CHAPTER 2 LITERATURE REVIEW

2.1. The Concept of Digital Identity

The idea of digital identity, where internet users try to represent themselves well to others online, is a fundamental part of identity. It is a complex entity presented by a set of a person's online image traits reflecting real individual characteristics and ensuring the integrity and identity of a person during Internet interaction (Pakhtusova & Uvarina, 2019). Further, Papaioannou, Tsohou, and Karyda (2019) explain that shaping a digital identity is a part of the process affected by multifaceted personality and everyday life of the individual. Generally, this means that identity is constantly evolving. It is a process rather than a product. It is something that people do rather than who they are. In other words, the internet users may behave or perform differently in different contexts and they may do so consciously or unconsciously. Their online or digital identities are a product of how they perform online. Further, Stetsenko (2017) explained that 'identity is about the way in which seek meaningful activities that can make it important to others and to ourselves and hence builds the uniqueness of ourselves' (p. 228).

The term of digital identity consists of two major things i.e. security and reputation. Security is when teachers try to deal with password management, sharing sensitive information, surrendering identity for some online requirements, etc. Meanwhile, reputation is defined as the image whether good or bad of an individual (Okada, et al., 2018).

Moreover, A study by the Australian Communications and Media Authority (ACMA, 2013) suggests that there are three different types of online identities that they adopt at different times for different purposes. These identities are as follows:

1) Transactional identity

Transactional identity refers to the information about individuals that they submit when they are completing a financial transaction or filling out forms for things like government agencies or insurance companies (Sullivan, 2016). This is the simplest and most removed of the identities. With this identity, [they] only give the minimum information about ourselves required to complete a task (ACMA, 2013). They do not share this information publicly. This identity brings up issues of security because of the nature of the information they give out. The next two identities concern their reputation online.

2) Social identity

Social identity refers to how individuals identify themselves based on social roles played in society or social group membership (Priante et al., 2016). In this case, social identity is the personal data they share on the internet. The person that they portray through status updates, profile pictures, and the memes or new articles that they share over social networking services such as Facebook or WeChat.

3) Professional identity

Professional identity in general refers to how teachers view themselves as a teacher based on the interpretation of interaction with the context. They present a positive image of their skills, experience or business offerings, perhaps through their websites like LinkedIn (Ilfiandra et al., 2018).

There are two key characteristics of participating in the online space that influence users' online identity. The first characteristic is that the Internet remembers everything. Every status update or blog post or comment that the users write, every photo they upload or are tagged in, and every website they sign up to is tracked and recorded. This is sometimes referred to as their digital footprint. All of these things will contribute to forming their online identity, whether the users intend to do it to or not. The second characteristic to be aware of when managing their digital identity is that the Internet has mixed professional and social lives (Ramarajan & Reid, 2013, p. 624). As one study stated, what was in the past unique to public figures or celebrities is now the norm for individuals (Bareket-Bojmel, Moran, & Shahar, 2016, p. 788). Basically, this means that previously private information about their social or home lives is entering the public sphere and can influence their professional lives and personal lives. If the users aren't careful, their online record is accessible to anyone and anywhere. This means that their parents, their boss, and their future boss can potentially access it.

2.2. Digital Identity Management

Digital Identity management refers to the process of representing and identifying individuals in an online setting (Halim et al., 2009). In fact, the web has undertaken significant changes over the last 20 years as it bridged the users from

reading-only shared information (Web 1.0) by some small groups of content experts to read-write shared information (Web 2.0). These days, the web has evolved and reached Web 4.0 which allows the users to interact with the machine broadly. Guarda et al. (2017) explains that Web 4.0 allows the interaction between people and machines in a symbiotic way, the network can be accessed by anyone, anywhere, at any time, utilizing any devices, as well as multifunctional devices with intelligent sensors such as cars, clothes, household appliances, among others, from applications that adapt dynamically to the necessity of users. It can be seen that individual identity is at risk since we are recorded all the time by the machine. However, in some way users can benefit through this Web 4.0 by constructing their identity online. A relevant study to this case was done by Babić et al. (2014) on students' digital identity and online learning activities which found that digital identity and online reputation management are central elements of e-education 2.0, whose influence can be detected on the level of a certain participant in the educational process, institutional, national and international level. As a result, there arises a term called identity management.

Managing digital identity has become a part of our life, either we are as a professional or simply want to interact with people. The utilization of social media (e.g., LinkedIn, Pinterest, Facebook) has been growing very quickly these days as the internet users are also on the rise (Kemp, 2018). These topics are highly essential in the realm of education and also healthcare because of the higher requirements for both students and practicing professionals in these areas (Barnable et al., 2018). Since the Web 2.0 allows communication broadly, an individual who interacts with

one another by way of the internet will surely construct their digital identity. The IP address, WhatsApp Numbers, the URL, the GPS are unique to each internet user which can be a part of our identity. Bouzefrane and Laurent (2015) categorized the identity management models into the following entities

- 1) a user: one who intends to do a transaction
- 2) an identity provider (IdP): an entity that provides and executes the authentication process. This entity will adjust the user who enrolls to the predetermined policy so as to be verified. For example, the requirements are identity card, proof of residence, certificate, proof of receipt of an email.
- 3) a service provider (SP): an entity that provides users with a service oftentimes a Web service.

This is also what has been triggering some internet users to misuse the tools they involve in a cybercrime. However, the presence of cybersecurity has been coping with this issue. In short, managing digital identity is fundamental to avoid the risks that can harm an individual's reputation and to positively increase the quality of an individual's reputation.

2.3. Teacher's Digital Identity Management

A huge part of managing our online identity is the ability to describe ourselves or present ourselves to different people in different ways. In this case, becoming a teacher these days will be more different and teachers have the opportunity to enhance their professional identity online. Teachers' digital identity is defined as an ability, including knowledge of usable resources, application of technological and pedagogical models and assessment, and the appropriateness of the didactic and technological strategies used in teaching (Cacheiro, 2016). The identity they share over Facebook should be different to the one they share over LinkedIn. The way they describe themselves as someone who is teaching as their profession. Some teachers might say "I'm a teacher". However, while these statements are accurate, they do not really say anything about them. Developing an elevator pitch to help teachers present themselves in a positive, interesting, and convincing way is fundamental to increase their professionalism. According to Manjusha and Vijayalakshmi, an elevator speech is a concise message or an advertisement about oneself. It conveys who an individual is, what the company expectations are and ways the individual can profit an institution (2016). In short, as a teacher, their elevator pitch should include a specific description of their degree, what professional teaching certificates they have, how much research the teachers have published, etc. In other words, what teachers present to the media will impact their reputation in their field. For example, presenting who they are, their skill set, teaching experience, and interests on LinkedIn, Facebook, Twitter, etc.

2.4. Teacher's E-Professionalism

Identifying teachers' professionalism is complex. However, in general, Quirke (2009) explained that there are two criteria of professionalism, namely credibility and legitimacy. Teacher credibility is defined as the teacher's degree of trustworthiness perceived by the student (Pishghadam et al., 2019). Moreover, they also explained that credibility can be categorized into three elements, namely: trustworthiness, mastery, and purpose toward the receiver. Simply, teacher credibility is the real teaching performance received by the students. Another criterion of professionalism in teaching is legitimacy. Coicaud (2002) concisely explained legitimacy as "the recognition of the right to govern" (p. 10). Meyer and Rowan (1977, 1978) stated that certified and licensed professionals indicate their legitimacy to the public. These days, teachers cannot only be credible, but also they are required to be credentialed in their teaching profession by obtaining a degree, certification, licenses, and badges. Therefore, these two criteria are central to their teaching career as they want to be professional in this field. This notion of professionalism in teaching now has changed as a recent study conducted by Engeness (2020) found a novel understanding that there has been a substantial alteration in the past 20 years in the processes and practices of education, these days, teachers are required to develop their pedagogic potential of digital technology to create a meaningful teaching practice that enhances their digital identity (p. 15-16).

The utilization of social media grows quickly as the internet users rate rises (Kemp, 2018). This issue has become one of increasing research interests, particularly in some areas such as privacy (Ross et al., 2013) and professional boundaries (Hillman et al., 2019). Further, there also arises e-professionalism which also has been at an increasing level of research interest (Duke et al., 2019). E-professionalism refers to the traditional paradigms of professionalism, but these days are manifested through digital media (Javaeed, 2020). This use of social media

by teachers is increasing and the advantages and utilization of it are becoming apparent (Fenwick, 2016). On the one hand, it also has a disadvantage in which this social media will depend on the users as they are one of the internet citizens there.

2.5. Studies of Relevant Research

A myriad of studies has been undertaken in the area of digital identity management in the educational field. The European Commission conducted by Rychen et al. in the DeSeCo Project of the OECD; this is where the empowerment of teachers with digital competence and knowledge is important (2003). Later, a study conducted by Cabero, Llorente and Marín (2010) provided a clear insight into technical, social-ethical and legal, pedagogical, school administration and agendas, professional development and communication aspects. The empowerment of teachers with this expertise implies their dedication to the community of disciplines and study areas covered by training in higher education. However, the core problem is the teachers' capacities in managing their digital identity as their digital competence needs some improvement. Peñaherrera (2012) in one study which reflects on the Ecuadorian use of ICT in education and its effect on established school systems explains that although there is no major improvement in educational practice in the classroom because 'it does not depend solely on technology itself, but rather on the educational skills, pedagogical attitudes and beliefs of teachers' (p. 5). Furthermore, Sevillano (2015) also suggests that a double aspect must be covered by the initial training and ongoing teachers: a technical one, allowing for a more user-friendly use of ICT/the internet, and a more didactic one, providing for

some reasonable change in concepts and attitudes about the development of the learning-teaching process. This proves that the capacity the teachers acquired is also central and affects how they manage their digital identity. A recent study by Engeness (2020) found that teachers and students repositioned themselves as active participants of knowledge activities by participating in learning and designing digital environments based on the proposed design principles to nurture the digital identity of teachers and strengthen the ability of students to learn. Simply, it is important for teachers to acquire a technological skill, but it is more important to acquire the digital literacy skill.