive wearables do not use Bluetooth or GSM connections, **their only option for loading a payment card is the same near-field communication (NFC) technology used in chip cards and mobile phones at the point of sale (PoS).** This means the wearable device needs to be in proximity to an NFC reader and, because of the technology's limitations, typically no more than 2 cm (~ 0,8 inch) away.

There are potential workarounds. Most modern phones have built-in NFC readers, so in the near future consumers could load payment cards by holding them to their phones. However, iPhones currently exclude the use of NFC for payment purposes, so this option would only be viable for Android phone users.

In the case of Swatch, each of their stores has a SwatchPAY! Box, which is an NFC reader a consumer can use to load a payment card to his/her newly purchased watch. There's also a Bluetooth chip included to connect to the box

via a mobile phone. As this requires a broad store presence, most wearable manufacturers or distributors can't support this kind of setup.

And what about wearables purchased online?

The cost advantage and convenience benefits of passive wearables would appear to be compromised by the inconvenience of loading a payment card. But with the global wearables market expected to reach \$51.6B by 2022, this means significant unrealized potential.

The wearonize payment-enabling solution for passive wearables

In order for the passive wearable tokenization process to be feasible, it has to be convenient for the producer and customer, as well as scalable to easily apply to a range of products.

What makes the wearonize offering so innovative is the ecosystem that supports the transaction from the customer's initial purchase (1) to their use of the wearable to make a payment (7).

In addition to freeing up resources and reducing customer PoS frustration, the wearonize solution enables producers to capitalize on a range of wearables that, for many, were too challenging for payment-enablement before now. As the payment wearables landscape continues to change, wearonize has demonstrated it is uniquely equipped to adapt to meet the evolving needs of both producers and consumers.

The customer purchases his/her passive payment wearable online.

1

2

The wearonize eCommerce application programming interface (API) is integrated into the producer's website so the customer is seamlessly transported to the wearonize eCommerce Cloud.

The customer enters his/her payment card details.

3

4

The wearonize eCommerce cloud requests tokenization of the consumer's payment card via Visa or Mastercard.

At the producer's warehouse or logistics center, wearonize special-purpose provisioning machines load the resulting payment card token securely and efficiently to the passive wearable the user has purchased.

5

6

Alternatively, wearonize can set up a fulfillment center that interested producers or issuers can use to outsource the management and logistics of the online ordering and fulfillment process.

When the customer receives his/her device, s/he activates it using the wearonize app and it's ready to go!

7

In a nutshell: Our benefits for producers

Wearables of all types offer significant opportunities to extend a business's reach to both disengaged and brand new customers.

To that end, the chart on the right is intended only to highlight key characteristics, not to advocate for either category of wearable payment technology.

Pros & Cons of active payment wearables

1. The payment-enablement process is relatively easy.
2. They offer increased flexibility for financial institutions.
3. They are a source for potential new revenue.
4. They provide increased opportunities for communication/customer touchpoints.
5. They are a new source for customer spending insights.
6. They can aid customer loyalty incentive programs.

... of passive payment wearables

1. They offer increased flexibility for financial institutions.
2. They are a source for potential new revenue.
3. They provide an opportunity to expand the customer base.
4. They are a new source for customer spending insights.
5. They can aid customer loyalty incentive programs.
6. They appeal to cost-conscious consumer segments.

1. Cost of these wearables might be prohibitive to a broader customer base.
2. It requires significant resources to enter the market (e.g., payment networks solution approvals, EMVCo. certifications*, supply chain, distribution).
3. Need to offer significant transparency to address security and privacy concerns.

1. It requires significant resources to enter the market (e.g., payment networks solution approvals, EMVCo.certifications, supply chain, distribution).
2. To date, there have been limited options for tokenization.
3. Need to offer significant transparency to address security and privacy concerns.

* EMVCo: EMV contactless Level 1 certification ensures that the device (also: terminal) meets the lower level electromagnetic and communication protocol requirements. It includes operating distance tests where reference cards are placed at a set of predefined positions in proximity to the device's antenna.

In a nutshell: Our benefits for consumers

Consumers choose wearable form factors and functionality that reflect their specific tastes and needs. With that in mind, the chart on the right is intended only to highlight key characteristics, not to advocate for either category of wearable payment technology.

Pros & Cons of Active Payment Wearables

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none">1. They can aid or provide incentive for increased productivity.2. They can aid or provide incentive for increased fitness levels.3. They can provide personalized tracking, entertainment, and info. experiences for the user.4. They can conduct contactless transactions (payments, keycard access, etc.).5. They offer a lower financial risk than carrying other payment forms. | <ol style="list-style-type: none">1. They can be cost-prohibitive for a user.2. They offer few fashion-forward options in favor of the onboard tech.3. They require batteries that need regular charging.4. Device life expectancy may be shortened by the onboard battery.5. They gather significant amounts of data, risking information overload and/or security and privacy concerns for the user. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

... Pros and Cons of Passive Payment Wearables

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none">1. They are generally affordable for the most casual of users.2. They can conduct contactless transactions (payments, keycard access, etc.).3. They are discreet and stylish - offering a broad range of fashion accessories.4. They offer the same protection as normal contactless payment cards. | <ol style="list-style-type: none">1. To date, there have been limited options for tokenization. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|

wearonize' offer in a nutshell ...

1. Payment wearables that can be branded per an organization or institution's needs.
2. Wallet app that allows customers to review transactions and manage multiple wearables.
3. Additional security through the ability to suspend the payment card token through app immediately blocking all attempted transaction.
5. Enablement during the online ordering process so wearables arrive ready to go.
6. Automated distribution system to ship orders without manual intervention or labor.
7. Mastercard and Visa solution approvals and certification in addition to agreements with banks worldwide.
8. Pre-certified payment chip inlays
9. Secure tokenization of payment cards to different wearable form factors.
10. White-label product catalog for expansion into market.
11. Integrated tokenization technology that can be hosted on your website for a seamless customer experience.

Curious?
**Then just write
us some lines.**

info@wearonize.com