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AND ADMINISTRATIVE
SCIENCES-2019/2

EDITORS

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THE ADVANTAGES AND DISADVANTAGES OF QR CODE AS A MARKETING TOOL

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Introduction

Quick Response codes (QR), are one the few Internet and iconic symbols or fads that have survived the constantly changing Internet domain. In spite of the QR code's invention back in 1994, its popularity grew as a prominent matrix barcode within the last decade as a machine-readable optical label. Invented by a Japanese subsidiary company Denso Wave that produces automatic identification products, its initial purpose was to track vehicles during manufacturing and to allow high-speed component scanning. But since this invention and initial purpose, QR codes have expanded into broader uses for commercial tracking and convenient applications for mobile phone users, also being known as mobile tagging. QR codes can be used to display text messages or simply text to users with the ability to add features such as virtual cards as a contact method to the user's device. The QR contact card may also be used as a wireless network to compose emails or related messaging. QR tools are now prevalent with available generators and various software or online tools.

History and Evolution

Denso Wave was a Toyota subsidiary that developed QR codes for quick fast decoding speeds. The quick responses in which assisted the manufacturing process is what provided the namesake Quick Response codes. QR codes were somewhat evolved from bar codes in which they were scanned. The innovation of bar codes especially with their impressive and speedy scanning processes, have popularized coding, scanning accuracy, and multiple functionality. The convenience of bar coding improved information storage with increased capacity, variation, and only required smaller printing areas. Hence the bar coding system is what catapulted the innovation of QR codes when involving information storage. QR codes had the ability to include increased amounts of digits and modify the layout to include multiple code readouts.

However with every form of evolutionary breakthroughs and improvements, some drawbacks were created as well. More storage required more area coverage and imposed less space on the surface. Increase in printing space also generated higher costs of printing. When larger prints were scanned, the complications of scanning increases printing areas also arose. Demands for storage capacity, functionality and

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accuracy needed a response to the negative factors associated with bar code technology development. QR codes were invented to counteract the negative effects by implementing a 2D or two-dimensional code. QR invention drew widespread attention and developments in technology to improve storage capacity.

General and Popular Uses of QR Code

QR codes have several and diverse applications. As they were originally invented to track inventory on production lines and in storage warehouses, they are still predominantly used for these applications, but in more advanced processes. In order to use QR codes, a QR code scanning application is required. Promotional material frequently uses QR codes and draws customers to a webpage or landing page promoting specific products or services (Lane, 2016). The purpose of coding on promotional material is to reduce the tedious task of typing a URL or searching endlessly for a link. A QR code can bring a YouTube video, LinkedIn page or any website that provides more information than a physical copy of a flyer or advertisement.

If Internet navigators are searching for specific apps, they will spot a QR code that brings them directly to that specific app in the App Store. The direct navigation to an app eliminates the need to endlessly search for apps through an app store to locate the app. Markets utilize the incentive to quickly locate an app and promote it as a trial run for its customers to test the marketing ability and effectiveness.

Business cards have become a branding place for QR codes. Many business cards nowadays have QR codes on the backs with links directing people to business profiles, particularly LinkedIn profiles. The effectiveness has not yet been confirmed. But with the growing trend of QR codes on business cards, many business people recommend having QR codes on a business card. For effective promotion, QR codes can be combined with LinkedIn and a mobile wallet to create a business card directly connected to LinkedIn.

For flight and airline convenience, QR codes are becoming more popular with frequent flyers. Most airlines have already introduced mobile tickets and use QR codes to redeem them. Many tedious steps such as dealing directly with travel agents or commuting to a travel agency can be avoided and save time by using a mobile phone or watch. With the requirements of presenting a ticket prior to a flight, customers can conveniently scan their tickets from various locations to verify the authenticity of their tickets.

Use of QR Code in Specific Marketing and Events

With QR codes going and found beyond shopping and consumer goods, they have found their way into magazines, brochures, and all sorts of mobile phones. Rather than just being mere displays of bar codes, QR codes can be used to organize or attend events by use of digital display. A device's camera can be act as a scanner to read QR codes, and contain an app converting an image into readily and usable information by reading the code. Sensibly QR codes are widely used by mobile phones and similar devices for obtain quick and easy information on specific subjects, as most of the latest smartphones are developed with built-in QR reader apps installed.

QR codes can support events and event organization from marketing and planning through an event itself. For example, printed matter can become outdated quickly. Printed material such as brochures and flyers were designed and printed before the event planning is completed to include scheduling, speakers, or vendor lists. By providing a QR code, the attendees gain easier access to the latest and updated information. Last minute information can be added to provide attendees with last-minute announcements in case events change or require additional preparation. As a safeguard, many events are subject to changes due to unforeseen circumstances, and the attendees can be informed to avoid any sudden surprises, which would otherwise disappoint the attendees (Dorman, 2019).

If promoting an event with billboards or public transportation vehicles, including a QR code allows interested people to scan for more information. The advertisement itself behaves as an incentive to intrigue people to gain further information and the QR code draws people onto the advertisement site. The QR code allows people to check in quicker and the event organizer can increase the pace when the QR codes are hard copies or electronic tickets. Each attendee registered for a specific event has a unique QR code for the purpose of tracking the rightful people with invitations or tickets to avoid any ticket fraud or prevent use of older codes not authentic to the event.

Participant badges are popular apps used by business people for exchanging data on event organizations. This is similar to an online forum or social business app to inform businesses with upcoming events and can exchange data or opinions of an event. With participant badges, the QR code can facilitate networking at business-to-business (B2B) and similar events. At times when events are cancelled or are relocating to another location, the QR code can inform business participants to prevent them from arriving at the previous location without the knowledge of any event updates.

Examples of QR Code Use in Marketing

QR codes have become user-friendlier over the years, where previously many users were unable to understand, let alone utilize QR codes. Supposedly the introduction of QR codes was not properly introduced, except for exposing them on popular products without providing specific instructions on how to use them. Although QR codes are obtaining measurable sets of customers, some companies continue to broadcast their importance to marketing entrants. Instagram and Angry Birds are known to be discerning and catchy to observers. Each of their respective QR codes navigate users toward the app download while encouraging ad creativity and providing self-explanatory instructions on how to download apps.

Greeting cards have evolved into online or virtual musical domains for users to apply them conveniently instead of purchasing expensive cards. QR images and playlists can be combined as arbitrarily needed. If users have a compatible and specific app on their mobile phones, the bar codes can be scanned to begin the playlist (Lucas, 2017). Music spans in almost every category users may access for whichever interests they wish to select. Previously the greeting cards were only coupled with the music provided. Nowadays, users may customize their greeting card with a music selection by scanning the QR code.

Locations and objects, which had to be previously physically visited, may have their information accessed through QR codes. Old paintings for example can be scanned for information about the specifications and history about the paintings. This ability is available for viewing to paintings in a museum in Poland where each of the paintings can have their QR codes scanned and abundant information about them can be revealed. In addition to viewing the paintings themselves, visitors can scan the QR codes and discover the true nature and story about the painter and the reasons why the painting exists. The information expressed in this manner provided livelihood for tourists and maintain attraction to tourist sites with information.

Almost any form of marketing had been cleverly manipulated to entice a higher customer base, especially by adding more personalization. Some franchise and supply chain stores during special or festive holidays or occasions such as Christmas or Valentine' Day. QR codes can be used as tags to write personalized messages to a recipient. As in the case of playlists, QR codes can be scanned with personalized messages in association to the musical message. If gifts are being purchased online and sent to a recipient, the QR codes can be used to pinpoint the recipient and the code will recognize the recipient's information to ensure the gift is being sent to the correct person. This method of QR scanning helps reduce cases of lost mail or delivery failure.

Other Uses In Brand Marketing and Industries

Furthermore, the entertainment industry is a key player when using QR codes. The QR codes provide access to users interested in the entertainment industry for the latest news and updates. For music, concerts, film festivals, and venues, QR codes provide list building and lead captures for users to interact and share information and opinions. Information sharing is an efficient method to review certain events in the entertainment industry for people to stay connected. Social media sites have landing pages enabling users to link to websites when they are scanned. Event marketers use scanning to drive traffic to events for users to view and make purchases for easier customer use. Event organizers can easily achieve extra traffic whether to entice customers to purchase tickets or to leave their contact information (i.e. email) for future notifications. Call to actions can be used to learn more about events the organizers or venues plan to promote in the future.

Entertainment and event venues utilize QR codes for customer service to make quick access to hotline services. They can be used to send pretext messages and emails drafted and ready to send with the recipient as well as the subject line already in place. The only action the customer needs to do is to hit the send button. Pre-sale promotions for music festivals and events often draw the most customer attention. Hence music event organizers appeal to customers by allowing them to link to discount coupons for a limited period of time. The QR codes can be used to combine with the coupon's advertising slogan or tagline that prompts customers to scan their QR codes. As long as the discount coupons are available, the QR scanning will continue to function. Sometimes when tickets to events are incredibly popular and selling quickly, venue and event organizers can continue the discount coupons by adding extra discounted tickets on a first-come and first-serve basis by QR scanning.

Similar to subscribing by conventional email, QR codes can be linked to signing up to newsletters for event organizers and marketers to gather customer information. What is additionally efficient about QR-based newsletters is distributing a survey with questionnaires to identify what customers want and need for future events and how future events can be improved (Patel, 2019). Surveys can function as lead generation keeping frequent customers and perhaps venues can develop preferred customer programs. Customers can continue being updated about the availability of tickets and related products. QR codes provide options on whether customers want to make the selection of notifications. Alternatively, venues and event organizers may link QR codes to feedback forms to render tracking and understanding customer behavior.

QR codes can be deemed as a social visibility tool where they are linked to social media profiles. QR codes drive users to social media to gain more attention and reviews of various venues and entertainment streams where customers with similar interests can share their views with others. Sometime venues and music festival reviews vary depending on the musical theme and the venue itself. A poorly managed venue will surely bring negative reviews to a concert. A renowned venue may invite a renowned musician. But if the performance is lower than customers' satisfaction, the performer may receive negative reviews over the venue. QR codes have their usages shared by virtual transfer through social media or cloud computing.

QR Code Use in Music Marketing

Although QR codes for music has been somewhat aforementioned, the following literature will be more extensive and detailed. For some users, offline marketing is more effective than online marketing. Music fans do not always simply register online. They often have their mobile phones and use them wherever there is a convenient time. Seemingly music fans also use their phones more frequently with entertainment-related themes instead of taking pictures. Music fans use their mobile phones in any convenient place to use QR codes for music marketing. Several viable areas for QR codes can be used for music marketing, whether by a band, venue, or even music fans themselves.

Tour flyers and band posters are usually the foregrounds of music events. They display the band appearance, the tour date and the venue. The QR codes can be scanned to provide the latest details of the band and the band members. The codes can be scanned to obtain information not always easily found online. To promote their tours or their images, bands often arrange to have merch tables at concerts or at local retailers. Not all merchandise is always readily available at concerts. Some specialized merchandise is only available through auctions. QR code scanning is a useful tool to obtain rare band merchandise. Otherwise, QR code scanning is available to provide updates on the merchandise that will be available at the concert venue (O'Neill, 2019). It saves music fans the trouble of waiting for long periods of time in line-ups to merch tables. Fans could discover ahead of time what merchandise is available.

Email sign-up lists have become a long-term and advantageous tool to keep informed about any music festivals or following a specific band. Traditionally, e-mails were simply means to contact people if they cannot be contacted by phone. All that was required was a quick line to send for an intended recipient. But emails needed to be more functional than simply sending messages. Emails evolved into electronic validation systems meaning emails often have to include ways to verify identities and ensure

the message was sent to the rightful recipients to gain admission into a music venue. Following purchase, an email confirmation is sent with a ticket and a QR code to be scanned when the ticket is presented at the music event. This is also to verify and reassure music fans that they have made the purchase are entitled to their seats and locations, if provided, at the music event. For music events, a host of data scanned through QR codes is needed to be included in a confined space.

Music fans have the benefits of QR codes at hand because they allow information to be stored in different locations, which actually provide more free space for graphics or other elements to be added by branding. For popular venues with a high volume of people as is generally with music events, codes allow for streamline admission to identify guests with a straightforward scan. Guests attending music events may use their phones instead of using paper tickets, which has become a means of going paperless. The use of smart phones over printed tickets is significantly increasing and saves the trouble of printing. Some QR promotions include upgrades to achieve more streamlined access to updates and events. Facebook is one of the most prominent social media sites that promotes or announces a music concert arriving. When venues plan for musical performances, Facebook somehow frequently becomes one of the first social media outlets to reveal the information. Venues add Facebook QR codes to tickets as an expedient way to inform music fans to follow developments about a band before they arrive at the venue. Alternatively, for example, if the band cancels a scheduled tour or evening from the venue, and the venue is searching for replacement band, fans may scan QR codes for suggestions. Although band suggestions may be on short notice, QR codes may be scanned for the bands to receive notifications of the demands for them to accept replacement offers to a specific venue.

The 2011 Pepsi Music Festival in Argentina is an example fans provided to share their information and experiences. Each of the tickets was labeled by QR codes allowing fans to immediately share videos and images of various musical acts. Some venues or music events offer contests to win tickets. For most fans, keeping track of the duration during the contest is impossible. But a scan allows contestants to check their status to discover whether they have won the contest. Music event organizers deploy QR codes in multiple locations and add them to email lists or virtual tickets. By scanning the event code, fans may instantly receive more information about where the various venues have taken place, the means to commute to the venue, and the time of the vents. Some venues are complex with multiple events, and event organizers can plan events to occur more smoothly.

One major purpose to QR code scanning is to track many loyal customers or preferred customers that frequent music venues. Hence

offering a premium back to music fans provides incentives for fans to return to the venues or buy tickets. Adding coupon QR codes to tickets may provide fans with future discounts or customer first-choice incentives. Some venues offer pre-sale incentives to loyal customers and allow them to make first selections when attempting to buy tickets. For example, some sections in renowned venues have sections only for customers who carry American Express Cards or MasterCard's over customers who do not have these options of payments. QR code scans can provide such preferred customers with pre-sale incentives and a seating plan where customers may select their preferred seating.

The Advantages and Disadvantages of QR Code in Marketing

QR codes can be observed with the best of practices or the worst of practices depending on the implementation. Similarly with any advanced tool, QR codes experience pitfalls and promises, strengths and weaknesses. The use of QR codes can depend on the campaign they are being scanned for. A compatible campaign can enhance QR strengths while the wrong campaign can render QR codes susceptible to mistakes.

Advantages

One aspect about QR codes is their versatility. They can be added to virtually any tangible or intangible product such as advertising, magazine pages to billboards, music posters, and entertainment events. In actual practice, any physical object can display an interaction point for viewers to be taken toward a digital experience or accomplish a digital task. QR codes can be used to bypass many steps of a transaction and carry messages or payments for music events. Online access to used to be by computer only, where it has been mostly, if not all replaced by mobile tactics. If music fans need to take immediate action, QR code scanning is available on their mobile phones instead of searching for a computer where time is of the essence to make a purchase.

QR code scanning is known to be one of the pioneers of seamlessly linking online and offline domains for music events. Marketers can drive merchandise and tickets online to offline sales or use an offline campaign to promote musical venues by an app or digital vessel. As with the example of purchasing tickets in a timely manner, QR code scanning provides more prompt updates as to when tickets are available for sale. Evidently mobile phones require an optimized app or landing page. But the QR codes can enable updates for upgrades needed to utilize the latest apps. This can draw customer attention at the exact point where they have expressed interest in an ad or video and prompt them to sign up to the email list. Signing up to the email list provides a noncommittal channel to offer updates without the pressure of selling customers products they do have any interest for.

Web analytics functions positively in tandem with QR codes for various placements, and marketers can gain valuable information about the status of a music event campaign. The analytics coupled with QR codes can determine whether certain aspects of a music campaign works. The analysis provides a better forecast of cost-effectiveness. In other words, the cost is virtually zero, but the value is immense to music fans.

The first impression with QR codes is its appearance and lack of color. But advancement in apps and similar accessible tools can enhance their prominence. QR code images can be illustrated with images, logos and many other forms of related artwork. They are either recognized by the QR code to convey the right information or are ignored due to error correction. A specific aspect of a QR image may convey a specific message, but interprets the remaining code on the QR image. Having various scans on the same image provides a wide variety of creative uses in music marketing and advertising. QR codes can be illustrated as visual marketing or be part of a larger visual such as carrying a brand logo or colors.

Disadvantages

Unfortunately along with advantages, there also disadvantages of QR code scanning despite its versatility and usefulness. Music fans and consumers may wish to attempt other types of methods to connect online or offline domains with mobile phones. While this section will acknowledge the problems with QR code scanning, QR codes will also be compared to other methods of improvement.

Near Field Communication (NFC) enables contactless payments when music fans are purchasing tickets. Several mobile or smartphone models have this type of capability used by apps for payments. NFC has several uses as QR codes such as providing product information, activating promotions, or launching a digital experience. In some locations around the world where QR codes have a negative reputation, NFC is faster and provides better experience than QR code scanning, in spite of NFC and QR scanning used in conjunction with each other. But many locations still do not have Wi-Fi or similar enabling technology. Hence NFC has the ability to provide for access where QR scanning does not. Even if music merch tables are available at concert venues, not having Wi-Fi available will render QR code scanning useless. Compared with NFC, QR codes may be difficult to scan, and NFC does not need a full signal for access. Additionally excess information on a QR image requires extra pixels.

Augmented reality (AR) joins the physical world with the digital world. Several brands have already experimented with innovative augmented reality adding interactive dimensions to the rest of the world. With augmented reality, it does not require downloading special readers to interact with the physical world. Additionally QR code readers are not

exactly on all mobile phones or related mobile operating systems. Augmented reality creates more interactive experiences providing user-friendliness and immersive access. In spite of production costs for augmented reality being high, it generated a more positive return on investment especially if the desired result is reached. Its potential traverses users beyond online pages or locations to overlaying the physical world with digital features. Hence if music fans are searching for music tours and dates, augmented reality provides the recognized reading and connection between the physical and digital world, rendering a better marketing tool.

In regions where specific apps are unavailable, utilizing the QR code adoption requires downloading separate apps prior to access in order to scan codes. The scans can interfere with momentary QR code interactions if users do not already have a code reader installed. Therefore, users either need to wait for an app to download or until a new app is available. If the app is available, there is the tedious task of waiting for the app to download especially in areas of poor connectivity. Waiting for extended periods of time renders users to abort the download. However with the assistance of Google Chrome by adding the native QR code support into various apps, connectivity improved. Yet the majority of users have Android phones, and downloading the apps through Google Chrome do still pose a problem especially for new apps.

In spite of QR code scanning improving significantly since its popularity grew in marketing campaigns, scanning still requires precise physical manipulation and unobstructed view of the code being scanned. In addition the time to scan can again be a tedious and time-consuming task. QR codes require being placed in visible locations and can negate prominent locations such as billboards, railway or subway platforms, moving vehicles, and quick-changing displays. Marketers may have the means of deriving ingenious methods of QR code scanning, but they are not always promising and not always user-friendly.

The use of QR codes have also faded in popularity because of poor implementation, lack of native support, and with limited mobile web experience. However, as of the current year (2019), QR codes are to be possibly re-launched by all of the aforementioned learning errors, yet the enthusiasm of utilizing them is not as expected. QR codes are still reputed as being slow scanning, inconvenient, and had poor user experience. Hence, NFC and AR may be dominating the mobile web world. Perhaps QR codes will still be available for marketing campaigns if they can at least be brought up to the criteria as NFC and AR.

Conclusion: The Future QR Code

QR being the most commonplace and most popular scanning code is actually a fallacy. Most technological-savvy users and marketers recognize

QR codes, but do not utilize them as frequently as expected. Even if the number of QR users increases, not many users following the entertainment industry are aware of them, let alone use them. But the potential uses of QR codes are immense for Wi-Fi connections, code payments, digital or virtual stores or website URLs. Except the heavy use is not well known enough. One of the crucial setbacks on QR codes is the fact that they are actually a one-way exchange and transaction (Sammonds, 2019). They can be printed on any advertising board and adhesive label with incredible benefits, but they cannot collect information from the actual person using them. In the modern-day data-driven age in marketing, lacking the ability to acquire information from the actual user is a drastic setback. The reason is QR code users are demonstrating active interest in branding and campaigning and shall be reflected in the form of data collection. QR codes usage for uploading landing pages would be beneficial, but would also hinder the experience to the number of users.

Hence so as not to generate the same errors as those who have the mistaken idea that QR codes were the latest trend, the development of NFC identifier tags resolves the major problems with QR codes. An application shall be required to read them when accessed. In order to achieve the same result of opening apps to access and read the QR codes, NFC users are enabled on their mobile phones to tap the device against the NFC tag. NFC tags have demonstrated tighter security, flexibility, and convenience more than QR codes. However NFC tags improve in the future, it appears unlikely that QR codes will revive themselves. It is not because QR codes are becoming less efficient than NFC performance, but because a multitude of users are unaware of QR codes or simply ignore their significant uses. But respondents of brands using QR codes have displayed higher interests in purchasing areas than using NFC tags (Kavanagh, 2018). The statistics of respondents in search engines, television ads, and word-of-mouth information may be less than 50 percent in each category compared to NFC, but it is still more promising for QR codes to be utilized for convenience. Just because another method of scanning may prove to be more advanced than QR code scanning, it does not necessarily imply it will surpass QR codes. With apps relying on testing new platform features, utilizing QR codes renders easier usage for people.

References

- Dorman, C. *QR Codes – Growth in Use Across Industries*. Qfuse. Reached at: Apr 23, 2019. <https://qfuse.com/blog/qr-codes-growth-in-use-across-industries/>
- Kavanagh, D. *Will QR Codes Make a Comeback in 2019?* Global Web Index. Dec 17, 2018. <https://blog.globalwebindex.com/trends/qr-codes-2019/>

- Lane, B. *How Are QR Codes Used and What is Their Future?* Pass Kit. Reached at: Mar 23, 2019. <https://blog.passkit.com/how-are-qr-codes-used-and-what-is-there-future/>
- Lucas. *How to Use QR Codes to Promote Your Event.* uQR.me. Jun 30, 2017. <https://uqr.me/blog/qr-code-event-marketing/>
- O'Neill, M. *What is a QR Code and How Does it Work?* Small Business Trends. Reached at: Feb. 12, 2019. <https://smallbiztrends.com/2015/05/what-is-a-qr-code.html>
- Patel, N. *5 Genius Examples of QR Codes in Marketing.* NeilPatel. Reached at: May 27, 2019. <https://neilpatel.com/blog/genius-qr-codes/>
- Sammonds, C. *What is the Future of QR Codes?* Innovation Enterprise. Jan. 17, 2018. <https://channels.theinnovationenterprise.com/articles/what-is-the-future-of-qr-codes>