The User Experience Landscape of South Africa

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ABSTRACT

Industry in South Africa is becoming increasingly aware of the need for user experience design in the development of products and services. Problems experienced with usability prevent people from accessing, and eventually adopting technology, and a deep understanding of the users' needs is needed for building a successful service. User experience activities, such as user research, can be used to understand how people live their lives, in order to more effectively respond to user needs with informed, relevant and innovative design solutions.

Together with this increased awareness and appetite, is the emergent challenge where those who constitute the field of user experience (practitioners, service providers, content providers, scholars and those requiring user experience services) often understand the field differently and in different ways.

The aim of this paper is to describe the current landscape of the field of user experience in South Africa and gain insights into the field's maturity such that further research and recommendations may assist in its positive growth. A survey was used to gather feedback from 105 respondents currently involved in the user experience field in South Africa. The user research methodology focused on: defining the goals of the survey; determining the user profiles; planning the survey; running the survey; analysing and reporting the results. Results provided insights into the demographics, experience, education, job titles, salaries, challenges of user experience practitioners, and the user experience community of practice in South Africa.

Categories and Subject Descriptors

Human-centered computing: Human computer interaction (HCI)

General Terms

Design, Human Factors.

Keywords

User experience; Human-Computer Interaction; Usability; Survey; UX landscape.

1. INTRODUCTION

It has become increasingly common, perhaps even required, for

organisations to include user experience (UX) activities, such as user research and testing in their design and development process [24]. Any thinking about a service, whether online or offline must start with the question: *"what is the user need?"* [12]. It has been noted that UX activities are typically not included in the Systems Development Lifecycles of South African government [27]. The goal of this research was to describe the landscape of the wider UX field in South Africa. Although attempts to map the landscape of UX design as a unified field of practice, have taken place internationally [7, 20] and in South Africa [41], this last occurred (in South Africa) in 2003.

A survey was used to gather feedback from South African UX practitioners in terms of demographics, education, practicing UX and institutionalising UX. The survey attracted 105 respondents. The results showed that many UX job titles currently exist in the South African industry, with the majority of respondents having experience in UX Design activities such as wireframing, prototyping, conceptual design and visual/graphic design. Several respondents also have experience in UX research activities, such as user research, interviews, focus groups and usability testing. UX buy-in, time constraints, lack of skilled UX staff, process challenges and budget were listed as the main challenges in the field.

The results (Section 4) will be of value to South African organisations with UX teams or those in the process of creating UX teams. The results of this study have implications for user experience practitioners, academics, content providers, website designers, information technologists, recruiters, managers of software development teams, educators and those considering a career in UX.

A theoretical background is provided in Section 2. The methodology of the study is provided in Section 3. Section 4 illustrates the results. Section 5 concludes and contextualises the findings and provides suggestions for future research.

2. LITERATURE REVIEW

The literature review is discussed next in terms of defining the UX field and investigating the measurement of UX landscapes.

2.1 Defining the User Experience Field

UX design, due to its contemporary emergence as a field of study and practice, is often understood differently by those who constitute the field and in different ways [20]. Arguably the dominant conceptualisations of UX can be organised in two distinct, but interrelated views:

1. UX as a broad umbrella field of disciplines and practices that focus on applying user-centred and market

related research, and iterative design methods for the design of digital products and services [3, 9, 32].

2. UX as a specific field of design that situates the notion of experience as a key conceptual concern of the design process [13, 40, 45].

The broad view of UX design includes multiple sub-fields of design and Human-Computer Interaction (HCI) such as design research, interaction design, visual design, interface design, information architecture [32, 40] amongst others, as well as drawing on fields such as psychology, cognitive science, anthropology, sociology, philosophy [40], marketing and business. Therefore due to the rather amorphous structure of UX, individuals that identify their practice and activities within UX design can originate from and/or practice within very distinct sub-disciplines. For example a business analyst, cognitive psychologist and a graphic designer could all self-identify as a UX practitioner.

Experience design could be interpreted as one of the many sub-disciplines and practices of broad UX practice. Of late, however design theorists and UX thought leaders [14, 40] have begun to equate experience design with UX. What experience design is concerned with, and why it is specifically addressed in this study, is for its focus on creating appropriate and meaningful experiences for people using technology [13, 45]. Experience, here is understood as a users' subjective, situated [21] engagement with the world. As Hassenzahl [13] states, 'experience' is *"an episode, a chunk of time that one went through [...] sights and sounds, feelings and thoughts, motives and actions [...] closely knitted together, stored in memory, labeled, relived and communicated to others. An experience is a story, emerging from the dialogue of a person with her or his world through action".*

Experience design is often considered from the perspective of how designed artifacts emotionally engage the user. These experiences include emotional response values such as satisfaction, enjoyment, engagement, pleasure, excitement, fun, helpfulness, boredom, frustration, irritation, patronization, etc. [31]. To a large extent a review of current practitioner orientated literature [9, 31, 32, 36], supports this view of experience as an emergent reaction obtained through interaction with a product and thus primarily shaped by visual and form-based design [13].

However, authors such as Hassenzahl [14], Wright and McCarthy [45] argue that experience design, while not excluding a consideration of an emotive engagement with users at the time of use, should be primarily concerned with how peoples' life experiences and needs shape, constrain and inspire digital services and products. Hassenzahl, describes this approach to designing interactive products as starting from *"the assumption that if we want to design for experience, we have to put them first, that is, before the products"* [13].

These brief descriptions of experience design articulates perhaps what is, we believe core to UX design practice, what differentiates UX from other approaches to digital innovation, and perhaps what bonds the various other sub-disciplines of UX together in terms of the teleological aim of the discipline. Thus we argue, that which makes a UX practitioner is not the field or discipline of practice but rather a commitment to an engagement towards creating or enhancing technologies that respond to and curate appropriate experiences for their users, within their contexts of use.

In South Africa, a broad range of literature that is set within the broader constraint of UX and related fields has been published in recent years from a variety of disciplines such as information science [1, 6, 28, 35], ICT 4D [2, 5, 22] and design thinking [8, 10, 16, 29]; however, the literature tends to focus on academic and practitioner concerns rather than addressing what and who constitutes the discursive and practitioner community of UX design in South Africa.

To this end, this study is concerned not so much with attempting to define UX but rather within the broad strokes outlined in the preceding literature to explore the landscape of UX design in South Africa to better understand who self-identifies with the field, what they consider UX to involve and what are the experiences of working as a UX designer in South Africa.

2.2 Measuring the User Experience Landscape

Attempts to map the landscape of UX design as a unified field of practice, have taken place at numerous times over the last 10 years with perhaps the most prominent examples being those of Law, Roto, Hassenzahl, Vermeeren and Kort [20] and Farrell and Nielson [7].

The Law et al. mapping focused on attempting to generate a clear understanding of how UX was understood by those actively engaged in the HCI community in order to obtain a shared definition of the nature of UX. Although over 250 participants, both academic and practitioners, contributed to the survey, consensus was still very broad requiring further *"understanding, scoping, and defining the concept of user experience"* [20].

The Farrell and Nielson report, instead of attempting to define UX, rather surveyed the nature of what a UX career is. They surveyed 963 practitioners from 38 countries working in UX with the bulk of the respondents being from America, Great Britain, Canada and Australia. The focus of their report generally centered on who UX practitioners tend to be, what sort of work they tend to do, what skills they require and what satisfaction they derive from their work. While the Farrell and Nielson report is relatively robust, its representation of the South African UX community is slight making up only 0.7 percent of the participant numbers.

Wesson and van Greunen [41] reviewed the status of HCI in South Africa in 2003. They state that very few software engineers in South Africa have any real knowledge or understanding of usability and user interface design. They listed several challenges (described in Section 4.6), such as a lack of HCI awareness, in the industry.

In South Africa the landscape of UX is at a critical point because although it has begun to gain acceptance as a valuable and viable approach to designing digital products, services and systems, there is still no specific, formal tertiary education route to becoming a UX designer. Practitioners and academics still tend to arrive at a UX career from a variety of backgrounds. The community itself is largely self-organised, arranged around informal 'meet-ups', and user-groups such as the South African User Experience (SAUX) forum. Formal local practitioner events such as the User Experience South Africa (UXSA) conference and World Information Architecture Day are well attended. Academic conferences such as INTERACT, SAICSIT, Design Educators Forum South Africa (DEFSA) and Design, Development and Research (DDR) engage with UX at times.

However, due to the lack of official institutions or associations there remains very little definitive information regarding the state of UX in South Africa.

3. METHODOLOGY

The user research methodology was based on a combination of the methodologies by Pretorius and Calitz [26] and Portigal [24]. The primary method for collecting data from participants was that of a survey.

Surveys measure and categorise attitudes or collect self-reported data that can help track or discover important issues to address [30]. As the research intention of this study was a broad framing of participant's experiences of their careers in UX, the authors felt that the self-reportage nature of surveys was adequate and appropriate.

An online survey was selected as the best tool to use, as it has the capability to reach a large audience, fast and affordably. The aim was to obtain a minimum of 100 responses within a one month timeframe. The timeframe was extended to six weeks and resulted in 105 respondents.

Table 1 lists the steps of the methodology. The details of the methodology are explained in the following sections.

Table 1: User Research Methodology

1. Define goals
• Why is the user research being conducted?
• What will be learnt from the user research?
• What actions will be taken based on the results of the user research?
2. Determine user profiles
3. Plan the survey
• Questions to be asked;
• Tool to be used;
• Number of respondents;
• Pilot study;
• Costs and budget;
• Timeline.
4. Run the survey
• Give an overview of the project;
• Let participant(s) know what to expect: type of questions; length of the survey; confidentiality.
5. Analyse the results
6. Report the results

3.1 Define Goals

The goals of the surveys are defined first.

Why is the survey being conducted? The goal of this survey is to describe the landscape of UX in South Africa.

What will be learned from the survey? Clarity will be provided to the following questions: What is the understanding of UX by South African practitioners and organisations? What is their approach to UX? How mature is UX in South African organisations? What educational and professional background do UX practitioners in South Africa have? What local UX communities exist? What are the challenges that practitioners face in their day-to-day practice of UX?

What actions will be taken based on the results of the survey? The results of this study will be made available publicly with the ambition of improving and raising the standard (i.e. maturity) of UX in South Africa. The results of this study will be shared in academic publications, conference presentations and South African UX blogs. A goal is also to raise more awareness of the UX field in South Africa and to assist practitioners and organisations who are entering the UX field.

3.2 Determine User Profiles

The main target audience for the research included UX practitioners in South Africa; organisations offering UX services and/or conducting UX in South Africa; and educators in the field of UX in South Africa. The survey also attracted responses from professionals not with mainstream UX titles (Sections 2.1 and 4.4). The survey was made available on the SAUX Forum (Facebook and Google Groups); LinkedIn UX groups; as well as the Twitter accounts of the authors. Additionally, the authors sent e-mail invitations to complete the survey to academic institutions and UX professionals in their network.

3.3 Plan and Run the Survey

Survey Monkey was used as the survey tool as it is regarded as a reliable tool in the industry [15] and has been used in similar studies [7]. Survey Monkey is perhaps the best-known survey tool in the field, offering a keyword search feature to help users navigate multiple surveys, security assurance and question-logic add-ons to maximize the efficiency and accuracy of surveys [15]. A two month plan was purchased from Survey Monkey in order to collect the data. Usability issues were found however while using the tool that impacted the design of the survey. Future research will include investigating alternative tools.

The survey consisted of five sections:

• About you (demographics; industry; education);

• Practicing UX (experience; understanding of UX; challenges);

• Institutionalising UX (size of the organisation; executive support; methods used);

• Educators (what UX courses are taught; size of classes); and

• Any other comments.

The survey started with an introductory paragraph, informing users of the goals of the survey, type of questions, length of the survey and that personal details were not being captured. Names and contact details were not requested as part of this survey.

The length of the survey was estimated at 10 to 20 minutes to complete. Before the survey went live, it was sent to a Professor at a Computer Science department at a South African university for feedback.

3.4 Analyse the Results

Survey Monkey allows the researcher to export captured data into a summarised document (PDF), as well as a detailed raw data Excel sheet. The researchers used both these documents to analyse results. The results were analysed according to the different themes identified in Section 3.3. Results were both qualitative (such as top challenges) and quantitative (such as the percentage

of respondents who conduct UX research). The results are reported in the next section.

4. RESULTS

The results of the research study are discussed next. They focus on the main themes found: demographics, experience, education, UX job titles, salaries, practicing UX and the South African UX community. The section concludes with limitations of the study.

4.1 Demographics

Section 3.2 listed the user profile of the study. Table 2 presents the profiles of the respondents of this study. The survey was completed by 105 respondents. Not all questions were required, due to the length of the survey. The results section indicates the number of respondents for a specific question, if that question was not answered by the full user profile.

Table 2: Respondent Demographics

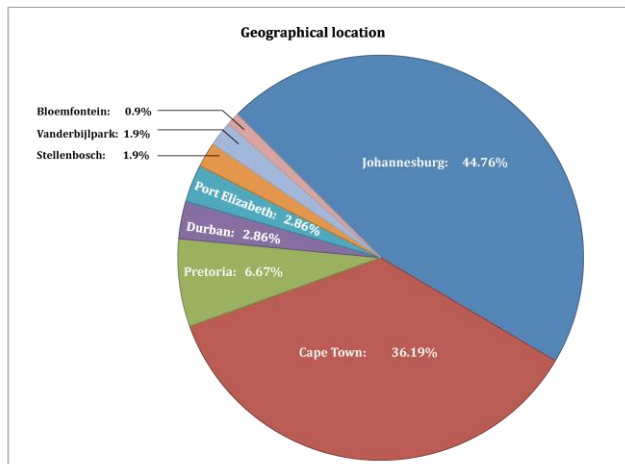| Number of respondents	105
Language	English: 72.00%
	Afrikaans: 22.00%
	Other languages: 6.00%
	(IsiNdebele, IsiXhosa, ThsiVenda, Xitsonga and German)
Gender	Male: 57.14%
	Female: 42.86%
Age	23 – 26: 11%
	27 - 33: 39%
	35 - 37: 11%
	38 - 42: 26%
	43 - 63: 14%
Employment	Employed: 92.38%
	Unemployed: 7.62%

Figure 1: Geographical locations of respondents

Figure 1 displays the geographical locations of respondents. The majority (80.95%) of respondents reside in Johannesburg (44.76%) and Cape Town (36.19%). Respondents between 27 and 33 years of age constitute the largest segment at 39%, followed by those between 38 and 42 at 26%. This indicates a low feeder base of student entrants into the field (only 11% is constituted by those between 23 and 26).

It has been noted that there is a massive gender gap in the technology industry where women made up 26% of the computing workforce in 2013 [11]. Furthermore, a recent study (2014) in the United States [17, 43] revealed that men outnumbered women seven to three in the IT industry. In contrast, this study demonstrated a fairly equal distribution in the UX field, with 57.14 % male respondents and 42.86 % female respondents.

4.2 Experience

Respondents were asked to indicate their experience within five categories of UX:

- **UX research: 78%** (e.g. user research; interviews; focus groups; and usability testing);

- **UX strategy: 61%** (e.g. defining UX strategies for products and services to take to market or those already in the marketplace);

- **UX design: 94%** (e.g. wireframing; prototyping; conceptual design; and visual/graphic design);

- **UX management: 56%** (e.g. advocating user-centred design; defining the SDLC; product scoping and discovery; team management; recruiting; and mentoring); and

- **UX consulting: 50%** (e.g. advising clients or internal departments on things like UX institutionalisation, and executive-level management).

Thirteen percent of respondents had experience with just one skillset; 13% with two skillsets; 28% with three skillsets; 17% with four skillsets; and 30% with all five skillsets. Twenty-two percent of respondents did not have experience with user research.

Eleven percent of respondents consider themselves of a junior level; 30% of mid-level; 47% of senior level; and 13% at the manager / director level. A concern that arises from the data is the small number of junior level practitioners.

4.3 Education

The lack of developmental growth in the ICT industry in South Africa is aggravated by a lack of HCI training and expertise [41]. To this end respondents were asked about their education backgrounds. Six percent of respondents hold matric passes, 4% certifications, 14% diplomas, 29% a Bachelor's degree, 21% an Honour's degree, 19% a Master's degree and 8% hold PhDs.

The following institutions were listed by respondents:

- University of Cape Town, 13%;

- Universities of Pretoria and University of the Witwatersrand, 11% each;

- University of Johannesburg, 7%;

- Nelson Mandela Metropolitan University, 6%;

- The Open Window, 5%;

- Rhodes University, University of South Africa (UNISA) and Human Factors International, 4% each; and

- The AAA School of Advertising, 2%.

25 other institutions were listed, all with 1% each.

Fifty-one percent of respondents completed UX specific short courses. The institutions offering these short courses were identified as: Human Factors International (44%); Coursera.org (13%); Red and Yellow School (11%); UNISA (4%); and Flow Interactive (4%). Other institutions who all had 2% each included: AIIM; Open2Study; University of Pretoria; Interaction Design Foundation; SXSW; Udemy; Quirk; University of Cape Town; Lynda.com; Britefire; and Google.

The results show a variety of institutions where UX is offered, but according to the authors' knowledge, no institution offers a formal UX focused degree, such as those found in the United States (for example, Master of Human-Computer Interaction offered at the University of Maryland).

Specific departments across Design, Computer Science, Management and other departments at different universities and and private colleges were identified by the authors. The survey was sent through personal e-mail invitations to 55 academic community members in 24 South African institutions. The goal of the academic section of the survey was to create a list of all the available UX education options available in South Africa. Unfortunately, there was a very low response rate. Future research will include one-on-one interviews or telephone interviews with academic staff at universities and colleges in an attempt to increase the response rate and to provide a list of facilities where UX education is offered.

4.4 User Experience Job Titles

A barrier to entering the UX job market is the sheer number of confusing UX Job titles [39]. Spoof websites, such as *"The UX Job Title Generator"* have even been created to make fun of the various titles [42]. User Experience is a very broad term, which is one of the root causes of confusion that permeates to UX job titles [39].

Table 3 presents the user experience titles of respondents of this study. Fifty-six percent of respondents (first three rows of Table 3) have titles that sit within mainstream UX titles (including those from usability and *specialist* titles such as interaction designer or information architect).

When companies write UX job descriptions, *"some of them throw the kitchen sink of responsibilities into one job"*, because: they are still figuring out what UX means to them; and UX design professionals may be viewed as the cost-effective solution that can do it all [39]. Future research will propose guidelines for UX titles and the various responsibilities.

In total, 43% of titles are not within *mainstream UX* and thus one could also deduct from these responses that UX is a field that touches upon and is touched by multiple disciplines (as discussed in Section 2.1). Future research will consider the following:

- Many people conducting UX related activities may not self-identify or even be aware of the field and thus would not have participated in the survey;

- Where definitions conflict (for example, an interaction designer who feels that UX relates only to the digital aspects

of what they are concerned with) may not have completed the survey or even have been aware of the survey;

- Fields where practitioners are actively attempting to disassociate with the term UX (such as information architecture) may not have participated with the survey; and

- Emerging fields, such as content strategy, are attempting to be both aligned and distinct from UX and their titles may not accurately reflect some or all activities that they perform.

Table 3: User Experience Titles

Mainstream UX titles (40.22%)	Head or lead of UX; Manager of UX; senior, mid, junior and intern UX; UX - specialist, researcher, analyst, architect, consultant, tester.
UX specialisation titles (9.19%)	Experience design consultant; interaction designer; information architect; innovation officer; strategist; researcher; user interface specialist.
Usability related titles (6.89%)	Usability - analyst, specialist, architect, engineer; HCI co-ordinator.
Development and technology related titles (11.49%)	Development manager; software engineer; web developer (incl. front-end developer); technical mentor; video producer; technical specialist.
Graphic design titles (10.34%)	Design lead; head of design; graphic designer; web designer; art director.
Content related titles (3.44%)	Content – strategist, analyst / architect.
Business / management consulting related titles (3.44%)	Business analyst; consultant; project manager.
Product related titles (3.44%)	Chief product officer; product manager.
Executive details (2.29%)	Director; vice president.
Marketing titles (1.14%)	Marketing manager.
Education titles (6.69%)	Research professor; Professor; Lecturer.

4.5 Salaries

Eighty of the 105 respondents (76.19%) provided salary information. This field was provided as optional in the event that any respondents found it too invasive. Five broad groupings of salary densities were identified (with the percentage of respondents in brackets):

- Less than R200 000 (13%);

- **R200 000 to R500 000 (46%);**
- R500 001 to R700 000 (23%);
- R700 001 to R900 000 (15%); and
- Greater than R900 001, (4%).

MyBroadband's latest (2015) IT salary survey [23] revealed that the average basic annual IT and telecoms salary in South Africa is R396 804. Future research will compare the salaries according to identified skill level and other IT fields in South Africa.

4.6 Practicing UX

A number of UX methods, tools and guidelines exist that can guide UX practitioners in creating solutions [28, 34, 36, 37, 44]; however, their effectiveness depends enormously on the profiles of the individuals on a team and on an organisation's understanding of UX. UX professionals are typically left unsupported in large organisations [34]. Institutionalisation of UX is a must if an organisation needs to move from an ad hoc user-centred design (UCD) approach to a sustained and managed UX practice [34].

Wesson and van Greunen [41] listed these challenges in 2003:

- A shortage of qualified practitioners and educators;
- A lack of awareness and implementation at industry level;
- Isolation, fragmentation and a lack of collaboration between academia, industry, private research, development and government;
- A lack of resources and inadequate training can result in inappropriate guidelines being adopted from literature; and
- A lack of knowledge of standards for usability and UCD exists in industry.

Even though the industry has seen growth, the results illustrated below shows that many of these challenges still exist in 2015.

Thirty-six percent of respondents answered that they conducted UX research on only selected projects; 31% on every project; 24% on most projects; and 10% never conduct user research.

Fourty-seven percent of respondents answered that they conducted usability testing on only selected projects; 25% on every project; 22% on most projects; and 5% never conduct usability testing.

Respondents were asked to provide the top challenges they experience in their day-to-day work as it relates to practicing UX. Table 4 list the top challenges listed by the 59 respondents who answered this question. Figure 2 illustrates the top challenges listed be respondents.

Table 4: Top Challenges Listed by Respondents

|	Top Challenges	Percentage of respondents
1.	UX buy-in and promoting UX in the organisation.	61.01%
2.	Time constraints during projects. Not enough time for UX methods (such as usability testing) and not enough time to implement recommendations.	35.59%
3.	Lack of skilled UX staff. UX teams do not have enough staff members; and it is difficult to find skilled UX staff.	28.81%
4.	Process challenges. UCD and UX activities are not included in the SDLC. UX activities are ignored. UX is not involved from the start.	22.03%
5.	Lack of budget. There is not enough budget for UX activities in a project. Or enough budget to employ more UX resources.	18.64%
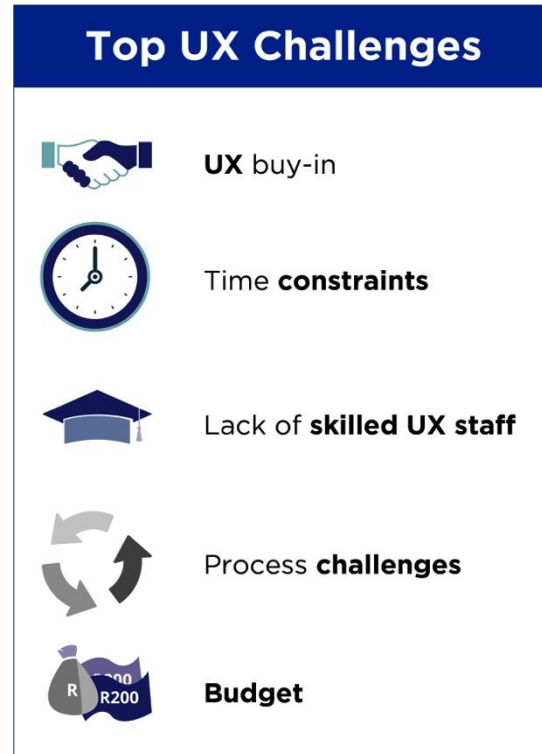
Figure 2: Top Five Challenges Listed by Respondents

The following were the key challenges listed when a project is in progress:

- Time constraints, as described in Table 4;
- Usability testing is still perceived as slowing down the project;
- A lack of user research and usability testing;
- Recruiting users and finding the correct users to conduct studies with;
- Content not provided early in the project;
- Lack of collaboration and poor communication in project teams;
- Balancing organisational goals versus user requirements; and
- System constraints.

A present challenge to the field of UX design is its institutionalisation within organisations [33]. Institutionalising UX in an enterprise demands, amongst other things, the establishment of routine practice; the use of best practices and the supply of tools, methods and resources to people. It appears that there is certainly scope for growth in maturation of UX within South African organisations (these questions were optional and were answered by 29 of the respondents):

- Only 50% of organisations have formal reporting of their UX capability;

- Only 44.83% of organisations have UX activities integrated into their SDLC;

- 82.21% of organisations indicated that UX is only seen as the design of digital products and services;

- 33.33% of organisations stated that UX training is not made available to staff; and

- 58.62% of respondents indicated that their organisations do not have a defined and documented UX strategy.

Methodologies to institutionalise UX are available however to support organisations [4, 18, 19, 25, 34, 36, 38]. For example, Pretorius [25] proposed a methodology that supports the institutionalisation of UX based on the premise that UX processes are not mature and institutionalised in South African Provincial Governments [27]. The methodology, an example of an available tool, provides a step-by-step method on how to institutionalise UX by following the six phases: startup, setup, organisation, method, standards and long-term.

4.7 The South African User Experience Community

The survey aimed to determine whether respondents were part of any UX communities and what UX communities exist in South Africa. Sixty-nine percent of respondents (64 respondents answered this question) indicated that they are part of local or international UX communities:

- The SAUX Forum (Facebook and Google Groups) constitute 39%;

- UX Craft Cape Town and the Information Architecture (IA) Institute each constitute 7%;

- The User Experience Professionals Association (UXPA, previously known as the Usability Professionals Association), Certified Usability Analyst (CUA) and Human Factors International (HFI) each constitute 6%;

- The Interaction Design Association, Durban UX Community, Linkedin UXSA and UX Masterclass Meet-ups each constitute 4%; and

- The remainder all constitute 2%: UX South Africa, SGI-SA, UX Bookclub (London), Johannesburg UX Forum, TEI, Mobile UX Johannesburg, UX Alliance, TELIT-SA and UX Meet-up Johannesburg.

Seventy-five percent of respondents indicated that they attend UX focused conferences or events:

- World Information IA Day constitutes 35%;

- The UXSA Conference constitutes 12%;

- UX Craft meet-ups constitute 8%;

- SAICSIT and UX Masterclass each constitute 5%; and

- The remainder all constitute 3% each: UX Joburg, Digify (Durban), UX Africa, UX Cape Town Meet-ups, Mantaray Annual Conference.

INTERACT 2013 was an international UX related conference in South Africa with several industry talks and attendance, however, this is not a repeating conference in South Africa. The first South African HCI conference was held in 2000 [41]. CHI-SA was proposed as an on-going conference solution in 2003, however, a Google search today does not show results for CHI-SA even on the first four results pages. Informal UX meet-ups have been present in Johannesburg and Cape Town since 2007 (usually promoted on the Google SAUX forum) and more recently in Durban.

The UXSA conference is a recent conference catering to UX practitioners in South Africa. The first conference, in 2014 attracted 380 attendees over two days and the 2015 conference attracted 600 attendees over two days. This was certainly not the first UX conference in South Africa, however other UX related conferences have had a predominantly academic focus. This is the first large-scale practitioner-oriented conference in South Africa. It is recommended that academia becomes involved in this industry focused conference. A second UXSA conference has been scheduled for November 2015 in Cape Town.

4.8 Limitations of the study

This study sought to better understand a field of design practice that is notoriously fragmented, dispersed and subjectively defined. The repercussions of this lack of uniformity must be acknowledged as the circulation of the survey was driven through existing UX structures such as the SAUX Forum. Hence there is the potential of practitioners outside of those existing structures to have been excluded.

Secondly, as this study is the first exploration with a specific focus on UX in South Africa, it is admittedly broad in nature as it attempts to portray an overview of a field. Thus while the survey method was selected as the primary method for data collection as it is helpful in obtaining feedback from a wide range of dispersed participants, it is acknowledged that the method has its own limitations in terms of ensuring an authenticity and rigor, more common with in depth qualitative accounts of experience.

5. CONCLUSIONS AND FUTURE WORK

The goal of this research study was to describe the current landscape of the field of UX in South Africa. A similar study on the field of HCI was conducted by Wesson and van Greunen in 2003 [41]. This study provides the UX landscape of South Africa as it stands in 2015. Results are of value to: academics and educators teaching in the UX design field, UX practitioners and service providers; organisations requiring UX capacity and competence; organisations requiring UX services; content providers and those considering a career in the field.

Survey Monkey was used to administer a survey to UX practitioners in the field via social media UX groups and direct e-mail invitations. 105 UX practitioners responded to the survey. Results focused on demographics, experience, education, UX job titles, salaries, practicing UX and the South African UX community.

Section 2.1 demonstrated the authors' position on that which makes a UX practitioner is not the field or discipline of practice but rather a commitment to an engagement towards creating or enhancing technologies that respond to and curate appropriate experiences for their users, within their contexts of use. No single defining characteristic of user experience careers exist [7]. The results of the survey indicated that 56% of respondents (Table 3) have titles that sit within mainstream UX titles and 43% of titles are not within *mainstream UX.* One could deduct from these responses that UX is a field that touches upon and is touched by multiple disciplines.

UX guidelines cannot be implemented if there is no executive support, if staff are inadequately trained, if there is no routine practice of UX, if there is insufficient budget for its execution and if there is inefficient use of usability methodologies and user-centred design processes [25]. These correspond closely to the challenges identified by participants: UX buy-in, time constraints, lack of skilled UX staff, process challenges and budgetary constraints. This demonstrates a clear lack of maturity of the institutionalisation of UX in the South African industry.

It appears that many of the challenges listed in 2003 [41] still remain in 2015. However, since 2003, the field of UX has grown. Several large organisations have created UX teams including, Standard Bank (started a UX graduate programme), Discovery, FNB and the Western Cape Government. Several big agencies now offer UX work as part of their services, including Native VML and Quirk. More organisations specialising in UX services are emerging, such as Deloitte Digital. Additionally, the UX community in South Africa is growing and perhaps with continued informal UX meet-ups, social media UX groups and the UXSA conference, collaboration opportunities could arise to strengthen the maturity of UX in South Africa. Lastly, clarity on the role, skills and abilities required of UX practitioners, can assist tertiary education to better prepare students for this rapidly growing field

It is the intention of the authors to learn from this survey and to repeat the survey on an annual or bi-annual basis. The authors tried to cover many questions in this survey. The authors will attempt to shorten the survey or to send specific questions to targeted groups, in order to increase the response rate for future surveys. Future work will include the compilation of a list of academic institutions where a UX is taught as part of formal degrees or short courses.

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