

Online participation and the theory of planned behaviour. Participation and lurking on IdeasTap.com.

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Abstract

IdeasTap is an online charity set up to help people build a career in the creative industries. There are multiple online services offered via ideastap.com designed to facilitate this. However, the majority of visitors to the site do not participate in the available services and instead choose to *lurk*. The Theory of Planned Behaviour (TPB) is a theory used to break down and understand behaviour in more detail. TPB has been shown to be a highly predictive model for understanding user behaviour. This study aims to understand IdeasTap's *lurking* and *participation* using TPB, and where appropriate to find ways to encourage and enable more *participation*. We use a combination of two surveys and an interview study to investigate different levels of participation. TPB is used both as an analysis tool in evaluating survey results and then as a tool for structuring the semi-structured interview study. The research builds on both existing lurking research by using behavioural theory to explore the topic as well as contributing to the use of TPB in the technology domain. The analysis revealed some key findings about the relevance of TPB to participation behaviours. For example attitudes were found to be quite consistent across levels of participation but the studies found that social norms and control beliefs ultimately had more direct impact on participation. The findings were used to uncover some detailed insights into how networking sites can better facilitate participation and how other online communities (particularly professional ones) can learn from the research on IdeasTap.com. Recommendations are made for design improvements to address normative beliefs around the professionalism of participation in an online network. We also suggest improving control beliefs with features such as syndicating content from other networking sites and better enabling *play* on the system.

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1. Introduction

This study looks at the phenomenon of *lurking* in the online arts community IdeasTap.com. According to Walker et al it is widely accepted that “lurkers” can be defined as a “persistent but silent audience” (Walker et al 2013). These are users who visit interactive sites (such as social networks) regularly but who read without posting, rating, liking or otherwise engaging with the community. There has been much research into the motivations of lurkers mainly focussed on forums (Preece et al, 2004; Lee et al, 2006; Walker et al, 2013) and on citizen science websites (Rotman et al, 2012; Massung et al, 2013, Eveleigh et al, 2014). The research focuses largely on categorising lurkers and their behaviour and describing the process of lurking and participating online. There has also been research into the underlying attitudes and motivations of lurkers in an attempt to understand the common behavioural trends (Rotman et al, 2012; Rafaeli et al, 2004; Preece et al, 2004).

This study seeks to expand on this work by using a specific behavioural theory to investigate lurking behaviour. The Theory of Planned Behaviour (TPB) looks at a person's readiness to perform a certain behaviour. The theory posits that “intention is a significant predictor of subsequent behaviour” (Ajzen, 1991). This “intention” is a function of three antecedents: “attitude”, “subjective norm” and “perceived behavioural control”. Attitude reflects the extent to which a subject has a positive or negative view of a behaviour. Subjective Norm frames a person's wider perspective taking in others perceived views of a behaviour. And Perceived Behavioural Control describes the extent to which the successful completion of a behaviour is perceived to be achievable within the limitations of the subject's abilities and resources. By breaking down intention into these component parts it is possible to measure and investigate these factors and how they can be influenced.

The study that follows uses TPB to understand more about online participation and lurking by exploring the following research questions:

1. **What are the behavioural themes for users with different participation levels on IdeasTap.com?**
2. **What can be done to overcome these behavioural barriers to participation?**

To address these questions the study uses the behavioural components described by TPB to break down participation behaviours:

1. **Attitude** - do users from different levels of participation exhibit favourable or unfavourable attitude towards the behaviour? What are the common themes?
2. **Subjective Norm** - do these users exhibit favourable or unfavourable subjective norm towards the behaviour? What are the common themes?
3. **Perceived Behavioural Control** - what is the relationship between levels of participation and levels of perceived behavioural control? What are the common themes?

The Background chapter gives a review of the relevant literature on lurking and the Theory of

Planned Behaviour as well as an overview of existing behavioural research into lurking. The chapter then gives an overview of lurking on IdeasTap and sets the basis for the research that follows.

The Method and Results chapters give an overview of three studies designed to explore the topic. Each of the subsequent studies is in large part shaped by the previous ones. The first study was a survey created with the intention of investigating the elusive lurker community. TPB was used as an analysis tool to identify themes that correspond to the behavioural components described. There were strong links to TPB themes; however the participants involved were found to be more active than the study intended and we found the true lurker audience by their nature was very difficult to engage in a dialogue.

For the second survey we tried to address these issues by intentionally investigating a slightly more active audience but one that was categorised by their tendency to begin an interaction with the site but then pull back into a “zone of lurking” (Lee et al, 2006). Lee et al describe the zone of lurking as a “rift between [being] willing to login and being able to post” (Lee et al, 2006). The results from this survey gave much more detailed insights and so this “zone of lurking” became the focus for the third study, which was a larger interview study. Something else that the second survey revealed was that focusing the recruitment and the questions around a specific task gave much more focussed and detailed results and so for the interview study two carefully selected tasks were used to structure the study and recruit participants. 1) Creating an online portfolio and 2) Entering a competition. These tasks were chosen because they had a range of users from the very active to the barely active.

Whereas TPB was used in the survey studies to analyse the results, in this interview study TPB is also used to frame the questions for the semi-structured interview. The results chapter lays out the key themes identified from the interview study from those which impact all users to those which appear to account for differences in levels of participation. The discussions chapter considers the implications of these themes and their relevance to participation. This chapter also looks at implications for design and weaknesses of the approach. The Conclusions chapter summarises the findings and the contribution of the study.

2. Background

The creative industries are believed to be worth £74.1 billion to the UK economy each year (Department for Culture, Media and Sport, 2014). Those working in the creative industries are shown to have high job satisfaction (77% in 2010), entrepreneurial skills, and an aptitude to continue learning through work (Ball et al, 2010). However there are many barriers for entering the creative industries including a perceived lack of opportunities, relevant skills and experience, and a high level of competition (Ball et al, 2010). IdeasTap.com is an online charity set up to help emerging creative practitioners overcome these barriers and enter into employment in the creative sector.

Ideastap.com provides a series of services via their website to both the public and to its registered membership. Public services include an extensive library of advice and inspiration via a their online magazine, extensive arts funding information and public postings of their member-held free cultural events. Private services are advertised publicly but are available only to registered members (who are able to join for free at any time). These services include comprehensive arts jobs listings, exclusive opportunities via leading arts organisations, free training and events nationwide (including free headshots and c.v. reviews), funding, as well as online and offline networking. Achieving the charitable objectives of IdeasTap is dependent on people using the online services offered which is why lurking behaviour is of interest.

This chapter gives a review of the relevant literature on lurking and the Theory of Planned Behaviour as well as an overview of existing behavioural research into lurking. The chapter then gives an overview of lurking on IdeasTap and sets the basis for the studies.

2.1 Lurking research

Definitions of what constitutes a lurker range from those who post infrequently to those who do not post at all. Walker et al (2013) state that it is generally agreed that lurkers “behave passively, they may have opinions, ideas and information of value to the community, and that they are a persistent but silent audience.” True lurkers on IdeasTap are essentially those visitors to the site who visit and read perhaps regularly but do not post any data in the form of signing up, posting comments, applying to briefs or for free training events. They neither create nor join member groups or events and do not connect with other users. There are also users however that may have at some stage signed up and continue to visit the site (referred to in section 4 as Member Lurkers) but they have then ceased to participate in any data interactions and their knowledge of their own membership and what it means is very low. For the purpose of this study we are interested in a range of lurking and participation from true lurkers to very active members.

There have been many papers and studies exploring the phenomenon of lurking in online communities. Lurking has been widely accepted as a normal behaviour on most social networks. Some research has challenged the notion of lurking as a negative behaviour seeing it as a form of participation or as a stage in the process of deeper participation. Studies have investigated the motivations for lurking and barriers to participation suggesting ways to create more equitable participation distribution and facilitate some of the positive forms of lurking.

In 2006 Nielsen investigated a cross section of online communities and found that the only universally common trend across the communities was that “most users don't participate”. Nielsen found an overarching trend for participation. “In most online communities, 90% of users are lurkers who never contribute, 9% of users contribute a little, and 1% of users account for almost all the action.” (Nielsen, 2006). Nielsen identifies issues with this skewed participation where the “overall system is not representative of average Web users”. For example not-for-profit sites have donators and contributors who are vastly outnumbered by lurkers, meaning that it is near impossible to understand what the broader audience would need from the organisation to inspire them to donate.

Nielsen warns that participation inequality cannot be overcome and so instead online communities should strive to “achieve a more equitable distribution” (Nielsen, 2006). Nielsen suggests a number of ways that participation can be made easier and more likely “Make it easier to contribute” (e.g. rating with stars instead of reviewing), “Make participation a side effect.” (e.g. “*Amazon’s people who bought this also bought...*”), “Edit, don’t create.” (e.g. reduce the need for users to create something from scratch), and “Reward — but don’t over-reward — participants.” Over rewarding will only encourage the top 1% and make the rest feel insignificant. Finally “Promote quality contributors” (Nielsen, 2006)

A 2011 study by Crawford takes a less negative stance on the act of lurking suggesting it is misunderstood and that it is our perception of lurking that needs to shift: “the act of reading and ‘hearing’ is not highly valued.” (Crawford, 2011). Crawford investigates a “Ladder of participation” (Li 2007) which places “Spectators” at the bottom along with “Inactives”. Crawford challenges the notion that these “Spectators” who are the largest and fastest growing group are not participating, or that they are “inactive”. In particular Crawford cites the example of Twitter where “the act of listening to several (or several hundred) Twitter users requires a kind of dexterity: a capacity to inhabit a stream of multi-layered information.” (Crawford, 2011)

Eveleigh et al (2014) explored the phenomenon of “dabblers” in a weather based citizen science project. Dabblers are described as “participants who contribute fleetingly or intermittently”. They also uncovered value in the act of dabbling finding that “dabbling is important to a project’s success”. They recommend a model where this level of participation is encouraged and enabled by citizen science projects.

Rafaeli et al (2004) identified a series of 9 explanations for why lurkers lurk only one of which was negative “Free-loaders or free-riders”. The rest were all closely related to the reasons that a poster might post e.g. “To learn about a new topic” or “To gain virtual social and cultural capital” They suggest allowing lurkers to remain passive until they are ready to become posters.

Preece et al (2004) also challenge the idea that lurkers “free ride” citing the example of Health and Education forums where “support communities accept lurkers as members of the community”. Lurking can also be seen as a lead-in activity towards participation enabling new members to learn “community norms” almost as a part of the participation process.

Walker et al (2013) identified a problem with the previous literature on lurking. They found that true lurkers by their nature are difficult to get to participate in a study. They tried to overcome the problem by focussing their study on a specific task around which they could build levels of participation. They used a three part study; the first part was a seminar designed to teach a complete set of small business owners how to be more “e-savvy” with their business. The seminar attendees were then given access to an online interactive workshop for the second part of the study. The third part was then the opportunity to continue participation in the online community. The study yielded 105 lurkers (who visited the online community but did not post), 11 posters (who actively visited and posted) and 184 “Shirkers” (who did not even visit the

online community).

Walker et al.'s study identified two types of lurkers "Passive" and "Active" and two types of poster "Initial" or "responding". The study looked at the motivations of these types of users and identified opportunities to move users between the categories. For example an active lurker could be encouraged to become a responding poster "when he felt that a question was asked that was within his competence to answer". In other words he had an "altruistic motive" for moving from active lurker to responding poster. (Walker et al, 2013). Walker et al identified the need for a clearly defined and communicated "what's in it for me" aspect to participation.

Crowston & Fagnot (2008) also proposed the idea of this type of lurking as a part of a process of participation. They suggest a model for motivations of contribution to "Massive Virtual Collaborations" (e.g. Wikipedia) described as "The motivational arc for massive virtual collaboration" (Crowston & Fagnot, 2008). Their model classifies 3 levels of participation "initial, sustained and meta" with initial being the first "test the water" interaction all the way to meta contributors who enable and facilitate others to contribute. Crowston and Fagnot investigate the motivations for entering the arc at the initial stage.

Lee et al. (2006) identify "logging in" as the minimum for participation and propose the "zone of lurking" as the space between logging in and further participation such as posting. They also suggest that lurking seems to be a necessary process for newcomers when becoming part of a community. It is this "zone of lurking" that we begin to look at in detail later in this study. This "zone of lurking" group are interesting because they have chosen to participate in part but then hold back. They are a large segment of the user base who are far easier to study than the evasive anonymous lurkers. The differences between this large group and the more active users give us clues about the influences on participation for the whole audience.

2.2 Theory of Planned Behaviour

The theory of planned behaviour (TPB) is a concept proposed by Icek Ajzen (1991) as a way of predicting and understanding behaviour. Human behaviour is notoriously difficult to predict using knowledge about attitude and demographics (Ajzen & Fishbein, 1977). The theory of planned behaviour has been shown to be one of the most predictive theories of human behaviour (Ajzen, 1991). The application of the theory has shown more immediate factors such as a user's belief in their abilities to influence the decision to carry out a behaviour. The theory suggests behaviour to be a descendent of intention which is itself a descendant of 3 factors: attitude, subjective norm and perceived behavioural control.

The more favourable the attitude and subjective norm and the greater the perceived behavioural control the greater the intention to perform the behaviour. In addition a sufficient level of actual behavioural control should lead the person to carry out their intention.

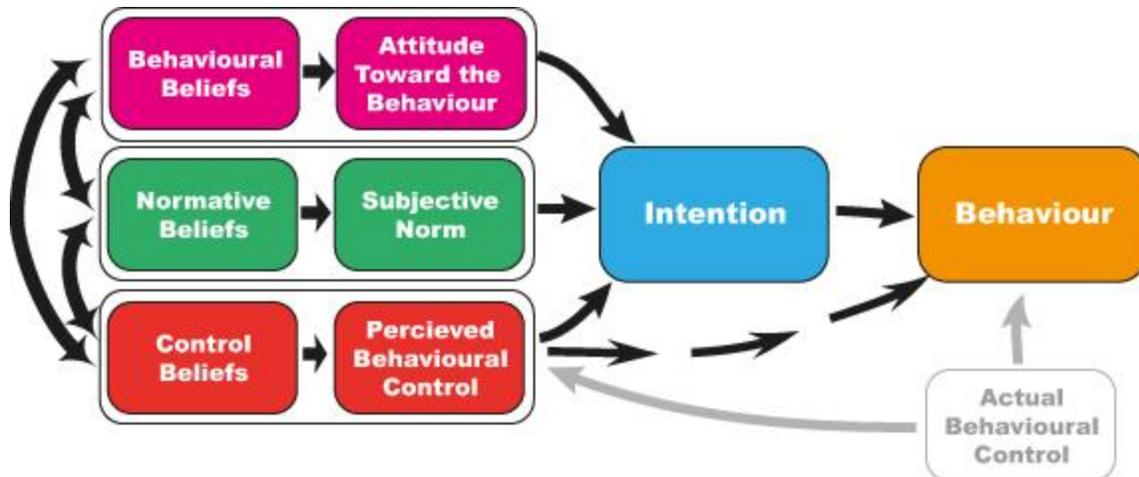


Figure 1: Theory of Planned Behaviour (based on Ajzen, 2002)

There has been much empirical research into the predictive capacity of the theory but what has been shown to a greater extent is the value of investigating and understanding the factors that construct a user's intention (Mathieson, 1991). By breaking these down in specific contexts the theory has been shown to enable us to understand behaviours and make meaningful interventions to help with behaviour change (Ajzen, 1991).

TPB has been applied to a multitude of studies of behaviour change from health such as exercise, smoking, or diet (Godin & Kok, 1996) to ethical consumption and environmentally conscious behaviour (Tonglet et al, 2004). It has also been applied to marketing and advertising (Kalafatis et al, 1999) and entrepreneurial intention (Kautonen et al , 2011, 2013).

There are also a handful of notable studies that use the theory to look at behaviour in technology contexts. Mathieson (1991) compared the predictive potential of TPB and the Technology Acceptance Model (TAM) (Davis et al, 1989) in predicting intended use of Information Systems. They found TAM to have an empirical advantage over TPB; however they found that TPB was able to give much more detailed insights about a user's specific needs and issues to help guide development.

Hsu and Chiu (2004) used TPB to investigate electronic service continuance, as opposed to the initial acceptance of an electronic service (their study used online tax filing). One of the interesting aspects of their study was that they used a decomposed model of TPB that broke the components down into items specifically relevant to electronic services. Attitude was broken down into "Perceived Usefulness", "Perceived Risk" and "Perceived Playfulness". Subjective norm was broken down into "External influence" and "Interpersonal influence". And Perceived Behavioural Control was broken down into "Internet self-efficacy" and "Controllability" (Hsu & Chiu, 2004). The decomposed model enabled them to create questions that probed the different aspects of the three main components of TPB. They found differences in the results within attitude, for example "perceived usefulness" and "playfulness" had a greater effect than "risk" on user satisfaction. In terms of subjective norm "interpersonal influence" (concerning known friends and family) was the dominant subjective norm influence on continuance and satisfaction

and “external influence” (concerning the views of the rest of the world) was much less significant. They also found that “internet self-efficacy” had a significant effect on continuance but not on satisfaction. Their research demonstrates the value of breaking down the constructs further to specifically suit the technology domain.

2.3 Lurking and behavioural research

There have been some notable studies into lurking which look specifically at lurking in terms of behaviour. Whilst none of these studies look specifically at TPB they do indicate the interesting potential of a TPB study of lurking and participation.

Preece et al (2004) carried out a study investigating the top reasons for lurking in online communities. They looked at a cross section of MSN online discussion boards. They found that the demographic of the lurker and poster populations was similar as were their reasons for going online. The main difference was in their attitudes with posters being more positive. “Posters feel they get more from the community; posters have a greater sense of belonging to the community; posters’ opinions about other posters and lurkers are more favorable; and most posters accept lurkers as members of the community”. The most popular reasons given by lurkers were “just reading/browsing is enough” (53.9%), followed by “still learning about the group” (29.7%) and “shy about posting” (28.3%). These attitudes indicate a relationship to Ajzen’s theory of planned behaviour with attitudes and subjective norm perceptions about participation influencing behaviour.

Rotman et al (2012) looked at the motivations and barriers for participation in citizen science projects both from the point of view of volunteers (whose motivations are less clear) and from the point of view of scientists (who stand to gain more directly from the projects explored). Motivations broke down into 4 main areas “Egoism” advancing own knowledge and experience, “Collectivism” benefitting a community, “Altruism” benefiting others and “Principalism” sharing and empowering. The main barriers to participation were around collaboration between scientists and volunteers. Barriers included “Mutual apprehension and trust” issues where scientists were found to be “intimidating”, or speaking “a different jargon”. There was additional misunderstanding from the scientist’s point of view where they often tended to assume that volunteers had different motivations to them. Assuming that volunteers were “wanting to be outside”, or “wanting to do something meaningful” rather than having a real interest in “scientific problems as their primary motivation.” (Rotman et al, 2012) The research indicates that subjective norm and a misunderstanding of attitude can impede desired behaviours.

Massung et al (2013) investigated the impact of extrinsic and intrinsic incentives as motivating factors in participating in citizen science initiatives. However they found that more significant than motivating factors were immediate enabling factors such as “lifestyle”, “technology” and “weather conditions”. Again this indicates a complex play of factors that ultimately influence behaviour rather than a single motivating factor being key.

2.4 Lurking on IdeasTap

IdeasTap has attracted an estimated 3M users¹ over the past 6 years but only 150k² of these have become signed up members. Many non-members visit the site frequently but they chose to lurk as they do not participate in any of the member services. Many signed-up members of the site also visit regularly and view a variety of content but also choose to just lurk on the site without applying to opportunities, jobs, funding and free training. Some members are found to visit and then start activities on the site or follow³ content but then fail to complete the actions they have started. The aim of this study is to understand the reasons for these lurking behaviours and where appropriate suggest design solutions to increase participation.

Participation Levels

Using the available data for participation on IdeasTap and examples from research literature 7 participation levels were identified to support the research in identifying and finding relevant participants:

- **Level 1: Meta posters** – Members who post content that cause other members to participate. (Posting events or groups, creating forum threads, sharing content, creating crowdfunding projects.)
- **Level 2: Originating posters** – Members who perform actions on the site which are originating with them rather than with another member. (Applying for briefs, booking workshops, uploading to portfolio, adding someone to your network)
- **Level 3: Responding posters** – Members carrying out actions that are in response to another members action (Commenting, liking, responding to forum thread, attending member events, joining member groups, backing a crowdfunding project, accepting a networking invitation)
- **Level 4: Followers** – Members who ‘follow’ content without actually responding (Following a brief but not entering, following a crowdfunding project but not backing, reading the newsletter but not visiting, viewing jobs)
- **Level 5: Member Lurkers** – Members who have signed up and who visit the site but who have not participated in any other way.
- **Level 6: Regular Lurkers** – Lurkers (not members) who have never signed up but who visit the site regularly
- **Level 7: One off Lurkers (Shirkers):** Lurkers (not members) who visit the site but not regularly.

¹ 3,099,165 estimate supplied by IdeasTap 12th May 2014 taken from Google Analytics. NB. this is just

² 150,327 signed-up members supplied by IdeasTap as of 28th May 2014.

³ ‘Following is an action that puts the user on a mailing list to be notified about content and reminded of closing dates etc.

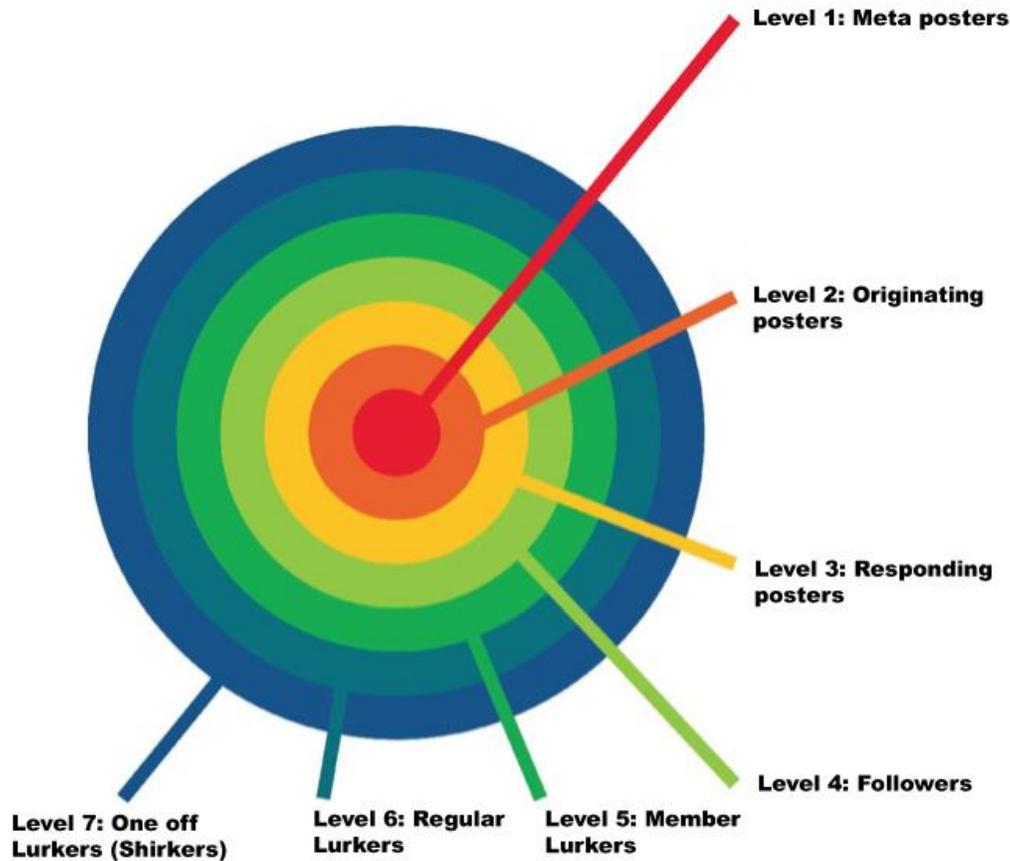


Figure 2: Participation levels on IdeasTap

The first study used an annual survey which was already being sent out to gather information about registered members of the site. The main purpose of the survey was to monitor feedback from members. We used it as an opportunity to also attract lurker responses and to tack on some questions aimed at lurkers to help build up more of a picture of how they compared in attitude and behaviour to the signed up members on the site. The goal of this survey study was to recruit participants from across a full range of participation levels and to understand their behaviour using TPB to break the findings down. What is uncovered in this first study is that recruitment of lurkers across the 7 levels described above is very difficult. And so for the next study a different set of task centred participation levels were identified and used to far greater effect.

Much of the lurking research suggests that lurkers are happy with their non-participatory role in a community (Rafaeli et al., 2004, Preece et al, 2004). However there is evidence from our studies that follow that some lurkers on IdeasTap are inhibited from participating at deeper levels by the factors that contribute to intention and behaviour as laid out in Ajzen's TPB. Therefore a closer inspection of these factors and their influence over the varying levels of participation on IdeasTap may help in the design of a better less inhibiting system for these users.

3. Overview of Studies

The research is formed of three separate studies. The first study was a survey designed to investigate the behaviour of users who fitted into our identified participation levels on IdeasTap.com using TPB to analyse the results. The study showed some interesting lurker responses but what was clear was that sampling across our participation levels identified above was not going to be realistic even with the large response group we had attracted. Looking to previous literature for help addressing this problem for our next study we considered Walker et al's approach (2013) of creating a complete set of users around a specific task and then exploring the levels of participation within the context of the task.

For the second survey study levels of participation within the task were identified and a much more revealing and complete set of user responses were analysed using TPB. This approach yielded much more detailed responses and also ones that demonstrated a very strong relevance to TPB with almost all results fitting strongly with one or more of Azjen's constructs.

The two survey studies showed that lurkers on IdeasTap have a relatively narrow range of reasons for lurking. Long-term lurkers cited lack of time or privacy concerns as their main reasons for not signing up. There was even evidence that there are members who have some intention to participate but that many (and often the majority) do not eventually do so. This discrepancy between the apparent intention to carry out an action and the eventual behaviour implied that there may be consistent behavioural trends at play. And so we set about understanding whether we could identify consistent trends with these participation behaviours, which related strongly to the intention constructs in figure 1.

What the surveys were not able to do was to uncover more than simply the relevance of TPB to lurking and participation. In order to probe into the detail of the behavioural findings we decided to use an interview study. Lessons learned from the literature and the two survey studies helped to shape the main semi-structured interview study. We used Hsu and Chiu's (2004) decomposed framework to design interview questions that were more relevant to the domain, this time using TPB to design the interview as well as to analyse results.

4. Survey Study 1 - Members and Lurkers

4.1 Survey 1 - Method

The survey was carried out in October 2013 using a PollDaddy survey and was first sent to the member mailing list of about 120k IdeasTap members (the membership at the time) and was then posted as an advert on IdeasTap.com for a 4 week period to pick up responses from non members. To attract the non-member responses we posted the advert in areas of the website, such as articles and the jobs section that lurkers were known to frequent. It was incentivised by entering into a draw for 3 iPads as well as twenty £20 amazon vouchers for the first twenty respondents. The main constraints for this survey study were around the sampling of participants. On the one hand the responses from members were biased towards quite

enthusiastic and active members (84% of respondents were active⁴ vs 34% active for the entire membership). In terms of the lurkers the main constraint is that by their very nature true lurkers are extremely difficult to gain responses from. Since there is no obvious way to overcome these issues they instead must be considered in the analysis of results.

Data gathered from members was associated with other demographic and behavioural data already held on the member database. Lurkers were asked a number of additional demographic questions to enable comparison during analysis. Participants were advised via the survey introduction that their data would not be shared with any third party.

Results were analysed separately for the lurker responses. Responses were split into member lurkers (people who had mistakenly thought themselves not to be members) and actual non-member lurkers. The main data that was analysed for non-member lurkers was the answer to the question “What is the main reason you have not yet signed up to IdeasTap?”. The data was analysed using a thematic analysis (Braun & Clarke 2006) where emergent themes were established after a number of readings of the data. Codes that emerged during the analysis were then used for a second and third iteration at analysing the data to identify the strongest and most interesting themes.

4.2 Survey 1 results

3642 (3.04%⁵) completed the survey by either clicking the link in an email or by finding the link on the website. The first question of the survey was designed to distinguish lurkers from members “Are you a registered member of IdeasTap?”. There were 128 responses from those claiming not to be members. Of these 68 in fact were already members indicating that there was an issue of misunderstanding. The member lurkers data was discounted from the lurker data but recommendations were made to IdeasTap regarding the origins of this misunderstanding. The responses from the remaining 57 were considered to be from lurkers.

As with other lurker studies (e.g. Preece et al, 2004) the demographic profile of lurker responses was relatively similar to member responses. This was true in terms of age, sex, employment status, creative discipline and education level. They even demonstrated a very similar awareness of member services as well as a similar affinity level with 93% saying they would recommend IdeasTap versus 97% of member respondents (see appendix 10).

The responses were from lurkers who were fairly active on the site. 20 respondents (35%) claimed to visit the site once a week and a further 24 (42%) claimed to visit once a month. Only 12 (21%) said that they were visiting for the first time.

Lurkers were asked to give the main reasons that they had not yet registered on the site. Only

⁴ ‘active’ was qualified as those who had logged into the site within the past 30 days before the survey was sent.

⁵ This percentage is only accurate in relation to the membership who were notified about the survey not to the traffic that may have attended to the advert.

39 respondents gave answers that could be included (although the field was mandatory some users simply put in a full stop). Their answers broke down into 4 main categories:

1. **“Only just found out about IdeasTap”** - 9 out of 39 respondents or 23% - two of these respondents have since become members⁶. As you would expect knowledge of the services offered was fairly low amongst this group.
2. **“Don't understand the benefits”** - 9 out of 39 respondents or 23% - said they didn't understand or hadn't looked into the benefits yet. Knowledge of the services offered was better amongst these respondents.
3. **“Not had enough time”** - 5 out of 39 said they hadn't had enough time to join.
4. **“Privacy concerns”** - Don't want to sign up as they don't want to receive another email or sign up to another site - 4 out of 57

The full list of the 39 lurker answers to this question can be seen in Appendix 9.

Out of the 57 lurkers, seven have since become members⁷ which indicates that the group is predominantly made up of habitual lurkers. Rather than of early stage members. This means that the data from the remaining 50 is a valuable sample in terms of feedback from real lurkers.

The main reasons given by these respondents were analysed against the components of TPB to understand the extent of the relevance of the theory. Of the main reasons given by lurkers for not joining number “3 - Not had enough time” indicated an unfavourable perceived behavioural control in terms of the effort required. Number “4 - privacy concerns” indicated an unfavourable attitude towards registering for online services in general. Answers falling under “2 - Don't understand the benefits” indicated an issue of unfavourable perceived behavioural control where there is confusion about the cost and value of signing up and the user is not readily equipped to make an informed decision.

Despite these interesting findings this study struggles to yield detailed enough findings for us to use TPB to uncover useful recommendations in relation to lurking behaviour. There are two main reasons for this. Firstly the format of a survey doesn't allow for ad-hoc delving into issues to get to the component facets of behaviour described by TPB. Secondly the broad nature of the study means that behaviours in question are not focussed enough on a specific set of tasks to indicate specific problems or solutions. However the biggest concern with the results of the study was that we were not able to attract a sample that could be categorised using the general participation levels we had identified in our research (Section 2.4). What was clear was that we were going to struggle to attract a representative spectrum of general lurkers.

The second survey attempts to overcome some of these issues by accepting that the full spectrum of general lurkers cannot be sampled. Instead the study focuses on a more accessible subsection of members all of whom have undertaken the same single task/behaviour.

⁶ As of December 2013

⁷ As of December 2013.

5. Survey Study 2 - Followers who don't apply.

The second survey was sent out in January 2014 to capture feedback from members who had exhibited the intention to apply to a big competition but who had not ultimately applied. The Sky Academy Arts Scholarship scheme is one of the largest funding awards made by IdeasTap each year in partnership with the broadcaster Sky. Five winners are chosen to receive a £30k bursary to support them in progressing their creative work for one year. In 2013 the site received 1016 applications for the award. However this number was far lower than the 5379 members who *followed* the brief. Following a brief is the first step to applying for a brief such as the Sky award with a button that reads "follow to apply". To follow a brief a person must first become a member of the site. The signup statistics indicate that over half of the followers (2,435) signed-up to the site specifically to apply to the brief. So why did so few of these followers end up actually applying to this exceptional opportunity having already taken the step of signing up to the site and then following the brief?

5.1. Survey 2 Method.

A single multiple choice question ("Why didn't you apply for the Sky Academy Arts Scholarship?") with an additional open question for comments was sent as a survey to the 4363 followers who did not end up applying to the Sky brief asking what the reason was for not applying (see appendix 6 for responses). The main constraint of the survey was around sampling. Whilst the responses were rich in feedback from both positive and negative experience of following the brief the sample could none the less be considered to be from a fairly active segment (who are opening and responding to the survey email). However all respondents could be reliably considered to be within a "zone of lurking" and the responses were rich in a variety of reasons for not following through with the application process. And so the data was considered to be reflective of the real issues facing a cross section of users. The survey was not incentivised instead users were asked to help improve the award for the future.

Responses from users who had given reasons for not applying that were out of the participants control were excluded. E.g. health reasons, or ineligibility. This time the free entry data was coded using a thematic analysis (Braun & Clarke 2006) that was framed by TPB. This involved two coding sessions with the data, the first seeking general themes and the second attributing one or more specific TPB codes to each response where appropriate (codes were A-Attitude, SN-Subjective norm or PBC-Perceived behavioural control). The general themes were then also categorised by the three TPB themes where appropriate.

5.2 Survey 2 results

317 (or 7.27%) responded and the results of the multiple choice portion of the survey once coded could be shown to indicate that almost 93% had issues that can be attributed to perceived behavioural control citing reasons ranging from lack of time (129 responses) to 'off-putting application process' (80 responses). Another major factor which seemed to cross over Subjective Norm and Perceived Behavioural Control was "too much competition" (46 responses).

However the most interesting part of the data gathered during this survey turned out to be the optional free entry question (answered by 177 participants) of “Please give any additional info to help us understand your answer.” The responses to this part of the survey gave much more detailed answers. This finding in particular indicated that the use of a semi-structured interview study would be likely to yield far more compelling results.

Answers to this free entry question were coded first using themes from TPB of Attitude, Subjective Norm and Perceived Behavioural Control. They were then coded a second time to reveal more detailed codes that fell into the TPB codes but were more specific to the data. This analysis revealed some very strong common themes across the findings. These codes were:

Daunting (37/177 responses) - ATTITUDE - respondents were “daunted” by the process of applying, they sometimes felt it was “unclear”, they were “unsure” or could not “confidently” complete the application.

No Time (28 responses) - PBC - Respondents felt they had no time. Whilst this was true for many respondents these 28 gave answers that indicated they felt they didn’t have enough time to create a “winning” application, rather than to apply at all which could in theory be done in a short time.

Underdeveloped idea (28 responses) - PBC - These respondents differed slightly from the time constrained ones in that they didn’t feel their idea was at the right stage of development to apply, or that their idea wasn’t “appropriate” or “specific enough”.

Not good enough (21 responses) - A/PBC - These respondents didn’t feel their ideas or sometimes their supporting work was “good” or “strong” enough.

Dejected (6 responses) - A - These respondents had applied before and felt negatively about the competition and about IdeasTap or Sky having failed previously.

The survey gave some interesting insights on the important factors influencing behaviour such as past experiences and confidence. In coding using TPB themes we were able to identify very strong links to the theory, proving that there is enough relevance to investigate further. However the findings are limited by the format of the survey, which doesn’t allow for deeper delving into specific issues to understand them fully and even propose design solutions. One of the most useful insights from this study was the quality of the open question data. This helped significantly in deciding to opt for a more specific interview study. The quality of data also demonstrated the value of grounding the study in a specific task and helped us to design the interview format. To extend the work of the survey studies we set about designing the interview questions with the emerging themes in mind in order to get more detailed data on each theme and identify the next layer of more intricate themes.

6. Interview Study Method

The interview study follows the “PRET A Reporter framework” or “PRETAR” for evaluating a system (Blandford et al 2008) using additional guidance from Blandford 2013 for creating a semi structured qualitative study (Blandford, 2013).

1. Purpose of the evaluation
2. Resources and constraints
3. Ethics
4. Techniques for data collection
5. Analysis techniques
6. Report findings

Purpose: The purpose of the interview study was to build on our findings from the survey studies which had already established the relevance of TPB to lurking and participation on IdeasTap.com. The interview study was designed to probe more deeply into these findings and to identify the common themes, which would hopefully lead to some reliable recommendations for improving participation. Uncovering detailed findings and recommendations is something that TPB has been shown to be very effective at doing in previous studies (Mathieson, 1991). By involving participants from a range of levels of participation (from posters to lurkers) we hoped to establish valuable insights within participation results as well as key differences in their attitudes and intentions that may explain their online behaviour. No existing study investigates the links between TPB and lurking behaviour in online communities.

Resources and constraints:

There was an existing audience of 160k⁸ members. We were able to use an activity database to identify which users have used certain features and which fell within the stated brackets of participation.

One of the major constraints was that the interviewer/researcher was heavily involved in the IdeasTap organisation and in the software development in particular so it was important to mitigate the effect that this would have on participant responses. Some participants may have felt discouraged from criticising the system or from expressing negative attitudes towards the organisation. Demonstrating a neutral view of the existing system was important, as well as expressing a desire to recognise and improve on any failings. A pilot study (see appendix 7) was used to check the structure of the study and to attempt to uncover additional confounds.

The role of TPB was key in the structuring of the study and analysis of the data. Hsu and Chiu’s (2004) decomposed framework for TPB was used to break down the interview questions into more domain specific questions. Attitude was broken down into “Perceived Usefulness”, “Perceived Risk”, and “Perceived Playfulness”. Subjective norm was broken down into “Interpersonal influence” and “External influence”. And Perceived behavioural control was broken down into “Internet self-efficacy” and “controllability”. Each of these sub components had a question associated with the specific domain and task (See Appendix 3 - Task specific

⁸ As of December 2014

questions). Where appropriate questions are also followed up with a question inviting suggestions for how attitudes could be altered by the system.

In order to identify the user tasks that would yield the most reliable results for the interview study we established a set of criteria for selecting the task:

1. **Identifiable participants** - a task that had participants that could be clearly identified.
2. **Publicly identifiable participants** - tasks where participants would not feel their privacy had been infringed by us being aware of their task participation. For example where a user had published something on the site publicly.
3. **Range of levels of participant** - a task that had participants from one end of the participation spectrum (who were considered active) and also had those considered less active (who had partially completed, completed to a lesser extent, on only one occasion, or had failed to complete).
4. **Recency** - tasks where there had been recent participation so that the issues and attitudes would be fresh in participant's minds.

Target behaviours:

We were able to identify two tasks on the website that fit our criteria with a total of six participant categories.

1. **Entering a competition** - We could easily identify members from the same competition who have done the following:
 - a. Entered target competition as well multiple other competitions (Regular competition entrant).
 - b. Entered target competition only (Single competition entrant).
 - c. Followed target competition but not entered (Competition follower).
2. **Creating a Portfolio** - Creating an online portfolio is a task that enables us to target a range of users:
 - a. Those who have a full portfolio that is regularly updated. (2 or more projects) (Full portfolio)
 - b. Those who have a sparse portfolio. (1-10 items) (Sparse portfolio)
 - c. Those who have begun to create but have not uploaded anything to their portfolio. (Empty portfolio)

Recruitment: A full list of all the members who qualified under each category was identified. Then for convenience these lists were compared against a list of 92 members who were already scheduled to be visiting the IdeasTap building to make use of the facilities. This meant that it was not necessary to incentivise participation since it would be an easy addition to their visit. The main confound of this recruitment strategy was that the group were engaged with the organisation at a deeper level than an average member. In addition since the facilities that they were travelling to the building to use were geared towards small enterprises these users were more likely to be further along in their career. This issue was mitigated in part by the fact that recruitment was focussed around participation in specific tasks. And so findings about participation in that task could be considered to be valid. These factors were also considered in the analysis of the findings.

There were 18 participants in total with three from each of the 6 participation categories. Interviews lasted between 25 minutes and 1 hour with an average of 37 minutes. See Appendix 4 for table of Participants.

Ethical considerations:

One potential issue arising from the recruitment strategy was the use of the member database to identify recruits. For this reason we intentionally chose tasks for which the extent to which a member has participated in the activity is publicly shown on the website. Prior to the collection of the interview data the use of the data was explained to participants and they were given the opportunity to approve transcripts before being analysed. All participants declined the opportunity check their transcripts and signed a disclaimer for the recording confirming that they were happy for their data to be recorded and used. This study was approved by the UCL Research Ethics Committee as Project ID Number: UCLIC/1213/015.

Techniques for data gathering:

An iPhone recording device was used to record the interviews for transcribing later. The interview was structured with a short introduction, followed by some general questions, followed by the questions specific to the participation category to which the participant belonged. (See appendices 1-3).

Analysis of data:

Interviews were transcribed and then coded using thematic analysis (Braun & Clarke 2006). The reason for using thematic analysis was the level of “flexibility” afforded by the method, which is suited to use with a variety of theoretical frameworks “Thematic analysis is not wed to any pre-existing theoretical framework, and so it can be used within different theoretical frameworks”. In our study we are working with a data set that contains the potential for both “bottom-up” and “top-down” findings, which many other frameworks do not support (Braun & Clarke 2006). Whilst we were to begin analysis in search of Bottom-up findings which are well accommodated via thematic analysis it is important to acknowledge the top-down framework implied by our theoretical starting point of using TPB to plan the study. Braun and Clarke encourage researchers to “acknowledge our own theoretical positions and values in relation to qualitative research”

The Thematic analysis used for the study follows the phases laid out by Braun and Clarke (2006) adapted to accommodate our study design:

- **“Phase 1: Familiarising yourself with the data.”** - in our analysis this first stage involved first transcribing and then re-reading the transcripts without TPB explicitly in mind, seeking out themes that stood out in the data as a whole.
- **“Phase 2: Generating initial codes.”** - Again this was first carried out without explicitly seeking themes relating to TPB to enable other interesting findings to emerge from the data set. At this stage we also did not take account of which participation category the data item belonged to.

- **“Phase 3: Searching for themes.”** - At this stage we re-examine the data and the initial codes via the lens of TPB. This meant identifying themes that strongly related to TPB themes and categorising them accordingly. In our analysis this phase involved an extra step which was to then examine the findings for each theme against the participation category of the user. So for example were there any consistent trends (both in relation to TPB and not) amongst those who had a tendency to participate or those who did not?
- **“Phase 4: Reviewing themes.”** - Themes were then reviewed and those with less relevance to the study were set aside (see appendix 5 for ‘other’ themes).
- **“Phase 5: Defining and naming themes.”** - The remaining themes and relevant extracts were re-name and re-categorised where appropriate and then analysed.
- **“Phase 6 producing the report.”**

Braun and Clarke do not propose their process as a fixed format.

Reporting:

The findings are designed for 2 audiences, for academic assessment and some recommendations (included in appendix 8) for use by IdeasTap Limited to understand users and improve their services. Findings and design recommendations based on the findings were reported.

Pilot study:

A pilot study with 2 participants was carried out in order to refine the study design and questions. One attitude question that was removed was “Who is IdeasTap run by?” since all the participants had a better than average understanding of the structure of the organisation. Also the question “Good or bad experiences that stand out” was too open a question and led participants off on a tangent that was not useful. The pilot is described in full in Appendix 7.

7. Interview study Results

From the rounds of coding a number of themes were identified which were split into three distinct groups:

1. **General themes (7.1)** - these were extremely prevalent themes across the data corpus, which linked to TPB themes that were of general interest to the study regardless of the users participation level.
2. **TPB themes (7.2)** - these themes related directly to TPB where the factors such as “Subjective Norm” were considered to be the direct influence on the user’s participation. These were interesting in themselves as well as in relation to participation levels.
3. **Participation themes (7.3)** - these themes became particularly interesting when you looked at the responses in terms of an individual user’s participation category. For example one theme “Technophobia” where users had described themselves as technically less capable was particularly interesting when examined alongside a user’s eventual participation level.

7.1 General Themes

Professionalism

One extremely prevalent subjective norm theme that arose with users across participation levels was that of professionalism. All but three users demonstrated a concern that IdeasTap might not support a professional enough image both in terms of showing their work on an IdeasTap portfolio and also in publicly applying to IdeasTap competitions.

“I couldn’t direct them here, it would be unprofessional” [On sharing an IdeasTap portfolio] P16 (Empty portfolio)

The concern for most was that the IdeasTap association would indicate that they are early on in their career. With the brand of IdeasTap seeming to be associated with earlier stage career.

“If they work in the industry then they will associate IdeasTap with young emerging artists. And when I first joined I was still young... We’ve outgrown it.” P11 (Full portfolio)

Two other users talked about their concern that when entering and then subsequently not “winning” a brief they were exposing in a sense their failure to win an early stage competition.

“I might have been a bit distressed at the idea of the fact that I had applied and not won just sitting there...sort of name and shame... like if you went for a job and they published who’s got the job and then said here’s a list of everyone who didn’t I think that’s a potential problem.” P7 (Single competition entrant)

For other users the concern seemed to come down to a lack of kudos associated with the brand, which could potentially be alleviated by more impressive partner associations.

“because the briefs, if you win them, that adds up to clout, to industry respect” P3 (Regular competition entrant)

There were 3 users who expressed a favourable attitude about the professional image of the IdeasTap brand.

“all it shows is that you are taking your career seriously so I don’t think there is anything bad about it” P17 (Empty portfolio)

It is important to note that the user group were skewed towards the more professional end of the spectrum of IdeasTap members due to the recruitment strategy. These normative beliefs and attitudes could well be related to the stage that the users are at in their careers. However if it were possible to alleviate these concerns for more advanced stage users it could improve the experience for all users and increase the longevity of the user relationship with the website.

Invisibility

Another related theme mentioned by 5 participants was a normative belief that a person's presence on IdeasTap had limited visibility. That people would either not see them on IdeasTap or would not "care" whether they were there or not.

"I feel a bit invisible... IdeasTap almost feels like this secret thing that unless you are part of if you don't really know properly what it is" P8 (Competition follower)

Specifically in relation to winning competitions there was a common attitude that this would not be something significant in terms of Interpersonal or external contacts.

"I think unless they are an IdeasTap member they wouldn't have a clue what I was talking about" P2 (Regular competition entrant)

In terms of portfolio content there was a strong view from many users that no one would be looking at their content at all.

"I'd be surprised if anyone's read them at all" P8 (Competition follower)

Community/Networking

Another very prevalent theme to emerge during the interviews was a perception of the community and networking element of the site as inadequate. Every user recognised the role of IdeasTap as being, in part, a networking tool. But networking was something that was described as problematic by almost every user. Seventeen of eighteen participants had a negative attitude towards the networking functionality and six cited it as the "worst thing" about the website. In addition seven participants said that it was the one thing that they would change about the website.

"I found it tricky to meet the right people...within the website it's quite difficult to strike up a conversation" P9 (Competition follower)

This community/networking theme has strong links with all three TPB elements but there was not a clear link to participation since it was a problem for users across participation levels. There was a common attitude that improvements in this area had huge potential for the users personally and the website as a whole.

"It's kind of uniquely placed to get that [networking] right... it seems to operate at a fraction of its potential." P1 (Regular competition entrant)

There were a number of users who had successfully found collaborators via IdeasTap but these were from physical events and not from digital interactions. This represents an interesting area to explore in terms of improving the online networking.

“I do a lot of networking through IdeasTap... but the thing is that it’s never been online it’s always been through an event or something.” P1 (Regular competition entrant)

Other users expressed interesting normative beliefs that there was a vibrant community but that they themselves were somehow outside of it.

“I don’t really feel a part of it because I am not really” P3 (Regular competition entrant)

There were also normative beliefs amongst some users that the site was a bit of a networking vacuum and that other users would not come across their content.

“I did use the forum once and no one replied to my question and it made me feel like no one’s really looking at it.” P8 (Competition follower)

There were also missed opportunities for self-generating social interactions.

“I’ve been trying to find a graphic designer for my website, so IdeasTap was the first place that I went to to try and find somebody [And did you find someone?] No I’m still looking.” P18 (Empty portfolio)

The promise and disappointment of the community element of the website seemed to be the single biggest let down for all but two of the participants who expressed a positive attitude towards the networking.

“I occasionally get a message through from other people that I don’t know just interested in my work, I’d say that’s happened 2 or 3 times...” P4 (Single competition entrant)

These users demonstrate that positive experiences reinforce the use of functionality. Following their positive experiences these users have accepted the website as a networking tool. Their experiences have altered their attitudes towards the website as well as their perceived ability to use the networking tools (PBC).

Forced use

Most competitions on the website require users to create an IdeasTap portfolio to support their application. This created a perception of less behavioural control where the creation of the portfolio had been in response to a competition rather than a desire to share the work publicly with the IdeasTap community. Many of the negative attitudes towards the portfolios seemed to stem from this.

“It’s like every time you apply for something it get’s plonked on your portfolio” P11 (Full portfolio)

For some participants the result of the slightly random creation of the portfolio seems to be a less coherent collection of their work than they would prefer to show in a portfolio (PBC).

“They look at the stuff I upload and it’s kind of a bit random, it doesn’t make sense why I have uploaded these kinds of things” P18 (Empty portfolio)

The experience of being forced to use the portfolio to support competition applications for some seemed to have a negative effect on attitudes towards both the portfolio and towards competitions.

“When you read something and it says you need this in your portfolio it’s always a bit frustrating that you can’t just email someone with that information.” P3 (Regular competition entrant)

Not all users felt negatively about the use of portfolios to support competition entries.

“I think those kinds of briefs are usually the best, where it just needs some kind of introduction about what you want to do but then you’re allowed to include additional information on your portfolio that will be considered.” P2 (Regular competition entrant)

This theme again demonstrates the impact that positive or negative experiences have had on the attitudes of users towards the functionality particularly in terms of perceived behavioural control. The above participant [P2] for example had subsequently won the brief she was creating the portfolio for and her attitude towards the act of building it had been positive. If the forced creation of the portfolio then leads to subsequently not winning the competition (as it would for most) then the attitude towards the portfolio and the process is understandably less favourable.

Age

Another theme mentioned by four participants was a negative attitude towards the age restrictions they perceived on the site. There is in fact no universal age restriction on IdeasTap but because specific briefs associated with youth partners have age restrictions imposed these competitions impacted on user’s perception of the competitions as a whole as age restricted.

“I keep meaning to see if any of the funding applies to me but being 34 I assume that almost none of it does so I don’t really look anymore” P11 (Full portfolio)

Although a majority of the opportunities are open to all ages the presence of opportunities, which are not (in particular high profile opportunities such as the Sky Academy) create a perception that the age restrictions are across all opportunities. Again the negative experience of finding they were too old for a single competition has negatively impacted their attitude and perceived behavioural control when it comes to all competitions on the site.

Changing Use

Related to the age theme was the theme of changing use over time for participants who had been members of the site for a number of years. Their usage appeared to have either increased or decreased over time and the functionality they used had also altered.

“In that first year I applied for lots of opportunities, I looked for jobs on it. I used the portfolio page as a website which was great... then I had my own website so I didn’t need to use the portfolio anymore.” P11 (Full portfolio)

This rolling up or down of usage is a trend that seems to be significant in the lurking behaviour that we are endeavouring to understand. It accounts for some of the similarities in attitudes of users from different participation levels and implies that lurkers are not always habitual and may be on a more natural cycle.

7.2 TPB Themes

These themes related most directly to the TPB elements being explored. They were investigated as themes in themselves and also in terms of the interviewee's participation level.

Attitude

What was interesting about the attitudes of all participants was that their attitude towards IdeasTap in general was a positive one. Where less favourable attitudes were uncovered was only in relation to specific tasks or issues.

“Massively useful... young, friendly, open place... very clear, very easy to engage with, very intuitive” P13 (Sparse portfolio)

“I think it is great and I have gained so much from it so I would almost hesitate to say what else I would sort of expect” P7 (Single competition entrant)

Attitudes were not just positive in general terms there were also examples in every interview where there were positive attitudes towards specific features of services.

“Often people give tips and advice and stuff like that so the whole process is very useful” P15 (Sparse portfolio)

“I have won briefs through it which has been a big deal for me” P3 (Regular competition entrant)

Other positive attitudes were influenced by the fact that IdeasTap is a charity.

“Because it is set up and run by a reputable charity I don’t really have any concerns” P12 (Full portfolio)

This belief in the integrity of the organisation for some also extended to a belief in the safety of using the system.

"It feels very safe" P13 (Sparse portfolio)

"It's quite open and honest" P18 (Empty portfolio)

In terms of the negative attitudes they were mainly in relation to specific functionality for example the competitions.

"In the past it's been really disappointing when you spend 4 or 5 days filling in a brief... and then you don't hear anything back." P3 (Regular competition entrant)

Again these attitudes are forged mainly through the participants experiences of actually using the website. The attitudes were also from regular competition entrants so do not necessarily relate directly to a reluctance to participate.

Subjective norm

Responses that demonstrated the positive or negative influence of subjective norms were particularly interesting. Many of the negative responses to the portfolios centred around subjective norms. There were some marked interesting differences between the *interpersonal responses* (aimed at understanding the perceptions of friends and family) and the *external responses* looking at the rest of the world's perspective on a behaviour. There was a widely held belief that family in particular wouldn't care about or understand the use of the portfolio or competitions.

"people that aren't within the industry wouldn't necessarily know that this was something that you had to do in order to get funding" P15 (Sparse portfolio)

External influences tended to focus on professional or industry peers and this was where views were considered in more detail. Often the assumptions made here about the perceptions of a behaviour were less favourable. For example with portfolios.

"I think other people would think about me, why has he not got a website of his own?" P16 (Empty portfolio)

"I think the danger is that you could say I'm a writer and they would say oh well have you written stuff and you say no then they won't take you seriously." P3 (Regular competition entrant)

There were also strong reactions to the external perceptions of entering competitions.

"well how much can other people see of my application?' are they going to judge me?" P2 (Regular competition entrant)

There were also a number of examples where external peers were considered to have a favourable view of entering competitions.

“It is related with success, winning a competition is definitely a success and it shows a calibre or some sort.” P8 (Competition follower)

And a handful of examples where the same was true of portfolios (although fewer of these favourable examples towards the portfolio).

“They'd think it's cool, they would look at the pictures and say 'oh i remember that'” P14 (Sparse portfolio)

As well as looking to the views of these external influencers some participants also looked to the individual actions of their peers to seek affirmation of their own behaviours.

“I will always look at who else had applied and with what sort of project.” P3 (Regular competition entrant)

Perceived behavioural control

Perceived behavioural control played a pivotal role in the use of the two features examined. Some users particularly competition followers (who do not apply) expressed concern at the level of competition experienced with some of the most popular competitions.

“because everyone finds it so useful it's become intensely competitive so even if I feel like I've done something that's really good, I don't even place it in any competition or anything.” P9 (Competition follower)

Others had concerns that there were hidden or inadequately explained criteria that might rule them out of winning.

“people always say do whatever you want but they don't mean it... I have looked at the films that tend to win and I know that there is a preference there for that kind of material. So I guess either be open and be genuinely open or be specific or be genuinely specific.” P16 (Empty portfolio)

For others a simple lack of confidence in their application inhibited them from entering.

“If I thought I had any chance of winning” P11 (Full portfolio)

Again with portfolios participants talked about the limited confidence in creating a representative portfolio or understanding the functionality well enough to use it correctly.

“But you do sometimes look at other people's portfolios particularly photographers and it's that much more vivid. And what you worry about is, is this more appealing than say mine which all it can be is here is my stuff, click on it and read it.” P3 (Regular competition entrant)

There were also examples where participants exhibited a favourable perceived behavioural control in relation to the two features.

“if you don't win one it's not going to put people off using the website again because then there is 10 others that they can apply for.” P3 (Regular competition entrant)

7.3 Participation Themes

When looking at these themes we looked at relationships between the level of participation and the theme since the theme in itself did not necessarily tell us much about participation behaviour.

Technophobic/ Techno confidence

There was a strong connection between control beliefs concerning technical confidence and the level of participation when it came to entering competitions.

“Not too confident. I mean I'm ok when it's basic things. I can use social media and I can upload things. I generally am a bit of a technophobe. So things that involve too much technology...” P8 (Competition follower)

However when it came to portfolios those who did not use their portfolio heavily were not necessarily those who did not have high technical self efficacy. In fact only one of the three “sparse portfolio” users demonstrated low self-efficacy and none of the three “empty portfolio” users.

“Maybe I'm a bit computer illiterate” P14 (Sparse portfolio)

“I'm pretty confident yeah, I've got 2 websites so I use content management systems all the time, I'm quite into social media so yeah.” P17 (Empty portfolio)

However there was a very strong connection between those with high technical self-efficacy and higher usage of their portfolio with all three heavy users describing strong self efficacy.

“[How confident are you using technology?] Very. I think if someone who did my job said anything else I think it would be an issue...For me, from my background yes it's very easy.” P10 (Full portfolio)

Some users who described themselves as less confident also described a willingness to “have a go” or “play” with the system.

“If I don't feel too confident I am happy to have a play.” **P9 (Competition follower)**

Encouraging and enabling this “play” could hold the key to overcoming some of the reluctance of technically less confident users.

Ease of use

All three heavy portfolio users volunteered control belief examples of how they found the site generally easy to use.

“There was a lot of options for customisation. I loved the fact that I could do logos so obviously I put mine up there as an option. So it wasn't too rigid.” P10 (Full portfolio)

However all three of the “empty portfolio” users also described a strong ease of use with the site generally.

“In general it's really easy, I use it on my phone as well and it's fine. I can look at articles and stuff quite easily.” P18 (Empty portfolio)

Two users talked about the ease of use in consideration of how complex the site had the potential to be. These remarks had a sense of the participant being accommodating of rather than appreciative of the ease of use.

“ I think it's very well designed given how much information is on it. How huge and sprawling it has the potential to be. I find it pretty easy to navigate actually. I don't think I've ever had problems tracking down or finding the thing I am looking for.” P7 (Single competition entrant)

This sentiment could account in part for some of the positive comments from less active participants. It could be that whilst these users do not resent the lack of usability of certain functions their participation is none the less influenced by a sense of difficulty of use.

Difficulty of use

There was a strong link between users reporting difficulty of use control issues and lower levels of participation for both the portfolio and competition groups.

“From what I remember I think it was quite difficult, and possibly because it wasn't particularly fun, there is probably a parallel between those things.” P18 (Empty portfolio)

Four of the six participants from the lowest participation group had problems with difficulty of use and all 6 of the mid level participants reported difficulty of use problems.

“I find it very confusing, it took me a very long time to do my portfolio and still it's not done properly because it wouldn't let me upload things and it crashes.” P14 (Sparse portfolio)

Whilst none of the full portfolio users reported difficulty of use issues all three of the heavy competition users did.

“The website was quite tricky to navigate and to be honest it always has been.” P3 (Regular competition entrant)

Multiple websites to maintain

One PBC issue that came up with a large number of users was the number of websites that they had to maintain a presence on and the fact that IdeasTap was adding to this workload. There was not a strong connection between portfolio use and this issue since it was only reported by one of the three empty portfolio users.

“there are just so many websites who are trying to create a community... it's like oh god how long does it take to fill in all these things and which ones are beneficial.” P17 (Empty portfolio)

In fact all three of the “full portfolio users” considered this multiple site workload to be an issue but it hadn't prevented them from actually using the portfolio.

“It was just a bit sort of redoing work that I've already done. If there was some way that I could have like Behance or cargo collective where I could have stuff side by side without having to re-upload. That would be good.” P12 (Full portfolio)

The majority of the issues were raised by the lower competition participation groups indicating a link to the forced use of the portfolio rather than the portfolio itself.

“I've got my own website, my company website, to maintain copy for, my CV, my linked in profile, facebook, twitter. I've got so many platforms that I need to keep updated that the ideastap portfolio given how much work I do generate, I choose not to keep it up to date.” P7 (Single competition entrant)

There were also heavy competition users who considered this a problem.

“Well it's not going to become a replacement for my website or LinkedIn or Behance any time soon as a way of showing my work to the wider world.” P1 (Regular competition entrant)

Outsider

There was a strong relationship between those who displayed an attitude of considering themselves to be “outsiders” and the less active participation groups across portfolios and competitions.

“a lot of the articles seem to talk about dissertations and lectures and make references to something that I think could come across a little bit elitists... if you are from a background where you haven't been to university I think it can make you feel a bit like you have missed out on something.” P8 (Competition follower)

There were however examples of very active users who also considered themselves in some ways outsiders.

“I don't feel like there's that many dance or theatre opportunities that come up.” P2 (Regular competition entrant)

8. Discussion

TPB predicts the likelihood of a behaviour in relation to a set of favourable or unfavourable conditions. In our study we designed an interview to probe some of these conditions in search of some consistent links to eventual participation. Attitude alone was found to be an inadequate predictor of behaviour with subjective norm and perceived behavioural control seeming to have more impact on eventual behaviour. From our subjective norm findings we get a sense of the public nature of some online participation behaviour and how this visibility impacts on some users' willingness to commit to deeper participation even when their attitude is quite favourable. The findings around perceived behavioural control indicate that even where attitudes are less favourable towards a behaviour the participants perceived confidence and ability has a greater impact on their behaviour than their attitude.

Attitude

Attitudes were actually favourable overall towards IdeasTap and the website system but often negative towards a specific task. Individual experiences were the main influence on attitudes towards tasks and features. Attitudes alone however did not directly influence the eventual behaviour since there were favourable and unfavourable attitudes towards tasks across participation levels.

Perceived Usefulness (Attitude) - The most prevalent theme to emerge was around the perceived usefulness of networking on the website. Many of the attitudes to this functionality could be traced back to direct negative experiences, and conversely positive anecdotal experiences caused a few users to have a quite favourable attitude towards the networking. Similarly the age restrictions on some competitions had caused an unfavourable attitude from some participants towards all competitions despite most being unrestricted.

The usefulness of the system and particularly the portfolios was called in to question by a large number of the users citing issues such as “invisibility”, or having “multiple other websites to maintain”. Perhaps one of the most interesting and consistent issues was that the needs of the user changed over time as their career advanced. These changing needs impacted on participation in a range of ways. For example employment status impacted the frequency of visits to the job section and development of their own more professional websites meant that the portfolio would become less of a priority. This trend towards changing use is likely to be relevant to other career focussed communities.

Perceived Risk (Attitude) - There were certain risks associated with the use of the site in general and with specific behaviours. One of the central risks identified by the group was that of appearing unprofessional or at an earlier stage in one’s career. This was true in terms of the portfolio use generally where the design and format were considered unprofessional. Concerns about entering competitions ranged from appearing to be “early stage career” to the image that entering and then not winning a brief could project. The attitudes towards professionalism were demonstrated across participation levels. The fact that IdeasTap is a charity appeared to alleviate some of the perceived risk of using it for some people and even positively influenced people’s perceived “safety”.

Perceived Playfulness (Attitude) - Where users had chosen to perform a task and were subsequently successful their attitudes were favourable. Where users had been forced to carry out a task (such as filling in their portfolio for a competition) and particularly where the outcome had disappointed them, their attitude towards carrying out the behaviour became quite firmly unfavourable. The time consuming nature of some of the tasks particularly building a portfolio detracted from the playfulness of using the system and had quite a strong impact on user attitudes. Playing with the system was also mentioned in relation to gaining technical confidence with using the system indicating that it could be a valuable area for overcoming technophobia.

Attitudes alone did not necessarily influence the level of participation. This could be in part because the strongest attitudes were formed through use of the system, which came from experience that is associated with the more engaged participation levels. However it can still be said that for these more active members their attitudes alone did not account for their level of participation.

Subjective norms

Subjective norm seemed to directly influence participation to a greater extent than attitude. In addition external influences seemed to have a far greater effect on participation behaviour than interpersonal. The responses gave an impression of the public nature of online participation, which had the potential to reflect negatively or positively on participants. There were particular concerns about the professionalism of appearing to participate in various services.

Interpersonal influence (Subjective norm) - There was a widely held belief that friends and family would not care or know about the users activities on IdeasTap. Participants did not

identify this as a problem. It merely seemed to identify the behaviours on IdeasTap as distinctly less socially motivated than most social networks.

External influence (Subjective norm) - The concerns around the professional image of using the site were heavily influenced by external subjective norms. The user's presence on the website appeared to represent the potential to give a favourable or unfavourable impression of professionalism to external influencers. Where users were in control such as showing the outside world an impressive achievement the influence was favourable. Where the user lacked control such as finding the portfolio hard to edit or where they were shown as a losing applicant on a competition the influence was unfavourable.

Perceived Behavioural Control

There were strong themes of perceived behavioural control ranging from technical confidence to the level of competition on the website. Again these had much stronger links to participation than attitude alone.

Internet self-efficacy (Perceived Behavioural Control) - There were strong links between someone's technical confidence and their likelihood to participate in both competitions and in populating their portfolio. Whilst having multiple websites to maintain was seen as a problem in terms of the playfulness of using the system it did not seem to affect the use of the portfolio section. In fact those who claimed to have multiple sites to maintain were often those with the fullest portfolios indicating that their ability to carry out the behaviour was more important than their attitude towards it.

Controllability (Perceived Behavioural Control) - Factors that were considered beyond the user's control were those such as the volume and calibre of competitors on the competitions section. Others had a sense of the potential for hidden or misunderstood criteria both of which had strong links to lower levels of participation.

We uncovered some strong themes using our decomposed TPB model both across participation levels and in differentiating between participation levels. The most prevalent themes uncovered by our interview study related to attitudes. What was perhaps unexpected about these attitudes was that they spanned the range of participation levels rather than differentiating them. This finding is consistent with Preece et al's research (2004) that found that the reasons for going online were the same between participation levels but contradicts Preece et al's finding that attitudes differed between participation levels. It is perhaps quite relevant to our findings that IdeasTap is a professional career focussed network. In this sense the importance of appearing to be professional, and competent have perhaps more influence on behaviour than the personally held attitudes towards an organisation or the network itself.

8.1 Implications for design

There are a number of design recommendations based on our findings some of which are specific to IdeasTap (see appendix 8 for these). The following recommendations are those that

would benefit future social websites and specifically those with a professional or career focussed emphasis.

- 1) **Professionalism** - Whilst the interest in professionalism is likely to have been skewed by our sample the social norms around professionalism are important on a career-focussed network. Content aimed at earlier stage careers creates the impression of an unprofessional network. This issue is compounded when linking to further related content, which is often pitched at a similar level. Where there is a range of career levels catered for we recommended clear signposting to “more advanced career” content from “less advanced career” content and visa versa. In addition association with respected and/or well know brands is a very effective way to eliminate concerns about professional association across the career levels.
- 2) **Changing needs** - Related to professionalism but more focussed on control beliefs than subjective norms are the changing needs of users as they progress their careers. Better differentiation between services aimed at early and later stage careers could help to keep users from drifting out of participation as they progress their careers. For example competitions on IdeasTap are designed to be aimed at a range of career stages. However when a user has successfully encountered a competition early in their career they associate competitions with this early stage. As the user progresses through their career they then filter out some of the services they have used at an earlier stage. Stronger differentiation between the early and later stage content could prevent this problem occurring or at least prolong the time that a user perceives themselves as the target audience. A successful example of content that transcends this issue is the Sky Academy Scholarship where association with a prestigious brand transcends other perceptions.
- 3) **Forced use** - Forcing the use of services enforces a negative attitude towards the entire system, and negatively impacts control beliefs. For example on IdeasTap the portfolios are made fuller by forcing users to use them to support competition entries but the user is not freely deciding to create a portfolio. In addition if they go on to fail at the competition (which most users will) their portfolio comes to represent that failure.
- 4) **Multiple websites** - The landscape in which any networking site is operating is one with some well established players. To avoid replication and improve user control wherever possible users should be given the opportunity to syndicate their online content. For example using widgets that display content from other services or simply by linking away to other services where appropriate. As well as enabling this syndication the networking site must have a clear understanding of what their own site does that cannot be easily syndicated from elsewhere. So that the user is clear on the benefits of using the “additional” service.
- 5) **Technophobia** - This is a huge barrier to participation and perceived control and a tricky one to overcome. Our research showed that some of the less technical users were willing to “play” with the system to figure out how to use it. Facilitating this “play” by enabling quick interactions, which are clearly reversible, could create a “safe” context for this play. For example using the principles from recommendation 4 above; a simple and quick process to “preview” one of your flickr albums in your portfolio could be quite easily

achieved. The language of "playing" and "previewing" will be important to make the users feel that they 'discovering' the system through use.

- 6) **Time taken** - The time taken to complete a task detracts from the playfulness of a task and so it should be easy to achieve a good result in a short time. Advanced options should be available for more advanced users, but there should also be a very quick way to achieve a good result, with clear feedback that the task is successfully complete.
- 7) **Positive experiences** - Positive experiences on the website reinforce positive attitudes and have the potential to increase participation. Likewise negative experiences can dominate attitudes towards the entire website. For example Age restricted content needs to be sensitively branded with clear signposting to unrestricted content, in order to avoid the impression that the restriction is universal.

8.2 Limitations of approach and future work

There are a few key limitations of the approach taken for the study. Firstly as has been found by others including Mathieson (1991) TPB studies are less effective than some other theories at generating empirical results (such as the Technology Acceptance Model, Davis et al, (1989)). This is made more difficult in our study by the size of our interview sample (of 3 per category) meaning that our empirical findings are not broad enough to draw final conclusions. However as with Mathieson's study there are interesting detailed findings about behaviour and how this might inform future work and design recommendations.

There is also the potential confound of the sample being comparatively active. This means that whilst the insights are indicative of global issues they cannot necessarily be considered to be representative of lurkers' behaviour. Similarly the approach of deciding to examine lurking around specific tasks means our users are not necessarily habitually lurking but perhaps choosing to lurk around specific tasks. In addition we did not take a sample of attitudes from before the users engaged in the website and so attitudes were influenced by use of the system rather than necessarily by the user's individual attitudes.

Finally we must account for the limitations of thematic analysis. As pointed out by Braun and Clarke (2006) Thematic Analysis has "limited interpretive power beyond mere description if it is not used within an existing theoretical framework". Our results are reliant on an effective implementation of the TPB framework that could have been approached in a number of ways. It is therefore possible that we have missed opportunities to find more relevance of the framework as well as having found relevance in a more profound way than would have been evident in a more bottom up analysis.

However the results uncovered indicate that there are some consistent behavioural trends when it comes to lurking on IdeasTap. It would be interesting to further explore the specific needs of users wanting to use a system like IdeasTap to advance their careers. TPB seem to be a useful tool for examining the professional networking context in relation to behavioural constructs and how these differ from more personal or social contexts. A further decomposed model of TPB that takes account of the social and professional online networking context could help in designing a study yielding yet more detailed findings.

9. Conclusion

We set out to understand more about the differing levels of participation on IdeasTap.com and to understand some of the motivational themes for the majority lurker community. We expanded on previous lurker research by using the Theory of Planned Behaviour to break down participation behaviours into attitudes, subjective norms and perceived behavioural control. We also sought to understand what might be done to overcome behavioural barriers to participation. Our surveys gave some strong indications of the value of TPB to this participation question and the interview study was able to uncover some detailed and interesting findings about behaviours for the specific domain.

Our survey studies supported findings by Massung et al (2013) that “enabling factors” were key to eventual participation. Similarly to Preece et al (2004) we found in our surveys that there were no demographic differences between lurkers and participants nor did their reasons for going online differ. However our interview study uncovered that unlike Preece et al’s results our participants’ attitudes were fairly consistent across participation levels. Where eventual behaviour was consistently influenced was by favourable or unfavourable subjective norm and perceived behavioural control.

We suggest that this finding is related to the professional context of the domain examined. The public nature of online participation means that a participant’s professionalism; their competence and their stage in career are all reflected in the act of participation itself as well as in the quality, frequency and outcomes of their participation. This can all be utilised to a favourable or unfavourable extent and so should be considered in the design of the system. This should be considered particularly in relation to the expectations for participation in the network.

What the study confirms is the value of TPB in uncovering detail about the “specific needs and issues which can help guide development” (Mathieson, 1991). In a professional networking context it has been used to uncover some consistent attitudes that give clues to the most important themes for users. And in particular the study has shown some of the specific social norms and control beliefs which impact eventual participation.

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11. List of figures

Figure 1: Theory of Planned Behaviour (based on Ajzen, 2002)

Figure 2: Participation levels on IdeasTap

12. Appendices

Appendix 1 - Pre-Introduction to interview:

The interviewer will give a pre-introduction setting the appropriate tone for the interview and addressing potential confounds where possible. These include:

- Role of the interviewer - looking to improve, no feedback is bad, all feedback is useful even negative.
- Importance of participant's views - introduce the ethos of IdeasTap.com needing to work for 'users' in order for it to 'work' at all.

- Purpose of research - to make recommendations for how to improve the system. Behavioural research can be explained at the end of the interview so as not to influence answers.
- The website feature under discussion will be shown to the participant to jog their memory - they will have an optional few minutes to re-familiarise themselves. The purpose of this would be to help focus the participant on the features of a specific section and avoid them feeling they need to give feedback even if they don't feel strongly.

The questions asked of each participant will include a set of general questions relating to TPB but not specific to features or tasks. These questions are followed by a specific set of questions relating to the task behaviour that the participant is known to have carried out (to a greater or lesser depth of participation).

Appendix 2 - General interview questions:

1. Introduction

- a. What do you do?
- b. How did you hear about IdeasTap?
- c. What did you think?
- d. What do you use it for? Visit for?
- e. How often do you try to visit?

2. Attitude

- a. How useful do you think IdeasTap is?
- b. How approachable is IdeasTap?
- c. What are your favourite features? Why?
- d. What is the worst thing? Why?
- e. Good or bad experiences that stand out?
- f. Who is IdeasTap run by?
- g. What would you change about ideastap?

3. Subjective Norm

- a. Who do you think ideastap is aimed at?
- b. What could ideastap do to help people like you?
- c. How do you feel about the IdeasTap community?
- d. How do you feel about your work being seen on IdeasTap? Why?

4. Perceived Behavioural Control

- a. How confident are you using technology?
- b. How much time do you have for pursuing your creative work?
- c. What would you like to do on IT if you had more time?
- d. How easy is the website to use? Explain.

Appendix 3 - Task specific interview questions:

These questions delve into the details of certain tasks on the site. The questions have been broken in to Attitude (A), Subjective Norm (SN) and Perceived Behavioural Control (PBC) as

these are the themes we are interested in breaking down. To enable us to ask useful questions that are relevant to a technology domain we have broken the questions down further based on Hsu & Chiu's 2004 decomposed model of TPB (Hsu & Chiu, 2004). Where appropriate questions are also followed up with a question inviting suggestions for how attitudes could be altered by the system.

1. Entering a brief

- a. Have you ever looked at and/or followed/entered a competition on the site?
- b. A "Perceived Usefulness" - Do you think competitions are useful to people like you? How?
 - i. Is there anything that could make it more useful for you?
- c. A "Perceived Risk" - Do you have any concerns about entering briefs?
 - i. Is there anything that would alleviate these concerns?
- d. A "Perceived Playfulness" - Is there anything enjoyable about entering briefs? If so what?
 - i. Are there other competitions that you have found or might find enjoyable? Why?
- e. SN "Interpersonal influence" - How would your friends and family feel about you entering a competition on IdeasTap? What does it say about you?
- f. SN "External influence" - How do you think the rest of the world perceives you entering a competition on IdeasTap? (e.g social media, people who don't know you but who might see you here)? What does it say about you?
 - i. Is there anything that would improve the way you are seen when you enter something like this?
- g. PBC "Internet self-efficacy" - How easy/difficult was it to enter a competition?
 - i. What would make it easier?
- h. PBC "controllability" - Was it possible when entering the competition for you to easily do everything you wanted and needed to do?
 - i. What couldn't you do/what was difficult that you might have wanted to do?

2. Creating a Portfolio

- a. Do you know you can create a portfolio on the site?
- b. A "Perceived Usefulness" - Do you think this is useful? How?
 - i. Is there anything that could make it more useful for you?
- c. A "Perceived Risk" - Do you have any concerns about creating a portfolio?
 - i. Is there anything that would alleviate these concerns?
- d. A "Perceived Playfulness" - Is there anything enjoyable about creating and/or having a portfolio? If so what?
 - i. Are there other online portfolios that you have found enjoyable? Why?
- e. SN "Interpersonal influence" - How would/do your friends and family feel about your having an IdeasTap portfolio? What does it say about you?
- f. SN "External influence" - How do you think the rest of the world perceives your online portfolio? What does it say about you?
 - i. Is there anything that would improve the way your work is seen on IdeasTap?

- g. PBC “Internet self-efficacy” - How easy/difficult was it to create a portfolio?
 - i. What would make it easier?
- h. PBC “controllability” - Was it possible when creating your portfolio for you to easily do everything you wanted to do?
 - i. What couldn’t you do/what was difficult that you might have wanted to do?

Appendix 4 - Participants:

Participant	Description	CATEGORY
P1	Regular Competition Entrant	Entered target competition as well as at least one other competition.
P2	Regular Competition Entrant	Entered target competition as well as at least one other competition.
P3	Regular Competition Entrant	Entered target competition as well as at least one other competition.
P4	Single Competition Entry	Entered target competition only.
P5	Single Competition Entry	Entered target competition only.
P6	Single Competition Entry	Entered target competition only.
P7	Competition Follower	Followed target competition but not entered - but entered previous competition.
P8	Competition Follower	Followed target competition but not entered - but entered previous competition.
P9	Competition Follower	Followed target competition but not entered - but entered previous competition.
P10	Full portfolio	Those who have a full portfolio that is regularly updated. (5-10 projects, more than 20 items, updated in past 3 months)
P11	Full portfolio	Those who have a full portfolio that is regularly updated. (5-10 projects, more than 20 items, updated in past 3 months)
P12	Full portfolio	Those who have a full portfolio that is regularly updated. (5-10 projects, more than 20 items, updated in past 3 months)
P13	Sparse portfolio	Those who have a sparse portfolio. (1-5 projects, less

		than 20 items, updated in past 3 months)
P14	Sparse portfolio	Those who have a sparse portfolio. (1-5 projects, less than 20 items, updated in past 3 months)
P15	Sparse portfolio	Those who have a sparse portfolio. (1-5 projects, less than 20 items, updated in past 3 months)
P16	Empty portfolio	Those who have begun to create but have not uploaded much to their portfolio. (1 project with less than 5 items)
P17	Empty portfolio	Those who have begun to create but have not uploaded much to their portfolio. (1 project with less than 5 items)
P18	Empty portfolio	Those who have begun to create but have not uploaded much to their portfolio. (1 project with less than 5 items)

Appendix 5 - Other Themes:

Youth versus experience

Good experience

Branding

Recruitment through specific scheme

key functionality

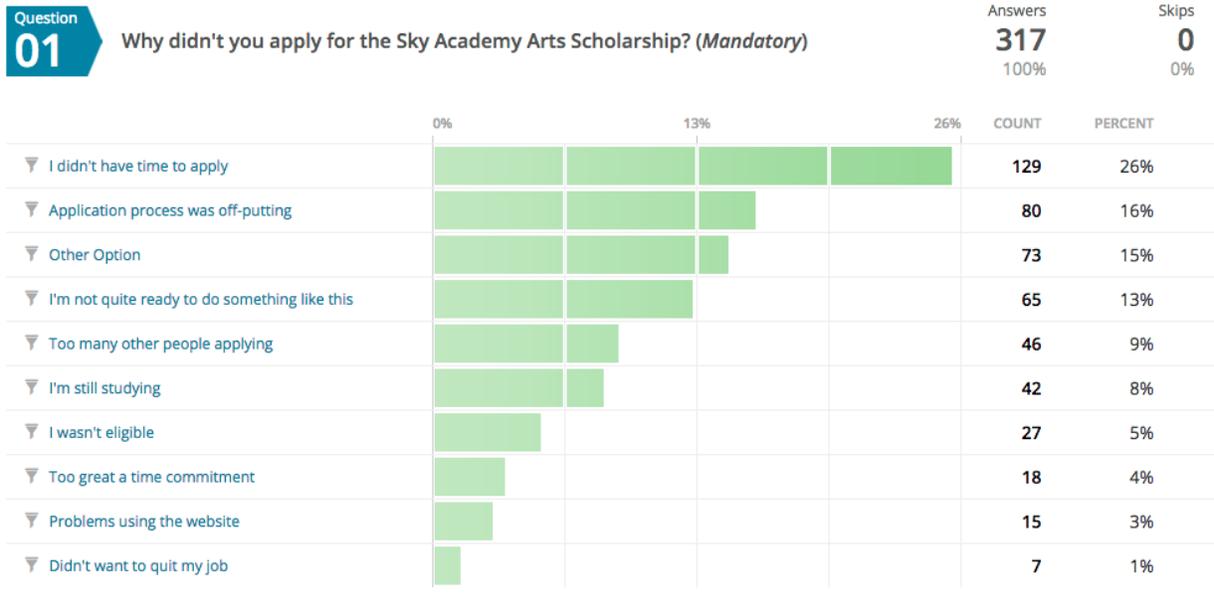
technical issues

Reassuring

Privacy

Time taken to carry out tasks

Appendix 6 - Sky survey results:



Appendix 7 - Interview Pilot Study:

A subset of members from the accessible group who did not fit into the categories being targeted for the main study were approached about participating in the pilot study. Two participant with a similar demographic profile to the rest of the group were selected. They were given the same incentives as the main participant to take part. The full set of questions from both task groups were used in the pilot. The questions worked well other than where the task questions were geared towards someone having experience of a task that was not relevant to the participant. For example questions around the ease of use of the portfolio were difficult for one of the participants to answer who had not used this functionality. A functionality recap around the specific tasks was shown to be extremely useful and was not distracting or disruptive. This segment seemed to be more effective when the participant was given a chance to recap directly before the task specific questions rather than in a more abstract context at the start of the general questions.

We also found that because the participants had involvement with IdeasTap beyond just the website it was important to frame the questions with direct reference to the website. Otherwise answers were sometimes directed at the organisation rather than the website. 'How do you feel about the IdeasTap Community?' was confusing for participants since they had different ideas about what 'community' means. The question was changed to 'Do you feel that there is an online community on IdeasTap? If so how do you perceive the community?' .

There were a couple of question from the general section that were removed following the pilot. One attitude question that was removed was 'who is ideastap run by?' since all the participants had a better than average understanding of the structure of the organisation. Also the question

'Good or bad experiences that stand out' was too open a question and led participants off on a tangent that was not useful. One other question felt repetitive for those from the portfolio group ('how they felt about work being seen on ideastap'). It was decided to ask this general question only of the competition group and not of the portfolio group who would be asked it later.

The pilot study revealed some interesting answers to the subjective norm questions and the participant expressed difficulty in answering these questions as they were not ones which had been asked of them in the past.

Appendix 8 - IdeasTap recommendations:

As a general recommendation it is suggested that positive experiences on the website reinforce positive attitudes and have the potential to increase participation. Creation of these reinforcing positive experiences would be a good focus for the design of the system when wanting to increase participation.

1. **Networking** - Networking was certainly an area where it seems that users need a positive and concrete experience of successful networking to accept the system as a networking tool. Networking should be made easier by focussing around professional tasks and themes such as specific opportunities to collaborate. Users also described the desire to replicate the success of face to face networking. So where there is a digital footprint for a face to face encounter (such as a matching event booking) connections between these users should be promoted and encouraged. Likewise where regional events have taken place around a similar topic, then those from other regions could be given the opportunity to network with each other.
2. **Professionalism** - Whilst the interest in professionalism from our results is likely to have been skewed by our relatively advanced-career sample there is still a strong implication that this theme is important to users. The content of IdeasTap could work harder to improve the professional perception by working with high profile commercial brands. It would also be useful to have more of these collaborations which do not have age restrictions. Whilst the transparency of listing every entrant to the competitions lends some integrity to the process it would be helpful to remove the listing once a competition has been announced so that a user is only ever listed as a 'hopeful' and never as a 'loser' of a competition. There are further recommendations for making the portfolio more 'professional' below.
3. **Portfolio functionality** - It seems as though the existing portfolio is not helpful in most instances for those seeking to promote a professional image. This appears to be as much to do with the perception of the IdeasTap brand as the portfolio itself. This calls into question the value of the portfolio functionality as it stands. A more effective system might be to enable users to signpost or integrate their existing professional presence (such as Behance, LinkedIn or Cargo Collective) into the portfolio rather than replicate this work in multiple locations. The link between self efficacy and portfolio use indicates that the portfolio is simply not usable enough. "I want to know what to do by just looking at the layout, I don't want to have to read anything" P16 (Empty portfolio). Making the portfolio easier to use is essential. This might be as simple as just enabling the

integration of alternative portfolios. This would also overcome the problem of multiple websites requiring maintenance.

4. **Lose forced portfolio** - In terms of the use of portfolios for supporting competition applications there does not seem to be a strong user imperative for using the ideasTap portfolio over pointing judges to an alternative portfolio (although there may well be an organisational imperative to use the IdeasTap system which should be clarified). Choice appears to be key here so where users are keen to use their IdeasTap portfolio to support their application they should be able to, but where there are suitable alternatives; such as attaching examples directly to the application; or signposting to an external portfolio these could be enabled.
5. **Competitions functionality** - Competition issues appeared mainly to be down to the forced portfolio issue but there was also room to make some competitions less technical for user's who were less confident with technology. Using online forms instead of needing users to create PDFs to respond as well as more flexibility about how you demonstrate your supporting work were key.
6. **Brand** - Communication of the charitable status of IdeasTap improves attitudes towards the organisation. The evidence indicates that IdeasTap is not perceived as a social platform, which is not a negative, it is a professional platform and so branding should work harder to support this perception in terms of users and also in terms of casual visitors as this would alleviate some of the subjective norm concerns of regular users.
7. **Age restrictions** - There is a misconception about age restrictions on the website. Something in context with a simple message such as a prominent link could solve this. E.g. a link reading "Wrong age? Find competitions you can apply for." alongside age restriction information.

Appendix 9 - Survey 1 data:

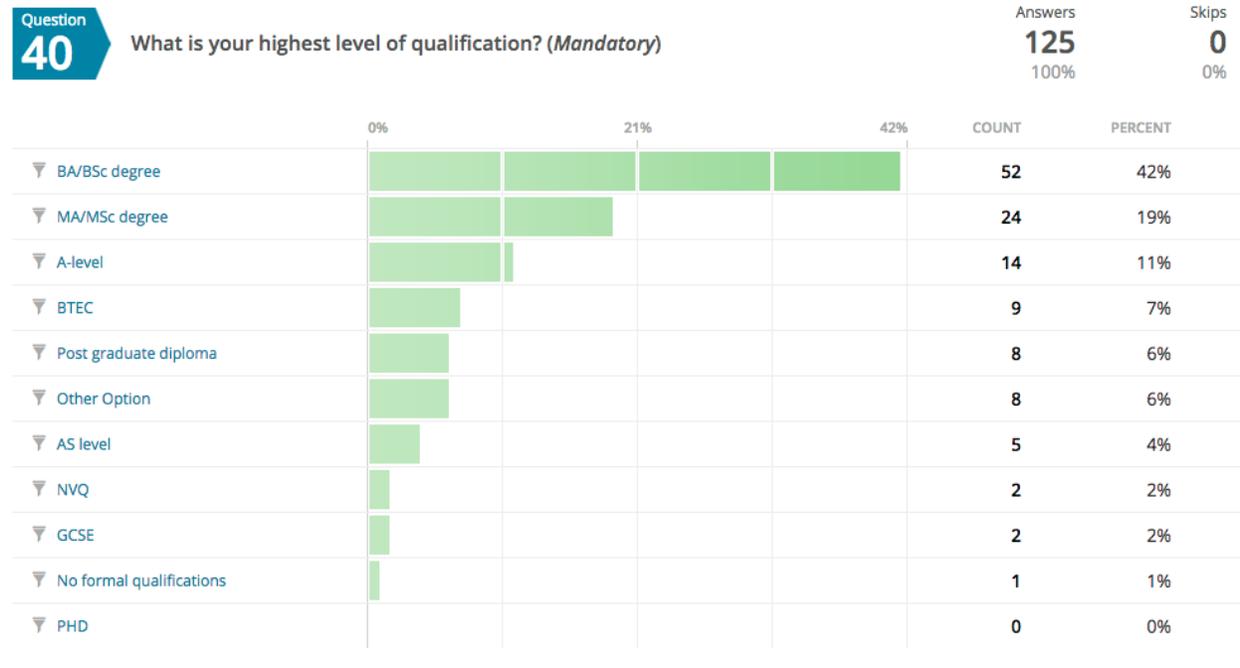
Answers to the question: What is the main reason that you have not yet signed up to IdeasTap?

Only just found out about it.
Haven't really assessed the benefits of being a member.
not sure what membership offers
i didnt know about it untill today but i will do today
I'm just about to register now!
May have an old membership - not sure
Time.
Not properly checked it out yet!
other colleagues have and I get there distilled info
I may be a member as I receive the newsletter? If this does not make me a member, then I was simply not aware I could be.

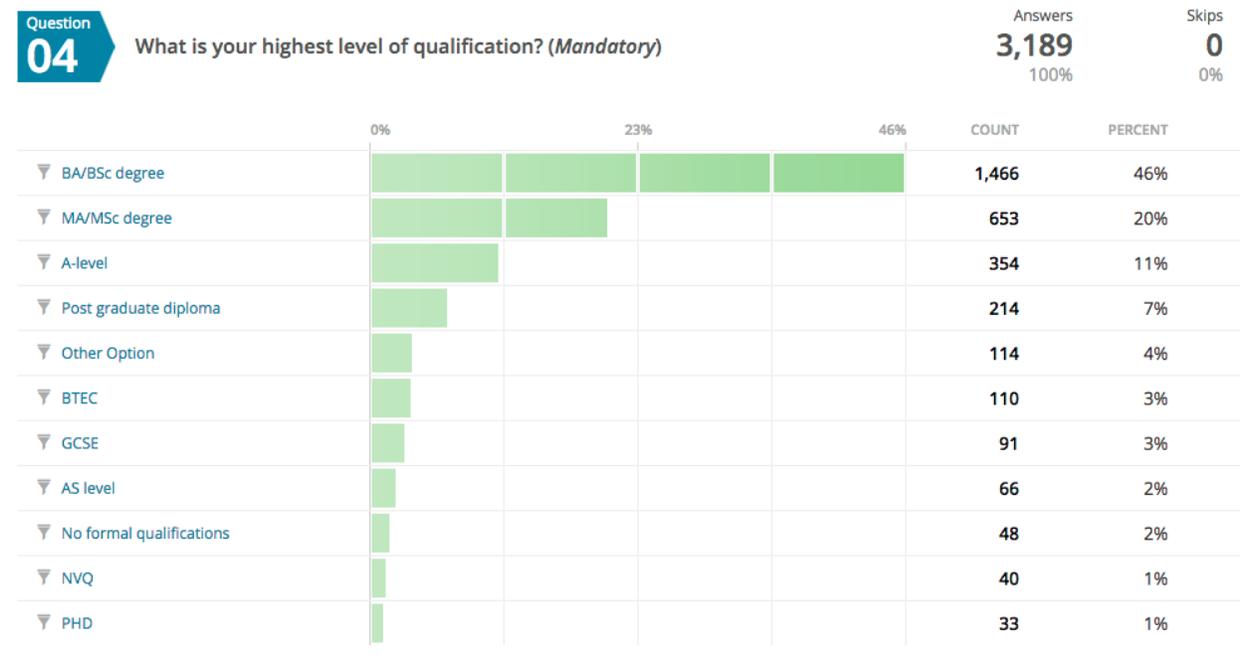
Haven't got around to it yet
I have only just found out about this
No reason, I thought I already did.
Other job sites like this one are constantly sending me emails, but even though I've filled in quite a specific criteria of what I'm looking for the jobs are completely irrelevant. I chose therefore to go to the sites and apply myself rather than the emails being sent to me.
Lack of time
Only recently found out about it.
It feels like it is for earlier career artists.
I am about to sign up.
hadnt had chance yet
Avoid getting too many emails.
At the moment, you are giving lots. There WILL be a time soon to go the further step.
Just found out about it. Will join.
first visit
Too many emails
Directed to the website by an associate
New user - I will sign up later
not sure of the benefits
understanding
I love this site.
I was planning to register.
I did not pay more attention to it.
I've only seen twice this site.
NO
i have not had the chance
I just found this website
Only just hear dof it
Because i havent seen a brief that i think i can realistically apply for until now.
not totally relevant, happy with overall news/ideas
I have too many online accounts.
I normally find the articles on Ideas Mag very helpful and useful enough and havn't had any need to sign up. However as I get further on education I will definitely think about joining as it may be a vital work/connection making tool.

Appendix 10 - Survey 1 data:

Lurker education level:



Member education level:



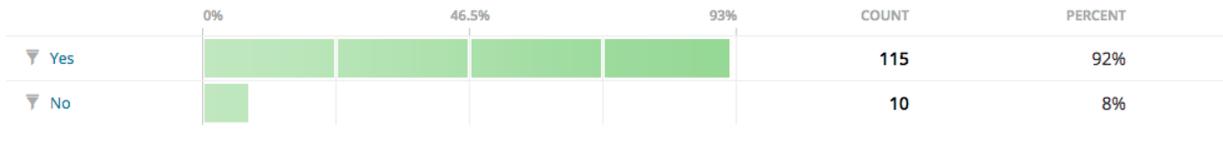
Lurker likelihood to recommend:

Question
38

Would you recommend IdeasTap to a friend? *(Mandatory)*

Answers
125
100%

Skips
0
0%



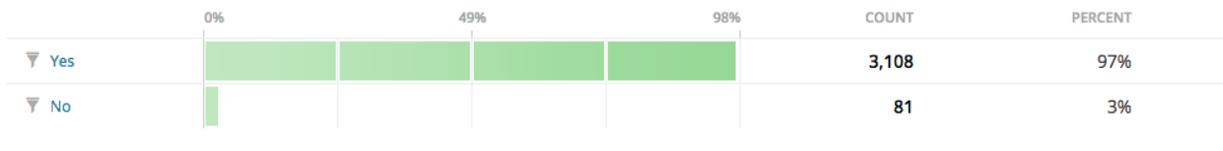
Member likelihood to recommend:

Question
13

Would you recommend IdeasTap to a friend? *(Mandatory)*

Answers
3,189
100%

Skips
0
0%



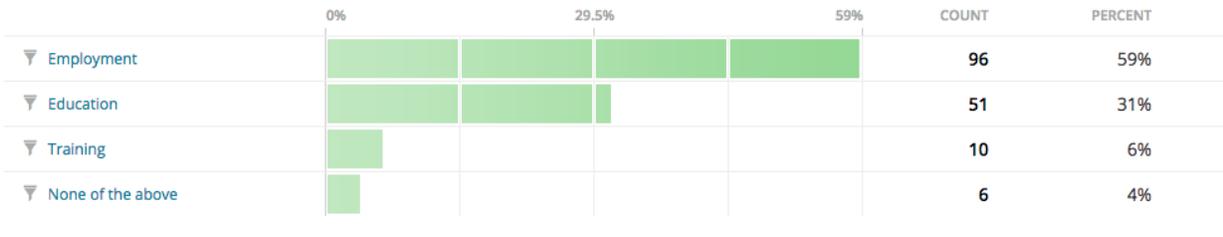
Lurker employment status:

Question
44

In the past six months, have you been in? *(Mandatory)*

Answers
163
130%

Skips
0
0%



Member employment status:

Question
05

In the past six months, have you been in? *(Mandatory)*

Answers
4,302
135%

Skips
0
0%

