A Case Study: How Are The Multimedia Technology Being used by The Casino Gaming Industry

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Abstract

The purpose of this paper is to take a look at the current use of multimedia technology in the casino gaming industry. In Las Vegas, there are many things competing for attention, and capturing viewers' interests cannot be effectively accomplished with static posters or flyers at the front desk. What is at stake is billions of dollars in revenue. So understanding the use of multimedia technology in the pursuit of that revenue is a must. Las Vegas has developed some very innovative ways for the use of multimedia technologies that the rest of the business and medical world will soon adapt. Vegas recently faces major competition from Maco for the international business. Maintaining a high level of customer service is paramount in keeping its customer base. .

Key Words: Multimedia, Telemedicine, Mobile Applications, WebCasting

I. INTRODUCTION

This paper looks at IS theory of Media richness and how it is used in the casino gaming industry. The first assumption of this theory is that organizations process information to reduce uncertainty and equivocality (Daft and Lengel 1986). Uncertainty is defined by Galbraith (1977) as "the difference between the amount of information required to perform the task and the amount of information already possessed by the organization." Equivocality is defined as the ambiguity of the task, caused by conflicting interpretations about a group situation or environment. Therefore, when equivocality is high, an individual does not know what questions to ask and when uncertainty is high the group knows the question but lacks the necessary information. In conclusion, as information increases, uncertainty and equivocality decrease.

The second assumption of this theory is commonly used media in organizations works better for certain tasks than others. Specifically, Daft and Lengel (1984) concluded that written media was preferred for unequivocal messages while face-to-face media was preferred for messages containing equivocality. Daft, Lengel, and Trevino (1987) present a media richness hierarchy which incorporates four media classifications; face-to-face, telephone, addressed documents, and unaddressed documents. The richness of each media is based on four criteria; feedback, multiple cues, language variety, and personal focus. The richest communication medium is face-to-face meetings followed by telephone, e-mail, and memos and letters (Rice and Shook 1990).

II. RESEARCH QUESTION ONE: HOW IS THE CASINO GAMING INDUSTRY UTILIZING MULTIMEDIA TECHNOLOGY TO ENHANCE, TRACK AND MEET CUSTOMER EXPECTATIONS.

2.1. MULTIMEDIA DEVICES

In order to discuss multimedia I first need to define what is. "The primary characteristic of a multimedia system is the use of more than one kind of media to deliver content and functionality. Web and desktop computing programs can both involve multimedia components".[1] The term multimedia communications generally refers to the use of text, images, audio, video, animation in any combination to relay a message. Multimedia devices generally refers to the hardware/software that enables the use of multimedia communications.

Multimedia devices in most people's mind really consist of audio and video combination devices. One of the keys to multimedia technology are speakers. Speakers are one of the most common output devices used with computer systems. They can come in all types of shapes and forms. The can range in size from just 1mm to muti-speaker THX theater systems. The can be built in or external to electronic devices such as a PC, Mac, tablet or phone. Price on speaker systems can vary from just a few dollars to muti-million dollar high end systems attached to home theater systems. Speakers transform electronic signals into waves that the human ear perceives as sound. "In order to translate an electrical signal into an audible sound, speakers contain an electromagnet: a metal coil which creates a magnetic field when an electric current flows through it. This coil behaves much like a normal (permanent) magnet, with one particularly handy property: reversing the direction of the current in the coil flips the poles of the magnet. The frequency of the vibrations governs the pitch of the sound produced, and their amplitude affects the volume – turn your stereo up high enough and you might even be able to see the diaphragm covering the cone move. [2]

2.2. VIDEO DISPLAYS

Video displays in the last several years have made leaps and bounds in quality. Computer monitor manufactures are continuously seeking ways to improve liquid crystal display (LCD) and cathode ray tube (CTR) monitors. Some of the technological achievements include LCDs' response time and color clarity, making them faster and able to handle a wide range of computing work such as editing, gaming and design. The monitors vary in durability, power consumption and safety measures.

2.3. UTILIZING TECHNOLOGY

So how do we utilize this technology in business today? One of the best industries for using multi-media technology is the resort industry. Michelle DiTondo the senior VP of human resources, for the MGM grand hotel in Los Vegas, had this to say about how multimedia

technology is being used in the entertainment resort business: "Multimedia does everything from graphic design for electronic signage to development of new apps for mobile technology. They put the menus and wine lists for our restaurants onto iPads. We've developed mobile apps for all our properties so you can make reservations but also tell us, 'I'm at the pool,' and we can send you specials for the pool bar." [12] She goes on to say that "Another area of technology is database marketing. Five years ago, we just sent out e-mail blasts to the millions of people who signed up for our loyalty club. Now we're getting smarter about it. We know when you were here last, where you stayed, what you did, and when you're coming again, so the marketing is much more targeted. We have our own television channel providing in-room service. We have directors, cameramen, and script writers who do our commercials. Video production is all they do". So through the use of multimedia MGM is trying to create a unique individualized experience for each of its resort guests.

Hotel management spends a lot of time thinking about the guest experience and how to maximize enjoyment during conventions and meetings. One of the key elements of success revolves around communication – presenting the right information to guests at the right time in a format that catches guests' attention. In Las Vegas, there are many things competing for attention, and capturing viewers' interests cannot be effectively accomplished with static posters or flyers at the front desk. MGM Resorts addressed many of its communications challenges by installing a digital signage network, using flat-panel LCD displays from NEC Display Solutions. " In all, there are roughly 700 NEC large-screen displays deployed throughout MGM's properties that range in size from 32" to 82". This allows flexible content to be scheduled throughout the hotel with riveting live video in colors bold enough to hold viewer interest. The in-house multimedia services team is responsible for planning the digital signage deployments, installing hardware and software, and managing day-to day content creation and scheduling. The team relies on Apple hardware and software, including the Mac Mini for players connected to the displays, and a special Mac version of Four Winds software to schedule content on the network of displays". [10]

2.4. SOCIAL MEDIA

MGM uses social media and multimedia technology to recruit potential employees as well. "MGM Resorts International has had great success with social media. Our college relations program has a really active Facebook page called MGM Resorts International College Programs.

We try to show students what the MAP is like, so we have current associate's blog about their experiences and share pictures and information". The MGM also uses multimedia technology for its internal web sites for training and development. In a 24x7 operation one of the hardest things to do is to reach all of your employees to explain job benefits and corporate communications. The mutimedia team does POD casts in order to reach all of its employees.

A multimedia-oriented Facebook page has many advantages over a more simplistic and text-based page of the same type. The audience of Facebook subscribers, and users of the Internet in general, require a variety of stimuli to maintain interest in your page. A potential customer will stick around longer when there are many entry points. Having a Facebook page that is multimedia is having a Facebook page that is more likely to further a company's goals.

INC.com's article on How To US Multimedia for Business Marketing states that "Multimedia, such as mobile marketing, livecasting and podcasting, photo, video and file sharing, can spread the word about your company and help build brand awareness in a very unique and powerful way. This particular type of social media also has the ability to go viral quickly….. When you think about multimedia platforms and what that's all about, it's about being able to communicate mass marketing messages to the device of choice on demand". Web sites like twitter, Facebook, Pinterest and flicker enable people to share products, web sites and video with their friends.

2.5. SHARING MULTIMEDIA

Resorts can share multimedia platforms about their location. They can show a potential guest a 360 degree view of their hotel room that they are thinking about staying in. According to CitizenM hotels the use this type of multimedia to "to illustrate the behavioral aspects of service operations. For example, one sequence is filmed using the 'Blair Witch Project' approach, as if the visit and experience is seen through the eyes of a guest who arrives at the hotel from the airport, checks in, goes to the room, looks around the room, visits the lounge, has breakfast and checks out. Its purpose is to provide visual signals and stimulants to convey an experience that written narrative cannot". The idea is that if the potential guest can picture themselves there they are more likely to book a room. or in the case of a company their conference center.

IMAP Enterprises, a Vancouver BC based application development company developed a solution for the MGM Grand Hotel & Casino in Las Vegas. They developed IMAP's 3D Interactive Hotel and Conference Facility

Floor Plan & Mapping solution. IMAP's multimedia application provides the MGM Grand with the unique ability to showcase its extensive conference facilities, hotel services, features, casino area and sports arena online and through stand-alone presentations. The interactivity of IMAP's application allows for customers to quickly select and view all of the amenities that MGM Grand has to offer.

One of the best ways to reach your audience is by sharing videos over the web by webcasting. "Webcasting is essentially broadcasting a video or media file over the Internet using streaming media technology, which can be distributed to many simultaneous viewers at once. Done the right way, webcasts, also called video podcasts, vblogs, video casting or Web shows, can be effective promotional tools. "It's a cool opportunity to take people behind the scenes of a business,"[9] says Dina Kaplan, co-founder and COO of blip.tv, a four-year-old Internet TV network. Her network airs video podcasts from hundreds of companies as diverse as the New York City Ballet to the crafter website Etsy, which broadcasts online classes. "It's been interesting to watch, especially in the last year, how many businesses have created Web shows to promote their product or gain exposure for principals," according to Kaplan. Encouraging visitors to post videos of their experiences in a positive manor can be a great source of free advertising. It just like the rest of social media employees the principle of the rule of 10. In that 1 person that has a good or bad experience will tell other people.

INC has identified that multimedia for a mobile market is the biggest expansion area. "There are 4.1 billion cellular connections worldwide, and with the prevalence of smart phones, the concept of browsing the Web from a mobile phone has gone mainstream. Consider this: Mobile phone carriers are sitting atop a trove of data – not just your name, address, and, of course, phone number but also credit card information, who your friends are, and where you're located at this very moment. Even with privacy regulations, more of this information will become available to marketers as phones are used more like little PCs, creating opportunities for highly targeted ads and other marketing breakthroughs".[8]

2. 6. KIOSKS

Another way that resorts are using multimedia technologies are kiosks. "Kiosks are a natural for conference centers or hotels that typically host several events simultaneously. Using touch screens, visitors can choose their conference and then choose the particular session they're interested in. The kiosks can provide not only the session details such as speakers, time, and room, but also provide step-by-step directions to the event from

the visitors' current location. Kiosks can also be programmed to display flight status information, providing helpful information to anyone anticipating the arrival of colleagues or checking on their own outbound flights". [5] Restaurants can use multimedia kiosks to promote their specials and entice people inside. When the kiosk is stationed away from the restaurant in the case of resorts or places like the MGM it could even be the casino portion of the property. The restaurant can also allow visitors to make reservations at the kiosk to ensure that there's a table available when they're ready to eat.

2.7. OTHER EQUIPMENT

Hotels and resorts are even looking at equipment that can be used in a person's room to increase a multimedia experience without leaving the room. High end TV screens, changeable room ambiance, biometric guest recognition, and electronic check-in facilities are some of the features already being implemented by some hotels. More and more people on the business trip or travelers like carrying various of portable video and entertainment gadgets (such as iPod,MP3,mobile DVD, PlayStation, Xbox, laptop, digital camera or digital video camcorder and so on.) With the development and popularization of the personal audio/video equipment and high definition televisions with big flat-screen, more hotel customers incline to use the hotel facility to display their own contents. For instance, to connect their own portable gadget to the HD TV at the hotel, so that they can both enjoy independent video content, also can experience the feeling of watching the HD television's big screen simultaneously.

MGM Grand's conference center web site states that "With a large inventory of state-of-the-art equipment on property, MGM Grand Production Services will facilitate all of your audio visual needs. From simple LCD packages for break out rooms to custom designed general sessions and full technical productions, we have the equipment and the qualified staff to accommodate any and all of your audio/visual requirements. Our full-service approach means we are dedicated to all of your event needs from concept to completion". [1] Audio is such a important part to the multimedia presentation that MGM has a complete dedicated department. They will provide anything from a small podium with sound to a complete sound stage capable of handling the most demanding heavy metal band.

2.8. WEBSITE

Nothing probably brings all of this together better than the MGM runs a boutique hotel called the sky lofts with in the Grand in Las Vegas. The web site was created to make the onlooker think of only high end luxury. The casual

browser of the web site can select from side bar and drop down menus to select an interactive online multimedia view of the "Sky Loft Experience". There are highlighted point and click areas within the interactive rooms that show you additional services such as a pillow or linen menu, rose petals, or to even plan a personal party with butler and catering service.

2.9. PRESS RELEASES

Another creative way to use multimedia that resorts do is use it in press releases. Not only will the visuals serve as an attraction to desired audiences, but it will also provide the news and media outlets with images they can add to their story about business. This will make the story more attractive to their readers. What's nice is that since businesses in every type of niche send out press releases, you can easily add this multimedia to your press releases for some extra flair. Domino's Pizza President issued a video apology to win back the trust of the public after a social media outrage over a video showing its employees acting in a highly unhygienic manner. The honest tone of the message (and being able to watch the leader speak directly to audiences), wouldn't have been as effective if it had been a print only press release.

The MGM grand partners even with the Cleveland Clinic in through their Stay Well program. They bill the program as "Stay Well® Meetings is the world's first ever wellness meetings experience. Offering healthy environments for high performance corporate meetings, the program provides meeting rooms and spaces designed to optimize the health and well-being of attendees, wellness programming, and Stay Well room and suite accommodations" The partner with the Cleveland Clinic so guests can have "access to online programs for sleep, stress and nutrition".[7] The guest rooms will included room lighting that is designed to assist in production of the hormone melatonin, which can help a guest sleep better, and adjust from jet lag more quickly. "Dawn-simulator alarm clocks that will gradually awaken a guest with light, instead of the jarring noise of a buzzer or loud music. A HEPA-standard air purification system that's designed to reduce allergens and toxins, creating better air-quality in the room. Mini-bars, often a pitfall for conscientious eaters, are stocked with more healthful snacks and beverages, including coconut water and almonds". The MGM grands stay well program is at its heart a IS theory of customer focus. [13]

2.10. GAMING

Another way that resorts in Las Vegas are using multimedia technology is through gaming itself. Web-based Slot Management system includes a highly

configurable casino structure that supports integration with any vendor and can be installed centrally, supporting multiple zones, floors or casino sites. A user-designed digital dashboard provides at-a-glance game performance metrics which can be viewed by casino, zone, bank, manufacturer, denomination, or even individual machine level, with the data being supported by custom reports that can be quickly exported to Excel. Yet there is a "Multimedia Games manages and maintains a nationwide network to provide Class II gaming solutions, such as our NIGC-approved Class II Real Time Bingo engine which creates quorums locally when the casino is busy, and centrally during low volumes of play. Our system also supports traditional central determinant and lottery systems, as well as NIGC audit information which requires the system to store the machines and locations of the players participating in each bingo game". [3]
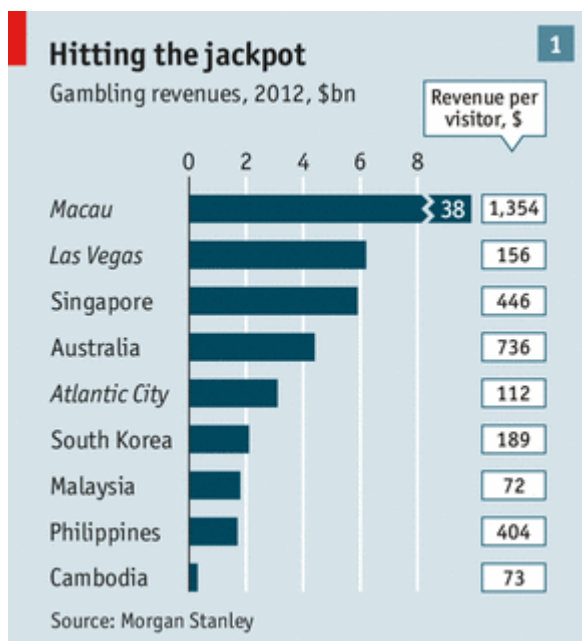

Fig. 1. 2012 Gambling Revenues - Retrieved from (http://www.economist.com/news/business/21584995-although-it-has-growing-number-rivals-macau-worlds-casino-capital-set-new)

III. CONCLUSION

Keeping the guests happy, marinating the reputation of Vegas is huge in the never ending battle for billions of dollars. With increased competition from within the United States and abroad, it is much tougher for the casino's in Vegas to maintain a level of income that they were at one time one of the sole site provider for. Globally only Monaco provided the only other site destination for

gambling. Monaco's market though was strictly tailored to a higher end client. More and more states are legalizing gambling in some way. Niagara Falls, Canada has developed into a gambling destination. On a global scale Vegas is having to compete with Macau for the large share of the Asian market dollars. The now defunct Atlantic City in New Jersey and the little town of Reno Nevada was for the longest time the only competition that Las Vegas had for gambling dollars. Those casino's where often though owned by the same owners of the Las Vegas casinos. So the owners where able to maintain Vegas as their ultimate destination for money. In the 1990's the laws in the individual states started to change, as did the outlook of money that was earned by gambling for state tax dollars.

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