Designing a Humorous Workplace: Improving and Retaining Employee’s Happiness

Marvin Andujar, Anton Nijholt and Juan E. Gilbert

Abstract In this paper, we discuss the possibilities of adapting humorous smart technologies to the workplace. Also, we discuss the precautions that need to be taken when introducing the theories of humor. We explore adapting the theories of humor and the pros and cons of integrating it in the workplace. We believe the adaptation of this technology will help current and future employees at companies to improve and retain their happiness. We also provide a brief explanation of the different types of humorous technologies: mobile, physical, and virtual and how they can be beneficial in the workplace. Suggestions of how to evaluate these systems are also provided.

Keywords Humorous workplace · Computational humor · User experience · Human-computer interaction · Humorous smart technologies

1 Introduction

The workplace can be considered a person’s second home. People spend at least 8 h a day performing several work and non-work related tasks. In many cases, a lot of people spend more time at work than at home for various personal reasons. This requires the workplace to have good amenities for comfort to keep their employees happy and comfortable. For example, Google let their employees bring their dogs to
work. They understand people treat their dogs as family and they would feel at home if they bring their “family” with them. The company also contains sleeping pods, laundry free of charge, free food, game rooms, and other amenities that allow their employees to keep a positive attitude or emotional state. So, if amenities that facilitate the employee’s life may contribute towards their happiness, why is there an absence of humorous smart technologies in workplace offices? Humorous technologies can contribute towards the employee’s happiness.

The workplace can be a tedious and stressful place where negative interactions with other employees could hinder the outcome of projects. Specially, disagreement among colleagues causes disengagement, which can lead to under-performance from the employees [1]. It is also known that people use humor to deal with difficult and negative situations [2]. Therefore, in this paper we discuss and propose the idea of adapting humorous smart technologies to improve and retain a positive emotional state of employees in the workplace. In this paper, we define humorous smart technologies as a technology that supports users’ interaction for the purpose amusement. We also discuss the amount of incongruities the workplace should contain. Too much incongruity may let people perceive the workplace lacks professionalism. Incongruous humor has to be controlled and monitored in the workplace as it is a professional place and incongruity could express unprofessionalism, which may lead towards violation of human resources regulations. We believe that the workplace can benefit from humorous interaction to keep their employees engaged and happy for better productivity. This concept is similar to the concept of humorous interaction for playable cities [3]. The author provided examples of existing entertaining ways to have a better user experience while performing daily activities in the city. Some of these presented experiences may be implemented in the workforce and others may emerge to better fit the given environment, in this case the workplace.

2 Humorous Smart Technologies

Humorous smart technologies are either physical, virtual, or mobile representation of humorous content for the purpose to provide playable, fun, and humorous experiences to the users. These technologies often contain Artificial Intelligence algorithms, which provide the “smart” aspect of the technology. In the following sub-sections, we provide a brief background to the three types of humorous smart technologies, which gives a more detailed explanation of what these technologies consist of.

2.1 Physical Humorous Smart Technologies

A physical smart technology can be defined as a physical representation of humorous content where the user interacts with the content for the purpose of amusement. These technologies can require the user to use their whole body or certain part of it. Also, it can take form of a physical robot programmed to provide jokes to the users.
A good example of a physical humorous smart technology is the piano stairs in Stockholm [3]. The users are able to make piano sounds once they step on the piano stair keys. They are able to create a song while they jump or run up and down the staircase. The piano provides two combinations of enjoyment: fitness and music. It is known that many people enjoy doing exercises for their health. They feel relieved and stress free. Music can relax and at the same time provide a feeling of enjoyment to the user. Therefore, the piano provides two types of enjoyment to the user, which may provide more enjoyment to the user compared to other physical technologies that provide one type of enjoyment.

Another good example is the talking postbox [3]. The users are able to talk to a postbox once they are about to drop their letters to be sent to someone else. In this case, the user interaction is verbal, but the postbox is physical and not a virtual environment. Unlike the piano, this does not require the user to perform any muscle movement. The user may be able to ask the postbox when the mail will be picked up to be delivered. On the other hand, the postbox can tell some jokes to the user that may enlighten someone’s mood. The postbox can also recall some exchange with previous visitors, tell something or ask something about its environment. In an office environment, the workplace can have coffee machines or bulletin boards that operate in similar ways.

There also exist humorous products that are not necessarily technologies. These products take form of objects that people would use in a daily basis. The bearded beanie is a winter hat with a beard. Therefore, when a person wears the hat, the person looks like they have a beard on as well [4]. These types of products are not necessarily technologies. However, these can serve as a model to incorporate them as a form of technology. They can contain Internet of Things (IoT) capabilities that allow the humorous aspect of the object reach the users like it never did before.

### 2.2 Virtual Humorous Smart Technologies

Virtual humorous smart technologies take many different forms such as: video games, virtual agents, simulated robots, videos, and others. A virtual humorous smart technology is considered as such when it involves a user interaction with a digital technology for the purpose of amusement. Virtual technologies have already been adapted in places like the city as described by Nijholt [3].

Video games are good examples of virtual humorous smart technologies. Their AI makes them smart and the content in the story makes it humorous, fun and enjoyable. The game Grand Theft Auto (GTA) is a massive game that contains a lot of AI obstacles or components and at the same time contains a lot of incongruous jokes, hence it is rated for mature audiences. We think one of the best parts of GTA is that the jokes can be related to real life and of a movie; it is safe to say is combination of both worlds. Nijholt also discusses on how video games have been implemented to reflect the real world, but digitally [5]. He discusses how game designers do not necessarily use humor techniques to incorporate humor into a video game, however the users recognize it.
Videos can be also considered humorous virtual technologies. There are different types of videos: animation, movies, and fan made videos. Animations, specifically anime made from Japan contain a lot of incongruous jokes. They are usually based on high school kids going through the different stages of a teenager. These stages can include a lot of incongruous jokes and events. The realistic aspect that the story takes in a school provide that sense of relationship with the viewer and the provided jokes can add to their amusement. The best about videos is that they the video makers understand what make the viewers laugh and enjoy the sequence of pictures. Although, these are not necessarily smart from the technology part, it is still smart from the maker’s perspective. There are also videos that exist in YouTube that are fan made. The purpose of these videos are to demonstrate how people react in different situations, but in a humorous perspective. These bring a lot of joy to the users, because many of them can relate to the situation and once they see it from a funny perspective, it brings joy and a lot of fun.

2.3 Mobile Humorous Smart Technologies

Mobile humorous smart technologies can be classified as on the go devices that can take the form of a cell phones, tablets, or wearables that allow the user have humorous experiences in different locations. The piano staircase and the postbox are not considered mobile, because they are not mobile, but stationary. They can only be experienced at the exact location where they were mounted/built. Video games in tablets and mobile phones can be mobile humorous technologies. It is a combination of both virtual and mobile. Games like Clash of Clans can only be played in a mobile device, can be humorous. Although, it is a very competitive game, it provides humor to users when another gamer attack their base and the gamer AI do something awkward that make them lose, so the user ends up winning. Clash of Clans is a mobile strategy game where gamers build their village and train soldiers to attack other villages to steal their gold and resources.

Wearables can be designed humorously. The bearded beanie can be transformed to a wearable computer. It can be added lights that form face expressions on the beard that can change with the facial movements of the user. It can also be customized through the mobile application for color use or even the type of expression the user would like to express at the moment.

3 A Humorous Workplace

3.1 What Can Be Considered a Humorous Workplace?

A workplace can be considered humorous when it contains humorous smart technologies or humorous non-technologies with a main purpose to provide recreation and enjoyment for the employees. The employees interact with these physical,
virtual, or mobile technologies to laugh or improve their current mood. Some companies already provide some humorous infrastructure in their offices, like Google. They have a slide that allows employees to go from the second floor to the first floor without taking the stairs. This humorous infrastructure provides employees a physical enjoyment that is reflected in their mood; this also provides them a remembrance of their youth, which can many times be a positive enjoyment. Most of the companies also provide game rooms that have billiards, table tennis, and sometimes even bowling. This games allow employees to relax and share an activity with their colleagues. During gameplay, they share funny moments in their life and laugh during gameplay. However, these games provide a limitation that not everyone plays those games and this can vary per person unique experiences or cultures. This leads to a handful amount of people still not experiencing humorous experiences at their jobs.

The applicability of humorous smart technologies into the workplace can include those that do not take advantage of the offered usual game facilities. In this case, they are able to interact with technologies that can benefit their physical and mental wellbeing.

3.2 Incongruity in the Workplace

The workplace is known to be a physical location where a group of people go to work on various projects for the benefit of the company. A lot of serious projects and discussions in meetings happen on a daily basis at that specific location. Therefore, introducing humorous technologies to the workplace should be carefully explored prior to implementation, specially when it contains incongruity. The theory of incongruity articulates that people laugh because something seems inappropriate [6]. This is a very familiar way of people enjoying their time by laughing at what are considered inappropriate comments or jokes. The classification of a joke containing incongruity varies per culture. Therefore, the question we face is how much incongruity is appropriate for the workplace? If the workplace is considered a serious and professional place, does incongruity add unprofessionalism? If there are ways to keep the professionalism and have incongruity, how can they be implemented? These are questions that researchers may need to address through investigation to see what fits best. Also, if incongruity content within a joke varies per culture and the workplace has people from all over the world, how can this be controlled or shown to specific people? Let’s consider having a projector that projects a mini game to the floor similarly how some shopping malls have for children to play. In this case, it would be in the workplace for employees enjoy themselves. Now, the game contains certain jokes for those of who lose in the game and the joke includes incongruity. The person may take it as a joke, but another person from another culture or even gender may feel insulted [7]. Perhaps, adapting
methods from computer vision and machine learning to these technologies may allow the technology to identify the set of jokes that would fit best with that particular person.

3.3 Relief Theory in the Workplace

Freud refers to the relief theory as the description of humor as a necessary means to release frustration originating in unpleasant experiences or social and sexual taboos [8]. As aforementioned, employees in the workplace experience a lot of frustration and stress for several reasons. It can be that they had a non-productive meeting and one of the members or managers were really mean to him/her. They can also be behind in their task when their deadline is approaching quickly. All of these situations can build up a lot of frustration at once, which may cause poor mental health, poor work performance, and disengagement. Therefore, introducing humorous smart technologies that offer relief humor may be useful for their well-being. However, just providing these technologies that offer relief may not be enough. They would have to be offered at an appropriate time. For example, companies perform in a quarterly basis, incorporated of four quarters, each quarter last three months. By the end of specific quarters, employees have to deliver certain deliverables or in some cases called required action (RAs). Providing the relief humorous content within the smart technologies at the time the quarterly is about to end may be appropriate.

3.4 The Theory of Superiority or Disparagement in the Workplace

Employees in the workplace may already experience some sort of superiority or disparagement joke in a daily or weekly basis. In this case, the joke can come from their managers, but in other cases are actually serious statements more than a joke. The theory of superiority or disparagement was mentioned in the humor text book by [9], but initially introduced by Plato, Aristotle, and Hobbes. It assumes that people laugh at the misfortune or inferior position of others. The question that we face is, are these appropriate humorous content that a technology in the workplace should contain? Assuming that employees already experience this at their workplace at some level, would introducing more jokes about the inferior, even if it is not directly correlated to them, may contribute towards more disengagement? Introducing this theory into the workplace may contribute towards some negative experiences instead of a positive one. The experience of course may vary by person and by what they are experiencing on that day or week. The implementation of this
theory should be explored further and longer than the other theories to achieve the most appropriate implementation. This may need to be adapted based in the specific culture of the company and its population.

3.5 Knowledge-Based Humor in the Workplace

The knowledge-based humor is not categorized as a theory, but as a type of humor. It requires the user to have some knowledge in an area in order to understand the joke [10]. The following jokes require some knowledge in a field to get the amusement behind it:

- “It’s as easy as 01 10 11.”
- “Why do programmers always get Christmas and Halloween mixed up? Because DEC 25 = OCT 31.”

These jokes require some Computer Science knowledge for the user to understand. In a technology workplace like Google, Intel, and Facebook, their employees would be able to understand these jokes and get humor out of it. Other employees in other areas like Business may not get the joke, because they do not understand it. This is when non-knowledge base humor is needed.

We think the knowledge-base humor can be a good content for the humorous technologies in technological workplaces. They can also be adapted in other type of businesses, but the aforementioned jokes are restricted to those in the Information Technology (IT) department as they would be the one to “get” the jokes. Of course, it is good to have in mind that other disciplines like law, history, and others have their unique knowledge-base jokes similarly to computing.

4 Humorous Smart Technologies Within the Workplace?

Humorous smart technologies can take different sizes and forms. It is important to identify key locations within the workplace where these humorous technologies can be located. Having a robot in the cafeteria telling jokes might not be ideal due to the amount of noise happening in that location. Although, there is work done addressing the issue of utilizing robots in noisy environments [11]. Therefore, having a robot in a break room or even in the game room can be beneficial. In the case of a musical piano, this should not be placed close to meeting rooms and cubicles, because it could irritate those who are working. Therefore, it should be placed close to a laundry room or even cafeteria. These may be places where people may not be working often.

It is more difficult to place humorous technologies in the workplace than in a city or home, because it may bring interference and annoyance to others who are
performing job-related tasks. Therefore, it is essential to understand each specific company architecture and work culture to determine where specific technologies may be placed. Some companies may prefer to have a piano stair close to the cafeteria and others may have them far away from it. As jokes are depended on cultures, placement of these technologies are also determined by the company culture instead of country.

5 Humorous Robots in the Workplace

We believe robots in the form of humanoid or drones can be a good adaptation for the workplace. Robots can be considered both physical and mobile. Robots like the humanoid Nao, created by Aldebaran, can be ideal for telling jokes to employees in cafeterias or other break areas. Specialized rooms could also be used for joke telling. These areas could consist of multiple robots that recognize voice and gesture communication.

The field of Human-Robot Interaction (HRI) has started to look to investigate the uses of disparaging and non-disparaging jokes [12]. The authors applied the theory of incongruity in comparing humans and robots saying the same type of jokes. They found that their participants perceived non-disparaging jokes to be more humorous when it was performed by a human. However, they showed less disgust toward disparaging jokes when they were performed by the robot. They proclaim that humor can be an effective way to enhance the human-robot interaction, but the types of jokes have to be carefully selected for the robot. This is a good example that current humanoids can be good for amusement, but certain types of jokes do not apply to them.

There is other research in using social robots to recognize or produce jokes or humorous statements in a conversation [13].

6 Digital Memes in the Workplace

Memes have shown to be a very effective way to provide humor to something serious. Coleman defined online memes as images, videos or catchphrases that are modified by users for the purpose of entertaining audiences [14]. Researchers from Carnegie Mellon and Microsoft Research came up with a computer-aided humor chat system named CAHOOTS that provides humor to conversations. The users are suggested humorous images to respond questions asked by the other users. The pictures are in form of memes [15]. The authors compared CAHOOTS with a plain chat and found that people found the author’s chat system more fun and allow them to express their sense of humor more.
Recently, it seems that meme is an effective way to provide humor to audiences. Users use and access different types of memes through various social media. Specially, when special events happen, users obtain the pictures of those precise moments and create various memes. For example, in the Oscars 2016, the comedian and Oscars host Chris Rock’s daughters were selling girls scouts cookies at the event. The camera caught the famous Oscar actor winner Leonardo DiCaprio opening one of the boxes with an amused face. Users created several memes regarding the actor opening the box of cookies with a lot of excitement, saying he would prefer the cookies over the Oscar.

In the workplace, memes can be really entertaining. Let’s say having on the wall small monitors showcasing the meme of the day can provide amusement to the worker. It has to be the right meme illustration. A meme related to the Oscars may not reach a lot of people’s amusement, however something related to work can reach a wide variety of employees. From a mobile point of view, the meme can be seen from the internal company’s website that serves as a central hub for news about the company. The illustration can be the first thing an employee sees when they get to their desks instead of a negative e-mail. The meme can be chosen randomly from the internet (as long as it is associated with work) or generated for the purpose to associate it to the specific company.

Another form of humorous illustrations are comics. PhD comics are famous humorous comics regarding obtaining the doctoral degree and after becoming a professor. The students and faculty can relate to the comics and find it amusing, because they have experienced it. There are also memes related to education and not necessarily comics. These also show realistic scenarios that students experience (not necessarily PhDs) from a humorous perspective. The workforce can also apply digital comics, where it takes real life work situations and explain it from a humorous point of view. This can provide pleasure to the employee’s wellbeing where they may commence their day in a happy state.

7 Evaluation of Humorous Technologies Effectiveness in the Workplace

One of the biggest challenges is to understand the effectiveness these technologies would have in the workplace. As previously mentioned, jokes and humorous moments varies per culture. This also means that some humorous content can be offensive towards some people. Some questions we face are, how much amusement do these technologies provide to the employees? Do they get boring through time? How can we improve and retain employee’s happiness, so they would keep themselves engaged at work? These questions should be addressed through evaluating these technologies through user studies or focus groups. In the case, a repository of memes related to work are displayed in several TVs for people to read
and laugh, we should understand, which memes were more amusing and the time they were accessed. These can be evaluated in different ways:

- Provide a physiological wearable device (skin conductance, heart rate, wearable electroencephalographic device) to employees to understand their emotional state when they interact with these humorous technologies. This method can be quite expensive and difficult to implement to obtain a big amount of data.
- Provide a list of emoticons showcasing different emotions at the bottom of each humorous content to receive feedback from the user on how humorous it was. This would be instantaneous and it could be one of the most accurate feedbacks we can obtain from users.
- Incorporate laughter and smiling recognition within the technology.
- Administer a survey certain amount of time to understand how these technologies are affecting people’s emotions. Through this method some users may not complete the survey in a timely manner and they may not recall their experience very well the longer they wait to complete the survey.
- Incorporate a camera within the system to obtain the emotional expressions from the user’s face.

The evolution of the content of these technologies is essential to keep the users interested to interact with them. Therefore, learning about the use experience with these technologies may help us understand more on how to adapt them in the workplace better and keep improving and retaining their positive emotional state. Principles from Affective Computing (AC) can also be adapted to understanding the effectiveness of colors and shapes used in the physical, virtual, and mobile technologies, if any. As AC deals with the understanding of how people feel when they interact with different technologies, their principles and theories can be useful to understand the experiences with these humorous computers.

8 Conclusion

In this paper, we discussed the possibility and benefits of adapting humorous smart technologies to the workplace. We believe that the adaptation of these technologies can be beneficial for the retention and improvement of employees’ positive emotional state. However, these adaptations need to be carefully explored when including incongruity, relief, and superiority humor. Further, we believe robots are advanced enough to perform basic smart jokes or humorously interact with the employee. These technologies may also be useful to be adapted in a smart city, home or building. In the future, virtual robots or agents can be well adapted for humorous interaction in self-driving autonomous cars as well by considering the aforementioned humor theories and the precautions that need to be taken. Lastly, we provide suggestions of how these technologies can be evaluated in the workplace for constant improvement.
References