



ARCHIVES IN THE DIGITAL AGE: THE READINESS OF THE TURKISH GENERATION Z FOR THE CHALLENGE

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ABSTRACT

Generation Z those born after 1995 account for the vast majority of students currently studying at Turkish universities, including Information and Records Management departments. This generation has always been familiar with the internet, social media and mobile technology, and is probably the most technologically savvy generation to date. The last decade has witnessed an increase in the number of Information and Records Management departments opening up at Turkish universities, and generally speaking, curricula aims to equip students with the skills necessary to enter the archival or information management profession in the digital age. The following character archetypes will be used throughout the talk to analyse the issues faced by students upon entering the archival profession in the digital age: students are protagonists, who are responsible for shaping their own professional destinies but face obstacles along the way; they can also act as advocates for change but this is dependent on their own personal development. Mentors are universities and academics, who support the intellectual development of students, the Sage represents knowledgeable government agencies who offer advice and guidance on archival practice (primarily archives), and the Trickster represents the fluidity and flux of the field of information management and recordkeeping- sometimes luring the student (protagonist) into a false sense of security in the digital age. This false sense of security stems from the fact that electronic records and archival management poses risks and challenges that didn't exist in the paper world, such as the long-term preservation of born-digital records. Upon graduation students in Turkey will enter a profession that requires the innovative re-thinking of current practices. This article examines whether the education students receive in terms of electronic information management and recordkeeping equips them to work with born-digital records in an archival context.

Keywords: Generation Z, Digital Archives, Recordkeeping

DİJİTAL ÇAĞDA ARŞİVLER: TÜRK Z KUŞAĞININ BU DEĞİŞİME HAZIRLIĞI

ÖZ

1995'ten sonra doğan Z kuşağı, Bilgi ve Belge Yönetimi bölümleri de dahil olmak üzere Türkiye'deki üniversitelerde okuyan öğrencilerin büyük çoğunluğunu oluşturmaktadır. Bu kuşak internet, sosyal medya ve mobil teknolojiye aşinadır ve muhtemelen bugüne kadar teknolojik anlamda en bilgili nesildir. Son on yılda, Türkiye'deki üniversitelerde açılan Bilgi ve Belge Yönetimi bölümlerinin sayısında bir artış görülmektedir ve müfredatlar öğrencileri dijital çağda arşiv veya bilgi yönetimi mesleklerindeki gerekli becerilerle donatmayı amaçlamaktadır. Konuşma boyunca, farklı rol modelleri ele alınacaktır; öğrenciler, kendi profesyonel kaderlerini şekillendirmekten sorumlu olan ancak yol boyunca engellerle karşılaşan Ana Karakterlerdir; değişimin savunucusu olarak da hareket edebilirler, ancak bu kendi kişisel gelişimlerine bağlıdır. Mentorlar, öğrencilerin entelektüel gelişimini destekleyen üniversiteler ve akademisyenlerdir. Bilge, arşiv uygulamaları hakkında yol gösteren kamu kurumları temsil eder (başta olmak üzere arşivler). Yanıltıcı ise bilgi ve belge yönetimi alanının akışkanlığını ve değişkenliğini temsil eder – kimi zaman hilekâr, öğrenciye (ana karakteri), dijital çağda, sahte bir özgüven duygusu hissettirir. Bu sahte özgüven duygusu, elektronik belge ve arşiv yönetimlerinin, dijital belgelerin uzun süreli korunması gibi, fiziksel belgelerin dünyasında var olmayan risklerinden ve zorluklarından kaynaklanmaktadır. Mezunlar hâlihazırda kullanılan uygulamalarının girişimci bir şekilde gözden geçirilmesi gerektiren bir mesleğe adımlarını atacaklardır. Bu çalışma, elektronik bilgi ve belge yönetimi eğitiminin mezun öğrencilerin ileride doğuştan dijital belgelerle çalışmak için yeterli olup olmadığını inceleyecektir.

Anahtar Kelimeler: Z Kuşağı, Dijital Arşivler, Belge Yönetimi

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INTRODUCTION

The compatibility of Generation Z, the digital generation and the concept of digital archives, is an area that should be given due consideration. This study aims to examine whether Generation Z university students/new graduates studying at, or who have newly graduated from Turkish universities are ready in terms of skills, both academically and interpersonally, to work in a digital archival environment. The above will be probed within the context of literary character archetypes which fit the current dynamics of the world of the student. These archetypes, that will be discussed in detail later, represent not only students, but universities, and also government agencies who are responsible for providing policy on recordkeeping on a national level. Prior to a discussion of whether Generation Z students are equipped to work with digital records, a definition is in order. First, Generation Z, also referred to as the iGeneration, iGenners, GenZ, and Generation Now, includes individuals born in the mid-1990s through the late 2010s (Looper, 2011; Twenge, 2017). This generation are referred to as such because they do not know life without the internet, and check their smartphones up to 80 times a day (Twenge, 2017). The Z Generation has always been familiar with the internet, social media and mobile technology, and is probably the most technologically savvy generation to date. This study aims to answer the following questions: does the fact that this generation are technologically adept and have access to events and information as they transpire, mean that they are de facto well equipped to work in a digital archival setting/with born-digital records? In short, is it easier for Generation Z to work in a digital environment solely based on the fact that they are used to using technology on an everyday basis? This study will demonstrate that the answer to this question, is not a straightforward one, and can take the form of a ‘yes’ or ‘no’ dependent on various factors. These factors include the characteristics of the Generation Z, the university education they receive in terms of digital archives, and how far national policies on digital archiving provide clarity and support to students upon graduation.

METHODOLOGY

The methodology employed for the purpose of this paper is one of a descriptive nature, within the context of literary archetypes, and examines how far Generation Z Turkish university graduates are suited to work in a digital archival setting. In terms of defining what a digital archival workplace could look like, this can be roughly, but not exclusively be defined as either working in an organisational archival setting, which includes both the public and private sectors, or at the Turkish State Archives, or other archives. This study is unique in that it examines the environment of the Generation Z university student within the context of literary archetypes to provide a fresh perspective on their preparedness for employment as digital archivists. The limitation of this study lies in the fact that it only focuses on Generation Z undergraduate students, and does not consider postgraduates as part of this study. In addition, this study does not discuss librarianship studies which also plays an important role in the curriculum of undergraduate students studying on Information and Management degree courses.

LITERARY ARCHETYPES

The concept of the archetype was developed by Carl Jung and refers to an idealized or prototypical model of a person, object, or concept (New World Encyclopedia, n.d.) For the purposes of this study, an archetype refers to a character type. There are several literary archetypes that are commonly used in literature. However, only the archetypes detailed below will be used in order to examine how ready Generation Z Turkish information and records management new graduates are for employment in the field of digital archiving. This process of readiness begins when the student embarks on their undergraduate degree course in information and records management, and continues upon

graduation, when they seek employment in the field. The table below (Table 1) details the characteristics of the archetypes both generally, and in a higher education/professional setting¹:

Table 1. Archetypes and Related Characteristics

Archetype	General Characteristics	Characteristics in higher education/professional setting
Protagonist: Generation Z information and records management university students/new graduates	<ul style="list-style-type: none"> - main character - responsible for shaping own destiny - can face obstacles - hero of own story 	<ul style="list-style-type: none"> - technologically savvy - shorter attention span - copy and paste generation (Ruban et.al, 2006) - no tolerance for inequality (Twenge, 2017) - Active involvement in university clubs/social responsibility projects - Lack of confidence working with English sources
Mentors: universities and academics	<ul style="list-style-type: none"> - Knowledgeable - mentors help heroes along their journeys - teach others to help themselves 	<ul style="list-style-type: none"> - guide students academically - take an interest in welfare of students - help students to gain professional experience prior to graduation - believe that all students have the right to graduate
Sage: government agencies who offer advice and guidance on archival practice (primarily Turkish State archives)	<ul style="list-style-type: none"> - make unbiased decisions - very wise - they differentiate themselves from others - regarded as superior 	<ul style="list-style-type: none"> - has a legal responsibility to offer advice and guidance on archival matters, including digital preservation - formulates policy and oversees its implementation - Employs staff that have the skills required to work digital records - Works in line with legislation
Trickster: represents the changing nature of the field of digital archiving	<ul style="list-style-type: none"> - reflects flux and fluidity - cunning - lures into false sense of security 	<ul style="list-style-type: none"> - makes digital preservation look too easy to students - gives all stakeholders the impression that digital transfer isn't urgent - gives credence to view that we can do just fine without an archival act

GENERATION Z: THE PROTAGONIST

Generation Z is the first generation to spend their entire youth in the age of the smartphone. With social media and texting replacing other activities, therefore they spend less time with their friends in person (Twenge, 2017). Being able to use technology more effortlessly than previous generations, this generation is clearly at an advantage. However, Generation Z is so deeply involved in using technology in their daily lives, that this can lead unprecedented levels of anxiety, depression, and loneliness (Twenge, 2017). University students who play games online rather than completing assignments is a common phenomenon. Indeed, Fawcett argues that Generation Z are so into everything digital that academics have named them “mutants” (Fawcett, 2013). Even though this generation are still very young, they have witnessed technologies become obsolete, and they have

¹ Unless referenced, all views belong to the author.

experienced all there is to see on the web (Fawcett, 2013). This generation has had no contact with a floppy disc and regards USB flash drives as outdated. Academics in Turkey frequently discuss amongst themselves how laid back most, but not all, university students are when they engage with them. There is no timidity in admitting to a full classroom that the weekly assignment hasn't been completed, or when a third deadline is sought. Although it is fair that generalisations shouldn't be made, the Generation Z can be considered to be the most entitled generation to date. In a recent study, Ernest (2017) found that parenting in the age of Generation Z is different to how it used to be. Parents are happy to bail their children out of any kind of trouble, and make excuses for them. Ernest stresses how work ethic was different in previous generations, and how responsibility was taken more seriously. Therefore, it is not surprising that Generation Z Turkish university students can sometimes communicate with their lecturers as if they are friends, because their parents treat them as friends. Therefore, a lack of authority in the home can result in the Generation Z student having less tolerance for authority at university, and later, in the workplace, which means that work ethic may be taken less seriously than it should be.

Turkish Generation Z in Higher Education: Mentors

The university system in Turkey is governed by the Higher Educational Council (YÖK). All students have to pass a national university entrance exam in order to be able to go onto higher education. Entry into higher education is points based, which means that a student has to meet the minimum points requirement to be placed at their university and course of choice. Entry to Information and Records Management Departments ranged from 203 to 331 points (Taban Puanları ve Başarı Sıralamaları t.y). The highest entry courses nationally require close to 600 points, which means that entry onto an Information and Records Management undergraduate course can sometimes be regarded as mediocre, or not particularly difficult. Entry into a BA History or an Engineering course requires higher entry points than entry onto an Information and Records Management course. Given this situation, a student who fails to achieve his/her first university or course of choice, can view studying information and records management as an easy option. However, this illusion tends to be short lived, as most undergraduate degree courses in information and records management have course units/classes in history, database management, law, English, and information management systems, which means that the Generation Z student has to knuckle down and study a range of different subjects.

In 2019, the quota for the intake of candidates intending on studying Information and Records Management across eleven universities in Turkey was 611 (Yükseköğretim Programları ve Kontenjanları Kılavuzu, 2019). This figure does not include the quota set aside for students who will undertake minor or major undergraduate degrees with Information and Records Management as one of their specialisms. This figure also does not take into account the quota for students who transfer from one Information and Records Management Department at one university to another. The number of universities with Information and Records Departments has risen to fourteen. Although only eleven have active departments with a student intake. Adana Science and Technology University, Bartın University and İzmir Katip Çelebi University are yet to embark on an intake of students to their Information and Records Management Departments. This is most likely due to the fact that the Information and Records Management Departments at these universities were founded in recent years, and may not yet meet national requirements in terms of achieving adequate staff levels (Devlet Yükseköğretim Kurumlarında Öğretim Elemanı Norm Kadrolarının Belirlenmesine ve Kullanılmasına İlişkin Yönetmelik, 2018). Information and Records Departments were primarily based in Istanbul, at universities such as Marmara University and Istanbul University, and in Ankara, at universities such as Ankara and Hacettepe. However, the establishment of Information and Records Departments across Anatolia, with universities such as Kastamonu, Çankırı Karatekin, and Atatürk is beginning to change this dynamic. This development can only be viewed as positive in light of the changing nature of the field which ensures that Information and Records Management graduates tend to find employment upon graduation.

The Mentor

Williams (2019) described information and records management university students as being in the process of “transition from an unqualified state into a well-informed, graduate and a professional one. This process of transition might be perceived as crossing a threshold – undergoing a rite of passage.” Upon crossing this threshold, can the students as protagonists successfully work in digital archiving? In order to answer this, not only does the point Williams makes in relation to the existing tension that exists between recordkeeping theory and practice in what is a very practice-oriented profession, have to be taken on board, we also need to consider the areas where students may be lacking. Academics know that upon graduation students will have to practice recordkeeping, and may end up working in digital archiving. Despite the fact the education system in Turkey can no longer be said to be based on rote memorisation, examinations both nationally, and at university, can sometimes still entail an element of memorisation (Kok, 2007). This can result in students favouring classes which have exams that require memorisation, and that do not require analysis. In addition, another factor which will ensure that life as an information professional will be harder in the long run, stems from the fact that the majority of Turkish information and records management students struggle with the English language. Bearing in mind that the vast majority of literature, especially on digital transfer, digital preservation etc. is in English, this means that students won’t be able to benefit from such literature upon graduation. Not only did a survey carried out on Turkish students in 2014 found that the majority did not know English (Başat, 2014), it is also the case that most private sector Turkish companies seeks proficiency in English from candidates. Unfortunately, a sizeable proportion of students are fooled by the trickster in their head who leads them to believe that they can get by professionally without proficiency in the English language.

As Mentors that help shape the student’s educational experience, universities and academics play a vital role in ensuring that there is a balance between theory and practice. If a student is not interested in a career in digital recordkeeping, then it may not be a loss that they cannot use the File Profiling Tool (DROID) developed by The National Archives, or cannot apply retention schedules in an information management system. However, as Mentors, academics still need to teach them how to. Whether the protagonist, the student, absorbs what is taught and utilises this knowledge in their career rests with them. The protagonist has to shape his/her own professional destiny.

INFORMATION AND RECORDS MANAGEMENT CURRICULA

Yılmaz (2018) carried out an in-depth study into the curricula of Information and Records Management Departments in Turkey. The total number of undergraduate classes offered ranged between 49-90 across the universities, thus revealing a discrepancy in the number of classes available to students to potentially choose as elective classes. All universities taught classes in archiving. However, it is unclear which of these include content on digital archiving. A closer examination of the curricula of the active Turkish Information and Records Management Departments reveals that they all have digital information management/recordkeeping courses that will hold students in good stead upon graduation. Below are some of the current courses available at some of the universities:²

- Web design
- Information Management Systems
- Database Management
- Semantic Information Management
- E-government Applications
- Data mining
- Introduction to Algorithm

² This list is not exhaustive.

The advances in technology mean that the classes above are a prerequisite, as technological tools continue to be used in different ways. Classes that focus on disruptive technologies will help the Protagonist understand that we cannot treat digital material as paper records. The Trickster as a literary archetype is relevant throughout this study because nothing stands still in the recordkeeping field. There was a time when digital preservation was viewed as almost impossible, and it was believed that technology quickly became obsolete. This was before the merits of parsimonious preservation was given the attention it deserved (Gollins, 2009). In his study, Yılmaz (2018) makes a very valid point regarding the future of archiving as part of the curriculum offered to students. The need for more academics specialising in archival studies was stressed, as was the need for universities to increase this number by helping to foster career development. The current study goes further and argues that universities should only consider candidates for archival posts who have or want to gain a specialism in digital archiving. The Protagonist has to be guided in terms of professional training, and Generation Z should know how to preserve digital records/digital material if they choose to do so.

One practice which can be viewed as being beneficial to the student in terms of practicing recordkeeping is that of compulsory internships that most Turkish universities, as mentors, have on their curricula. Students, generally speaking, take up a month long internship twice during their studies, and can also undertake internships in digital recordkeeping/archiving, as well as information management or librarianship. A recent study found that the vast majority of Turkish university students found their internship(s) to be highly beneficial in terms of career development (Yalçınkaya and Saydam, 2017).

DIGITAL ARCHIVING

Twenty years ago “digital archiving” was defined as the long-term storage, preservation and access to born-digital information (Best Practices for Digital Archiving, 2000). A more recent definition of “digital archiving” from the National Archives of Australia, is a more expanded one, and makes reference to the formulation of policies, and the need to preserve the authenticity of the record, so that it can be trusted over time: “the identification, appraisal, description, storage, preservation, management and retrieval of digital records, including all the policies, guidelines and systems associated with those processes, so that the logical and physical integrity of the records is securely maintained over time” (National Archives of Australia,). This means that archives have to preserve digital heritage, and by extension, the national memory through the long term preservation of digital records in different forms such as emails, spreadsheets, websites, social media, video and databases.

Technological advances have had a huge impact on archiving, archivists and archival users. Born-digital records, those created in an electronic environment, should not be managed as physical records. Digital records are more voluminous, granular and intangible. Thus rendering digital records vulnerable. This is because born-digital records should be managed from the moment of creation, thus requiring intervention much earlier on than paper records. This is not to say that the management of paper records is risk free, it is just that the risks surrounding the management of digital records are of a different nature. Access in the digital age is increasingly easy but at the same time is problematic. Mcleod (2015) summarises the challenges for recordkeeping in the digital age as follows:

“... for example, managing access to the unprecedented volume of information being captured; the unanticipated consequences of search and search engines on discovery; ensuring sufficient context in order to understand the information being accessed; balancing privacy, confidentiality and security with access, sharing and re-use in the world of open and big data; and defining the roles, responsibilities and behaviour of information/records creators and consumers.”

There are those who may argue that the issues raised above such as the trustworthiness, security, privacy and greater likelihood of the inadvertent disclosure of digital records are the problem of the records or information manager, and not of the archivist. Isn't it the case after all that the archivist is

concerned with provenance, integrity, and authenticity, while the information professional views records as information assets for government or corporate business. Whereas data scientists concern themselves with the analysis, manipulation, interpretation and visualisation of data (Yeo, 2003, Williams, 2019). The reality is that there has been a change over recent years in how archivists and information professionals manage information and records. There has been a shift from acquiring, storing and providing access to information resources in physical forms, to acquiring, storing and providing access to digital information resources (Harvey and Weatherburn, 2018). The above-mentioned professions impact on one another and roles and responsibilities can become blurred, or at the very least, overlap. The information manager plays a role in ensuring the confidentiality and security of records within a corporate context because they are managed as assets to minimize risk. This risk based approach also continues at the archives, because archivists also play a role in ensuring the confidentiality and security of sensitive born-digital records so that they may not be inadvertently downloaded or accessed by users.

The trustworthiness of born-digital records can also be considered within the context of another example of why recordkeeping and archiving professionals both have vital roles to play, and cannot afford to work in silos. An important strand of digital continuity, the ability for organisations to access digital information as long as it is needed, is about being able to trust your corporate information. In other words, being able to trust that it is what it says it is (The National Archives, 2017). Digital Continuity is a case in point that illustrates how archives in the digital age have to adapt. Digital continuity is based upon the premise that corporate digital information is managed as an asset within a risk management framework, so that you can find information when you need it, open it as you need it and in short, ensure its continued use (Understanding Digital Continuity). The UK National Archives (hereafter The National Archives) set up its digital continuity department in the early 2000s, because it recognised that digital information was more vulnerable due to technological change in organisations. This is true for a number of reasons including that it is easier to lose metadata and thus context, and that information can be stored in multiple places rendering it harder to locate (Understanding Digital Continuity). Without adequate metadata and context, the long term successful preservation of digital records is highly unlikely. If the user should manage digital information from the point of creation, then archives should offer advice and guidance to public bodies on how to do this. Ultimately, a proportion of information produced by public bodies may be selected for permanent preservation which means that this information may not reach the archives when its transfer period arrives if it is no longer accessible, trustworthy or findable. The ARCHANGEL project at The National Archives is carrying out research on how we can know that a digital record has been modified and whether this modification was legitimate so that ultimately it can still be trusted as the authentic record. The project is particularly investigating how blockchain might be used to make this work (The National Archives, 2018). Managing digital information, including ensuring its trustworthiness and usability, is a multi-discipline endeavour which begins the moment the information is created and upon transfer to the archives, becomes the pursuit of the archivist.

THE ROLE OF A DIGITAL ARCHIVIST IN TURKEY

A recent Turkish study (Er-Koçoğlu, 2018) examined 221 job advertisements that were published in the private sector between 2015-17 for graduates of Information and Records Departments. 48 job advertisements for archiving related jobs were posted during this period. These included vacancies for Archiving Digitalisation Experts, Archivists, Archival Officers, and Archives and Documentation Officers. The vacancy that had the highest frequency was for the post of Archival Digitalisation Expert, which appeared 9 times in the period covered by the study. This is significant as it paints a picture of where Turkey is at in terms of digital archiving. One of the predominant tasks of an archivist in the current archival landscape is to undertake digitalisation. Several government departments have digitalized millions of documents. In the case of the Ministry of Foreign Affairs, this was to make accessible documents to the public in its newly opened archives (Republic of Turkey, Ministry of Foreign Affairs) and the General Directorate of Population and Citizenship affairs, of the Ministry of Interior digitalised 268 million documents that ranged from incident books

to genealogy records (Republic of Turkey, Ministry of Interior). The 200 Archivists employed by the Land Registry in recent years have been involved in the digitalisation projects of charts and maps (Republic of Turkey, Ministry of Environment and Urban Planning). The qualification most required for the vacancies discussed above is an undergraduate degree in Information and Records Management. The proficiencies sought were, generally speaking, experience of digitalisation, experience using information management systems, and a knowledge of archiving (Er-Koçoğlu, 2018). The national occupational standard for archivists, recently revised by the Turkish State Archives in consultation with academics, outlines the proficiencies expected of an archivist (National Occupational Standard, 2019). Archivists, working in the public sector, are expected to be able to:

- Carry out the selection of records
- Identify records that need to undergo restoration
- Arrange and catalogue records
- Provide access to records in accordance with the Turkish Freedom of Information Act
- Digitalise records
- Quality check records to be transferred to the archives
- Provide an inventory of records to be transferred
- To ensure information security principles are adhered to
- To monitor file formats and to ensure that digital records are backed up.

As can be seen from the above points, archivists are expected to work in a hybrid environment and to undertake processes from selection to transfer. The above are tasks that every archivist should be able to perform with ease. What is lacking however, are policy and procedures relating to digital archival processes. It is highly unlikely that the Protagonist will know how to sensitivity review or appraise digital records, or how to prepare them for transfer to the archives. In this respect, both Mentors and the Sage are lacking. How many undergraduate classes contain content on such issues, and when will the State Archives provide detailed guidance on these processes? Collaboration between academics and the State Archives needs to be strengthened so that a mutual exchange of knowledge can take place. Academia should be involved in shaping national policy on digital preservation and the transfer of born-digital records. Granted, born-digital records may have not reached their transfer date, nonetheless the required infrastructure that includes not just the technology but the policies and procedures that guide the archivist on how to *do*, is needed. In addition to the points included in the national standard for archivists above, the following proficiencies should also be sought once national policies on digital preservation are formulated:

- Hands-on experience of digital preservation, digital repository management or digital asset management.
- In-depth understanding of digital preservation principles and techniques,
- including up-to-date knowledge of relevant tools, methodologies and standards.

THE SAGE

Within the context of this paper, an archive that receives the transfer of records from public bodies is defined as a Sage. At first sight, it may seem that there a link does not exist between the Sage and the Protagonist, the student/new graduate. However, this is not case. The Sage, as a literary archetype, is a wise figure with knowledge for those who inquire. This fits the remit of most national archives the world over as they have a generic remit to provide advice and guidance to public bodies on all archival matters, and this includes digital preservation. Thus, the knowledge of the Sage is communicated as advice and guidance, and this is especially important within the context of the uncharted waters that digital transfer is for the vast majority of information professionals in these public bodies, who have no experience of transferring born-digital records. The advice and guidance given by the Sage (Turkish State Archives) should be grounded in sound legislation that minimalizes the uncertainty and flux around what is required of information professionals in organisations, archivists working in various sectors, and, indeed, of those providing the advice and guidance. A

clear legislative framework and solid advice and guidance, based on policy and procedures, enables new graduates who find employment in the public sector to know what is expected of them in terms of archival processes prior to digital transfer. In addition, archival legislation with enforcement powers means that the role of the archivist will be taken more seriously. Finally, the plethora of academic studies on digital recordkeeping that focus on the theory of aspects of digital preservation, can be bolstered by a national archive's willingness to provide guidance on practice and know-how with regard to digital preservation. This in turn impacts on a student's educational experience, because they are taught how to practice digital preservation, or at the very least, to understand the policies and procedures that are needed nationally on such issues. Several nations have archival/public records legislation in force, to cite but a few, these include the United Kingdom, Scotland, France, Australia, Canada, America, and Malaysia. However, Turkey despite having various regulations and decrees in place regarding public records, has not as yet passed archival legislation. It could be argued that a single piece of archival legislation that provides sanctions for non-compliance, and has enforcement powers, would ensure that public bodies would have to heed the advice and guidance of the Turkish State Archives.

National Archives and Digital Transfer: The Sage in Action

National Archives Abroad

National Archives the world over should be in a position to accept transfers of born-digital records- if not now, then in the near future when born-digital records legally have to pass to the custody of the archives. A digital repository should provide long term access to the metadata and associated contextual information of the record, whilst ensuring its integrity. This, at the most basic level, includes ensuring that sensitive metadata isn't made accessible via the catalogue, to the public. The National Archives has been accepting the transfer of born-digital records for a number of years, and like the National Archives of Australia, and the American National Archives and Records Administration (NARA) provides guidance to public bodies on the steps required for digital transfer (The National Archives, Digital transfer steps). However, recent research has highlighted that despite the active role of The National Archives in offering advice and guidance on digital transfer, that digital transfer was not yet widespread, and that processes and procedures specifically for the management of processes for born-digital records, in government departments, were yet to be implemented (Özdemir, 2019).

The transfer of born-digital records is problematic for both those at public bodies and for archives. It requires that public sector organisations implement processes and procedures for the management of born-digital records, and should primarily be guided by the archives they intend to transfer to, with regard to this. This includes considerations such as the following; deciding how to select, appraisal and sensitivity review voluminous granular records, for which a consensus does not exist in the archival community. Do we retain everything digital because storage costs have gone down, and because advances in technological tools enable us to find the data we need? Indeed, Yeo (2018) suggests increasingly sophisticated methods of retrieval and e-discovery may do away with the need for traditional appraisal. How do we carry out the sensitivity review of born-digital material? Can technology-assisted review aid the record keeper?

As for archives, they have been working on how to preserve born-digital records, at least in theory, since the early 2000s. A 2003 report by NARA on building an electronic archive, states that "NARA recognizes, it is critical to start developing new electronic records preservation capabilities quickly in order to continue to fulfil NARA's mandate to preserve federal records." Although at the time of writing, no data is available to confirm the volume of digital records transferred to NARA, the archives began its planning for its digital transfer infrastructure 17 years ago. In addition, even though it seems that most of the UK government departments are yet to transfer born-digital records, The National Archives, as of 2018, held 700Tb of digital records (Ranade, 2018). Although it is not clear whether the digital records transferred have undergone processing and interpretation technically, and if they are currently accessible to the public.

The Turkish State Archives

The Turkish State Archives underwent a machinery of government change in 2018 and is now affiliated to the Presidency. The archives has two main sites, one in Istanbul which houses records from the Ottoman era, predominantly in the Ottoman Turkish script, and the other in Ankara which holds records from the establishment of the Republic of Turkey to the present day. Over recent years the Turkish State Archives has undertaken colossal digitalisation projects in Turkey, resulting in millions of Ottoman Turkish documents being digitalised, and made available for the public to download via the BETSİS Catalogue (The Catalogue, Turkish State Archives/Katalog, Devlet Arşivleri). The digitalisation of Ottoman documents that date from the middle ages onwards, was a lengthy endeavour that entailed the cataloguing of these documents which were predominantly handwritten, and in the Arabic script. In this respect, the Turkish State Archives has fulfilled its role as a Sage, because it has imparted its knowledge to the public, through preserving and making accessible to its users, the digital surrogates of millions of Ottoman archival documents.

However, the transfer of born-digital records to the Turkish State Archives is yet to begin. Section 11(f) of the 2018 Presidential Decree which relates to the state archives, clearly states that the archive is responsible for establishing the method and principles for the transfer of electronic archival records (Presidential Decree Relating to the Directorate of State Archives/ Devlet Arşivleri Başkanlığı Hakkında Cumhurbaşkanlığı Kararnamesi). A regulatory framework exists for the management of digital information and the Turkish Standard TS 13298: Electronic Records Management, that all organisations are required to adhere to, is based on international records management standards, and came into force in 2008.

In 2015, the revised version of the above standard for managing electronic records and archives (Turkish Standards Institute, 2015, Kandur, 2016) was developed. The new version emphasises the need for the application of adequate metadata, data sharing between organisations, and the need for organisations to maintain a corporate digital archive for records not transferred to the archives (Kandur, 2016). The use of information management systems in both the public and private sector is widespread, and the State Archives assesses the compliance of organisations to the Turkish Standard TS 13298. However, even though corporately digital archiving systems are used, share data securely, and information is viewed as an asset, more now than before, a missing link exists with regard to the required infrastructure for the long term preservation of born-digital records. As mentioned, Turkey does not have a public records act or archival legislation in place. As mentioned previously, the Presidential Decree came into force in 2018. In addition, regulations regarding State Archival Services, have been in existence since 1988, but were revised in 2019. The revised 2019 regulations now make reference to topics such as information security, the need to apply adequate metadata to digital records at the point of creation, and also stresses that the Turkish State Archives is responsible for determining the procedure and principles for the transfer of digital records (Regulations Relating to State Archival Services/Devlet Arşiv Hizmetleri Hakkında Yönetmelik, 2019). This begs the question of why comprehensive archival legislation, covering all aspects of the public records system, was not introduced instead of revising existing regulations, and bringing into force a new decree in 2019, relating to the management of digital records. This is despite the fact that academics such Özdemirci (1999) have voiced the need for a Public Records/Archival Act for decades. At the time of writing, the State Archives are yet to publish a policy or road map on how the transfer of born-digital records will be undertaken, both in terms of the processing and interpreting of the records at the archives, and in terms of how public bodies will prepare their records. This preparation starts from the creation of the born-digital record and involves their appraisal, selection and sensitivity review. The State Archives is yet to provide advice and guidance on these issues with regard to the transfer of born-digital records.

CONCLUSION

This study has examined how far the Generation Z students and new graduates of Information and Records Management will be ready to face the world of digital archiving. The answer to this is not clear cut, as in some respects this generation is well suited to working in a digital environment not only because they are technologically savvy, but also because they are required to take classes at university that have some content on digital recordkeeping. However, the fact that some of these students regard choosing to study in Information and Records Management as an 'easy option' and will only choose elective classes that are 'easy' or require memorisation rather than analysis is a concern. Courses with digital archiving content should be compulsory, with students given the opportunity to practice digital archiving. Students have the opportunity to use different technologies on their internships, and many go on to find employment. However, the field of digital preservation in Turkey is fairly new, with the exception of digitalisation, which is very commonplace across both private and public sector organisations. There isn't a significant digital preservation community, working with born-digital, in Turkey, and although academics can teach about digital preservation and digital archiving, an archival or public records act is sorely needed. As is policy and guidance on how the digital transfer of born-digital records will take place, and how the Turkish State Archives will process and interpret the digital material before making it accessible to the public. The National Archives' Digital Strategy (2017) stressed that digital skills were at a premium and that archives were finding it increasingly difficult to fill roles that require digital skills. Undergraduate curricula should offer more classes that offer the student to practice rather than to simply listen, and classes in digital preservation should be compulsory. Crucially, the Turkish State Archives and the academic community need to work together to ensure that born-digital records that will form the basis for the national memory, in the future, are preserved.

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