

# The Effect of Espoused Culture on Acceptance of Online Tax Filing Services in an Emerging Economy

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This paper investigates the impact of espoused national culture on the individuals' acceptance of online tax filing services in an emerging economy. This study integrates the theory of planned behavior and incorporates the impact of taxpayers' trust and skepticism on their intentions to adopt online tax filing. This paper studies the moderating effect of espoused national culture on taxpayers' intentions to e-file taxes using either government or private vendor tax filing portals. The results indicate that higher subjective norm, positive attitude, higher perceived behavioral control, and higher perceived trust are linked to higher intentions of adopting online tax filing.

*Keywords:* Online tax filing; theory of planned behavior; espoused culture; skepticism; intentions; taxpayers.

## Introduction

The purpose of this research is to examine the influence of espoused national culture on the acceptance of e-services (i.e., online tax filing) in a developing country. Udo and Bagchi (2011) argue that acceptance of technologies in developing countries cannot be simply assumed. They suggest that the cultural reasons behind the acceptance of online services need to be understood. The current research aims to explore the behavioral intentions of taxpayers<sup>1</sup> to use government and other private vendor tax filing websites to file their taxes online.

Wang (2002) argues that the use of online tax filing systems is limited regardless of the efforts spent to make these systems work better; therefore, it is important to understand the adoption of online tax filing systems in a country. Straub, Karahanna, Evaristo, and Srite (2002) state that India has strong internal cultural differences owing to the fact that it has over 14 official languages and hundreds of dialects. Moreover, India is made of not only several ethnic and religious subgroups but also possesses diverse cultural and racial characteristics (Walsham, 2002). Therefore, the existing cultural diversity in India may create significant differences in the mode of filing taxes in the country.

Culture dimensions (Hofstede, 1980) have been extensively used to study cross-cultural differences among nations. These cultural dimensions (individualism-collectivism, power distance, masculinity-femininity, and uncertainty avoidance) at the individual level of analysis are termed as

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<sup>1</sup> Taxpayers, in this study, include tax-filers (i.e., individuals) who have filed other taxpayers' taxes electronically.

espoused culture (Srite & Karahanna, 2006). Srite and Karahanna (2006, p. 681) define espoused culture as “the degree to which an individual embraces the values of his or her national culture.” Given the varied sub cultural groups in India, this research focuses on India. Moreover, India is one of the fastest developing emerging nations in the world. It is forecasted that India’s GDP will become the world’s second largest GDP by 2050 (O’Neill, 2007). Given the multi-cultural socio-economic environment in India, it would be very interesting to understand factors that influence the adoption of online tax filing services.

This research integrates the theory of planned behavior (Ajzen, 1991) and incorporates the impact of taxpayers’ trust (Gefen, Karahanna, & Straub, 2003) in the tax web vendors and skepticism (Hurtt, 2010) on their intentions to adopt online tax filing. This research also contributes to the literature by examining the influence of espoused national culture on acceptance of an accounting e-service, i.e. online tax filing in an emerging nation. One goal of this research is to understand how different sub-cultural groups in a multicultural country such as India would adopt online tax filing services. In addition to enhancing knowledge on adoption of electronic tax filing technology in a multicultural nation, this research may also have important policy implications for government of India in making technology diffusion decisions. The findings from this research will assist policymakers in making technology diffusion decisions in countries with multiple sub cultural groups.

For successful diffusion of an online technology, it is imperative that the users willingly adopt such online technology. Fallan (1999) finds a positive correlation between increased tax knowledge of individuals and tax law compliance. Therefore, enhancing taxpayers’ knowledge is the antecedent of successful adoption of online tax filing.

The remainder of the paper is structured as follows. Section 2 provides literature review and hypotheses development. Section 3 discusses research method. Section 4 analyzes the results. Section 5 provides discussion on findings. Section six provides conclusion.

## **Literature Review and Hypotheses Development**

Online tax filing (i.e., e-filing) is relatively new in India. Indian federal government is making continuous efforts to improve the delivery of public services in cost effective ways. In 2006, the Indian government unveiled the National e-Governance Plan (NeGP) to make government services available to common people in India (Ojha, Sahu, & Gupta, 2008). With this in mind, the Income Tax department of India introduced the adoption of online tax filing. Currently, online tax filing is mandatory<sup>2</sup> for a set of taxpayers.

A large number of web vendors in India are currently offering e-filing tax services to Indian taxpayers. Although some studies (Wang, 2002) tried to capture factors that can explain individuals’ intentions to file taxes online, they were limited in scope. This study develops a comprehensive model to evaluate factors that can explain taxpayers’ intentions to file taxes electronically.

### **Theory of Planned Behavior (TPB)**

This study uses a comprehensive model based on prior accounting and information systems (IS) literature to examine factors that have an impact on taxpayers’ intentions to file taxes online. Pioneered by Ajzen (1991), the theory of planned behavior (TPB) is one of the most cited models used to explain behavioral intentions. TPB models individuals’ intentions to engage in specific

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<sup>2</sup>For more details about mandatory e-filing requirements, please check the following website: <https://incometaxindiaefiling.gov.in/>

behavior as a function of the following three factors: subjective norms, attitude towards behavior, and perceived behavioral control. Behavioral Intentions are defined as “the strength of conscious plans to perform the target behavior” (Harrison, Mykytyn & Riemenschneider, 1997, p. 176). Subjective norms refer to an individual’s beliefs about whether their friends, family members, colleagues, superiors or significant others approve or disapprove a particular behavior (Ajzen, 1991). Attitude is defined as “an individual’s evaluation of the favorableness or unfavorableness of an attitude object” (Bobek & Hatfield, 2003, p. 17). Perceived behavioral control is defined as “people’s perception of the ease or difficulty of performing the behavior of interest” (Ajzen, 1991, p. 183).

## Culture

Culture is a very broad construct. Scholars have used different approaches to measure it. Culture has been measured at different levels, i.e., individual level, organizational level, and national level. Schein (1992, p. 9) defines culture as “a pattern of basic assumptions-invented, discovered or developed by a given group...in relation to those problems.” Hofstede (1980, p. 25) defines culture as “the collective programming of the mind which distinguishes the members of one human group from another.” Based on a study of IBM employees, Hofstede (1980) identify four major dimensions of national culture: individualism-collectivism (IC), power distance (PD), uncertainty avoidance (UA), and masculinity-femininity (MF).

These cultural dimensions are given unique cultural scores for different countries, which have been widely used by researchers to determine how nations differ from each other. At the individual level, Srite and Karahanna (2006) state that these dimensions can be labelled as espoused cultural dimensions<sup>3</sup> (Udo & Bagchi, 2011). Many researchers (Bochner & Hesketh, 1994; Gomez, Kirkman, & Shapiro, 2000; Srite & Karahanna 2006; Udo & Bagchi, 2011; Yoon, 2009; Zhang & Maruping, 2008) have used espoused cultural values in their research. In a study of acceptance of online services in Nigeria, Udo and Bagchi (2011) conclude that some national espoused cultural values have moderated the relationships between predictors and outcome variables.

In accounting literature, the impact of culture on accounting systems has been deeply studied. The framework for explaining the impact of culture on accounting systems was first proposed by Gray (1988). The author posits that shared cultural (or societal) values lead to shared accounting values (professionalism vs. statutory control; uniformity vs. flexibility; conservatism vs. optimism; secrecy vs. transparency) in a country and these accounting values explain the usage of different accounting systems in different countries.<sup>4</sup> Thus, culture has been given prime importance in the accounting research. The concept of espoused national culture is relatively new in accounting filed. Therefore, it is imperative to explore how espoused national culture values can moderate the relationship between the predictor and outcome variables.

## Hypotheses Development

In this section, several hypotheses are developed to explain the relationships identified in current study. Specifically, this study examines the direct influence of attitude, subjective norm, perceived behavioral control, trust, and skepticism on behavioral intentions to adopt online tax filing. In addition, Hofstede’s (1980) cultural dimensions are utilized to hypothesize the moderating effects of individualism-collectivism, power distance, masculinity-femininity, and uncertainty avoidance on the direct relationships identified in this study. The following sub-sections discuss the development of hypotheses.

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<sup>3</sup> For more discussion on espoused cultural dimensions, review Srite and Karahanna (2006).

<sup>4</sup> For more discussion, review Gray (1988).

**Skepticism.** The level of skepticism is more likely to influence individuals' intentions to use the online tax payment system for filing taxes. Skepticism is relatively a newer construct, but is gaining popularity in accounting research. In marketing literature, skepticism is "a trait that predisposes individuals to doubt the veracity of various forms of marketing communication, including advertising and public relations" (Forehand & Grier, 2003, p. 349). Skepticism, a characteristic of an individual, can also influence an individual's intentions to use online tax payment system for making tax payments. Massey, Khatri, and Montoya-Weiss (2007, p. 282) argue that "skeptics tend to be dispassionate about technology, but also have a few inhibitions; thus, they need to be convinced of benefits." The definition suggest that skeptical taxpayers are less likely to utilize online tax filing services. Hence, the following hypothesis is proposed:

**H1:** High (Low) skepticism leads to lower (higher) intentions of using online tax payment system for filing current year or future year income taxes.

**Trust.** Trust has an impact on the adoption of online services. Online consumers are different from traditional consumers, who had opportunity to interact with seller and inspect the quality of a product before buying it. Pavlou and Chai (2002, p. 240) state that the "the spatial and temporal separation between consumers and web vendors increase fears of seller opportunism due to product and identity uncertainty." Online consumers perceive greater risk in online shopping since they cannot observe actions or behaviors of online vendors (Reichheld & Schefter, 2000). Gefen et al. (2003) argue that trust is an important factor in influencing repeat consumers' intentions to engage in an online activity. Therefore, there exist a positive relationship between consumers' perceived trust in web vendors and behavioral intentions to engage in online activity. This suggests that an increased trust in online tax payment systems positively impact taxpayers' intentions to adopt electronic tax filing systems. Hence, the following hypothesis is proposed:

**H2:** High perceived trust in online tax vendors leads to higher behavioral intentions of filing taxes online.

**Theory of Planned Behavior.** TPB, an extension of the theory of reasoned action, has been successfully tested in prior research. Harrison et al. (1997) find that TPB model can be used in understanding small businesses executives' intentions to make IT adoption decisions. Pavlou and Fygenson (2006) and Dowling (2009) also utilize TPB. The Pavlou and Fygenson (2006) propose a business-to-commerce (B2C) e-commerce adoption model based on the extended TPB and find considerable support for this theory. Therefore, the following hypotheses are developed:

**H3:** Higher subjective norms lead to higher intentions of using online tax payment system for filing current year or future year income taxes.

**H4:** Positive attitude towards behavior leads to higher intentions of using online tax payment system for filing current year or future year income taxes.

**H5:** Higher perceived behavioral control leads to higher intentions of using online tax payment system for filing current year or future year income taxes.

**Culture.** National culture has been a topic of research across nations. Hofstede (1980, p. 25) defines culture as "the collective programming of the mind which distinguishes the members of one human group from another." The pioneer work of cultural influence on accounting systems was conducted by Gray (1988). Douppnik and Tsakumis (2004) present a thorough review of papers (Salter & Niswander, 1995) that test Gray's model of cultural influence on accounting systems.

Doupnik and Tsakumis (2004, p. 1) state that “culture is a powerful environmental factor that affects the accounting systems of a country as well as how individuals perceive and use accounting information.” However, accounting literature has largely ignored the impact of the presence of sub-cultures within a country on the outcome variables. This study examines the moderating effects of Hofstede’s (1980) cultural dimensions (PD, IC, UA, and MF) on intentions to adopt online tax filing.

*Power distance:* Power distance is an important cultural factor for India (House, Hanges, Javidan, Dorfman, & Gupta, 2004). The government of India realizes the power distance among different classes. In order to lift the socio-economic status of the lower classes, the government has reserved a fixed percentage of seats in the country’s higher education institutions for students applying from lower classes (Desai & Kulkarni, 2008). Desai & Kulkarni (2008) further provide that similar reservations have been made for them in government jobs and politics. Therefore, studying the impact of espoused power distance among various groups in India is well justified.

At the individual level, high espoused power distance means that individuals perceive status gap between superiors and subordinates, and try to follow orders of their superiors (Udo & Bagchi, 2011). Moreover, the subjective norm of the TPB in context of present research shows the impact which an individual taxpayer’s friends, colleagues, superiors, and family members have on influencing his/her intentions to adopt online tax filing system. Therefore, it is expected that espoused power distance to moderate the relationship between the subjective norm and intentions to adopt e-filing of taxes. Therefore, the following hypothesis is proposed:

**H6a:** Espoused power distance moderates the relationship between subjective norm and intentions to adopt electronic tax filing.

Yoon (2009) states that in low power distance countries, superiors and subordinates are interdependent because they are more likely to consider each other equal. Given this interdependence, superiors and subordinates will exhibit more interpersonal trust. Thus, it is hypothesized that the relationship between trust and behavioral intentions of taxpayers is moderated by espoused power distance. The following hypothesis is proposed:

**H6b:** Espoused power distance moderates the relationship between trust and intentions to adopt electronic tax filing.

*Individualism-Collectivism:* In-group collectivism refers to “the degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families” (House et al., 2004, p. 30). Thus, individuals with high espoused collectivism (or low espoused individualism) are more likely to be concerned about what group members have to say about their actions. Thus, espoused collectivism may moderate the relationship between subjective norm and behavioral intentions to adopt online tax filing. Hence, the following hypothesis is developed:

**H7:** Espoused collectivism moderates the relationship between subjective norm and intentions to adopt electronic tax filing.

*Uncertainty Avoidance:* The Globe study defines uncertainty avoidance as “the extent to which members of collectives seek orderliness, consistency, structure, formalized procedures, and laws to cover situations in their daily lives” (House et al., 2004, p. 603). The Globe study (House et al., 2004) states less resistance to change as one of the characteristics of weak uncertainty avoidance orientation. Hofstede (2001) posits that high uncertainty avoidance individuals are more

uncomfortable in dealing with unpredictable and unstable situations. Also, online consumers perceive greater risk in online shopping as they cannot observe the actions or behaviors of online vendors (Reichheld & Schefter, 2000). It is hypothesized that taxpayers with higher espoused uncertainty avoidance will be more uncomfortable in unpredictable situations and are more likely to perceive risk in online tax filing as compared to taxpayers with lower espoused uncertainty avoidance. Thus, espoused uncertainty avoidance is expected to moderate the relationship between trust in online tax vendor and behavioral intentions to adopt online tax filing. Therefore, the following hypothesis is developed:

**H8:** Espoused uncertainty avoidance moderates the relationship between trust in online tax vendor and behavioral intentions to adopt electronic tax filing.

*Masculinity-Femininity:* Udo and Bagchi (2011) state that masculinity refers to the extent to which a society or a group encourages masculine characteristics such as assertiveness, ambition, and competitiveness, against feminine characteristics such as caring, relationships, etc. Further, Udo and Bagchi (2011, p. 32) posit that “Individuals with feminine-type of traits are likely to assign much importance to an online service system that is perceived to be easy to use than individuals with masculine-type traits, as it is a quality-of-work life issue.” Therefore, it is argued that the higher the espoused masculinity, the smaller the effect of attitude on behavioral intentions to adopt e-filing for taxes. Hence, the following hypothesis is developed:

**H9:** Espoused masculinity moderates the relationship between attitude and intentions to adopt electronic tax filing.

## Research Method

This is a survey study. The study uses WarpPLS 4.0 to perform partial least square structural equation modeling (PLS SEM). Several independent variables are used to examine taxpayers’ intentions to file taxes electronically. The following sections provide description of variables, model, and sample.

### Variables

The dependent variable is taxpayers’ intentions to file taxes online. Independent variables include skepticism, trust, subjective norms, attitude, and perceived behavioral control. This study adapts the instruments from Ajzen (1991), Pavlou and Fygenon (2006), and Hurtt (2010) to measure the constructs for subjective norm, trust, attitude, perceived behavioral control (PBC), and skepticism. The moderating variables include power distance (PD), individualism-collectivism (IC), uncertainty avoidance (UA), and masculinity-femininity (MF). The constructs for moderating variable are adapted from Hofstede (1980).

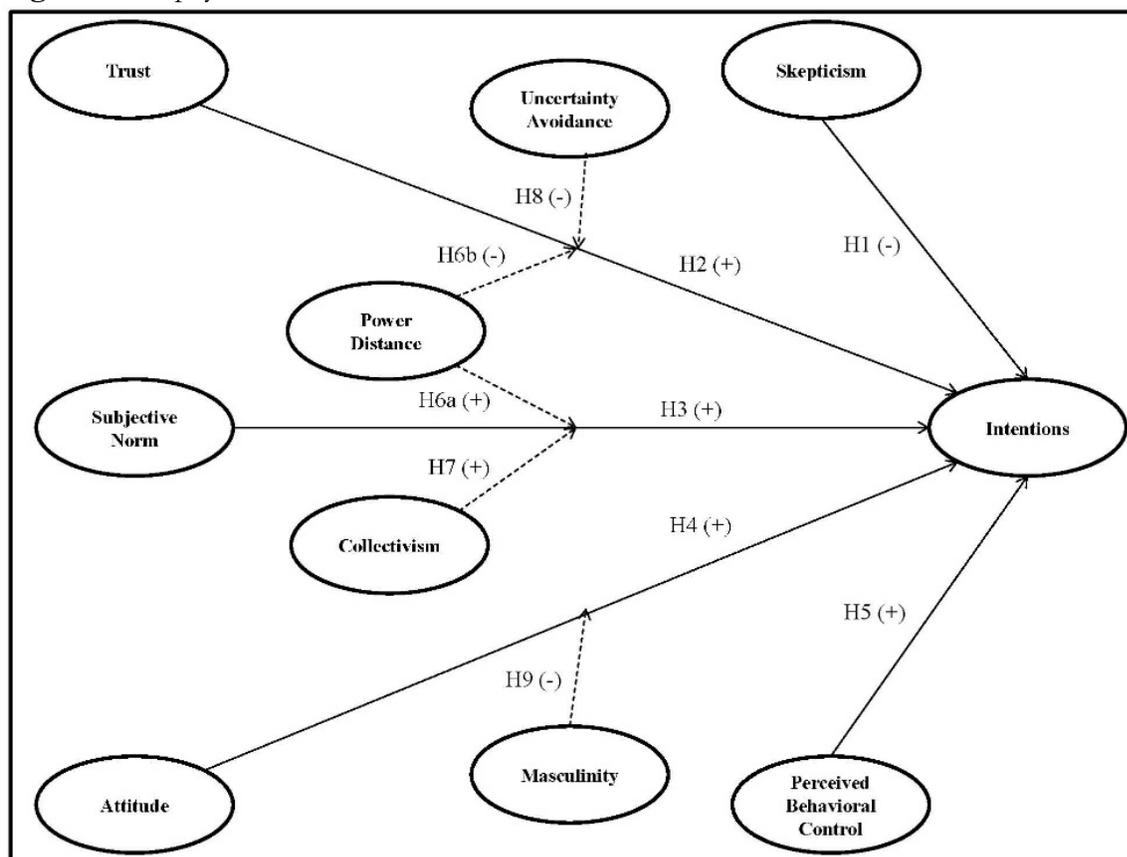
### Model

Based on extant accounting and information systems literature, this study develops a comprehensive model to explain taxpayers’ intentions to file taxes online (Figure 1). The model shows the impact of trust, subjective norms, attitude, skepticism, and perceived behavioral control on taxpayers’ intentions to file taxes online. In addition, the figure also shows moderating variables: PD, IC, UA, and MF.

### Sample

This is a survey study. Snowball sampling technique is used for data collection purpose. This research uses two main criteria to select participants. First, participants should be earning income. Second, participants should be filing tax returns. The final sample includes 201 participants from various organizations in India. A majority of participants were male. Table 1 provides detailed demographic information about the respondents.

**Figure 1:** Taxpayers' model



The questionnaire<sup>5</sup> consists of several parts. Most parts in the survey were based on 5-point Likert scale, where respondents were asked to rate between 1 (low, strongly disagree, bad idea, or very foolish) and 5 (high, strongly agree, good idea, or wise). One part of the survey was based on 6-point Likert scale, where respondents were asked to rate between 1 (strongly disagree) and 6 (strongly agree). The variation in this scale is due to the fact that the instruments from different sources were adapted.

<sup>5</sup> The items for perceived behavioral control (PBC) were adapted from Pavlou and Fygenon (2006). The authors state that "PBC has two distinct dimensions: self-efficacy and controllability" (Pavlou & Fygenon (2006, p. 119). This research combines the items of self-efficacy and controllability to measure PBC.

**Table 1:** Background of respondents

Total Responses		201 surveys
Gender	Female	43 respondents (21.4%)
	Male	156 respondents (77.6%)
	No response	2 respondents (1%)
Age	Less than 18 years	0 respondents
	18-24 years	51 respondents
	25-35 years	95 respondents
	36-50 years	51 respondents
	Over 50 years	4 respondents
Internet Experience		6.98 years (average)
Work Experience (Accounting Related Field)	Average number of years	7.65 years (161 respondents)
	No response/other	40 respondents
Work Experience (Non-Accounting Field)	Average number of years	4.85 years (163 respondents)
	No response	38 respondents
Online Tax Filing Experience	Personal	108 respondents
	Corporate (business)	13 respondents
	Other	11 respondents
	Personal and corporate (business)	44 respondents
	Personal and other	2 respondents
	Corporate (business) and other	2 respondents
	Personal, corporate (business), and other	19 respondents
No response	2 respondents	
Current Employment	Accounting related field	145 respondents
	Non-accounting related field	55 respondents
	No response	1 respondent
Annual Income	Less than INR200 000	31 respondents
	INR200 000-1 000 000	132 respondents
	More than INR1 000 000	33 respondents
	No response	5 respondents
Language	English	66 respondents
	Hindi	57 respondents
	Other	3 respondents
	English and Hindi	69 respondents
	English and Other	2 respondents
	English, Hindi, & Other	3 respondents
	No response	1 respondent

## Analysis and Results

Table 2 shows model fit indices. Average path coefficient (APC), average r-squared (ARS), and average adjusted r-squared (AARS) are all significant at 1% level which suggests a good model fit. Average block variance inflation factor (AVIF) and average full collinearity variance inflation factor (AFVIF) are 1.468 and 1.494, respectively. The both are in the ideal range ( $\leq 3.3$ ), which shows model's overall predictive and explanatory quality. The Tenenhaus goodness of fit (GoF) is 0.523 which is greater than the large cut-off point of 0.36. Therefore, the model has a higher

explanatory power. Simpson's paradox ratio (SPR) of 1.000 is in the ideal range ( $\geq 0.7$ ) suggesting that 100.0% of the paths in the model are free from Simpson's paradox or causality problem<sup>6</sup>. The r-squared contribution ratio (RSCR) is very close to ideal range. Statistical suppression ratio (SSR) and nonlinear bivariate causality direction ratio (NLBCDR) are in the acceptable range.

**Table 2:** Model fit and quality indices

Model Fit	Indices
Average path coefficient (APC)	0.136***
Average r-squared (ARS)	0.542***
Average adjusted r-squared (AARS)	0.518***
Average block variance inflation factor (AVIF)	1.468
Average full collinearity variance inflation factor (AFVIF)	1.494
Tenenhaus goodness of fit (GoF)	0.523
Simpson's paradox ratio (SPR)	1.000
R-squared contribution ratio (RSCR)	1.000
Statistical suppression ratio (SSR)	1.000
Nonlinear bivariate causality direction ratio (NLBCDR)	0.800

\*\*\* $P < 0.01$

In addition, all indicator and cross loadings for both latent and interaction variables are significant which suggests that they are passing confirmatory factor analysis (CFA). Block variance inflation factors (VIF) are also below the threshold of 3.3 which suggests that there is no vertical multicollinearity in a block of latent variables (Kock & Lynn, 2012).

A few questions were failed to load at the acceptable levels and therefore, were dropped from further analysis. Table 3 reports factor loadings and Cronbach's alphas of the constructs used in this study. The Cronbach's alphas for all of the constructs are greater than 0.60. Nunnally (1967) suggests that the reliability of 0.50 to 0.60 is sufficient.

**Table 3:** Factor loadings

Construct and Indicators	Loadings	Cronbach's Alpha
<b>Masculinity-Femininity</b>		0.836
• It is preferable to have a man in high level position rather than a woman.	0.795	
• There are some jobs in which a man can always do better than a woman.	0.703	
• It is more important for men to have a professional career than it is for women to have a professional career.	0.871	
• Solving organizational problems requires the active forcible approach which is typical of men.	0.808	
• Women do not value recognition and promotion in their work as much as men do.	0.705	

<sup>6</sup> Simpson's paradox is a situation that "occurs when a path coefficient and a correlation associated with a pair of linked variables have different signs" (Kock, 2013, p. 49). It is the indication of a causality problem. It suggests that "a hypothesized path is either implausible or reversed" (Kock, 2013, p. 49).

Construct and Indicators	Loadings	Cronbach's Alpha
<b>Individualism-Collectivism</b> <ul style="list-style-type: none"> <li>• Being accepted as a member of a group is more important than having autonomy and Independence.</li> <li>• Being accepted as a member of a group is more important than being independent.</li> <li>• Group success is more important than individual success.</li> <li>• Being loyal to a group is more important than individual gain.</li> <li>• Individual rewards are not as important as group welfare.</li> <li>• It is more important for a manager to encourage loyalty and a sense of duty in subordinates than it is to encourage individual initiative.</li> </ul>	0.769 0.675 0.708 0.682 0.538 0.565	0.738
<b>Power Distance</b> <ul style="list-style-type: none"> <li>• Managers should make most decisions without consulting subordinates.</li> <li>• Managers should not ask subordinates for advice, because they might appear less powerful.</li> <li>• Decision making power should stay with top management in the organization and not be delegated to lower level employees.</li> <li>• Employees should not question their manager's decisions.</li> <li>• A manager should perform work which is difficult and important and delegate tasks which are repetitive and mundane to subordinates.</li> <li>• Higher level managers should receive more benefits and privileges than lower level managers and professional staff.</li> <li>• Managers should be careful not to ask the opinions of subordinates too frequently, otherwise the manager might appear to be weak and incompetent.</li> </ul>	0.802 0.759 0.561 0.721 0.529 0.659 0.582	0.785
<b>Uncertainty Avoidance</b> <ul style="list-style-type: none"> <li>• Rules and regulations are important because they inform workers what the organization expects of them.</li> <li>• Order and structure are very important in a work environment.</li> <li>• It is important to have job requirements and instructions spelled out in detail so that people always know what they are expected to do.</li> <li>• Providing opportunities to be innovative is more important than requiring standardized work procedures.</li> </ul>	0.745 0.732 0.786 0.625	0.695
<b>Trust</b> <ul style="list-style-type: none"> <li>• The tax website vendor would continue to be honest in its dealings in future.</li> <li>• For me, it is important for tax website vendors to be honest in their dealings with their customers.</li> <li>• For me, it is important for tax website vendors not to take advantage of their customers.</li> <li>• This tax website vendor would not seek to take advantage of me if I continue to file taxes using it.</li> </ul>	0.623 0.814 0.696 0.630	0.637
<b>Subjective Norm</b> <ul style="list-style-type: none"> <li>• Most people who are important to me think it is a good idea to file taxes online.</li> </ul>	0.913	0.799

<b>Construct and Indicators</b>	<b>Loadings</b>	<b>Cronbach's Alpha</b>
<ul style="list-style-type: none"> <li>• Most people who are important to me would file taxes online.</li> </ul>	0.913	
<b>Attitude</b>		0.762
<ul style="list-style-type: none"> <li>• Filing taxes online would be (a bad idea/a good idea).</li> <li>• Filing taxes online would be (very foolish/wise).</li> </ul>	0.899 0.899	
<b>Skepticism</b>		0.905
<ul style="list-style-type: none"> <li>• I wait to decide on issues until I can get more information.</li> <li>• The prospect of learning excites me.</li> <li>• I am interested in what causes people to behave the way they do.</li> <li>• I often reject statements unless I have proof that they are true.</li> <li>• I am confident about my abilities.</li> <li>• Discovering new information is fun.</li> <li>• I take my time making decisions.</li> <li>• I like to understand the reason for other people's behavior.</li> <li>• I think that learning is exciting.</li> <li>• I have confidence in myself.</li> <li>• I do not like to decide until I've looked at all of the readily available information.</li> <li>• I like searching for knowledge.</li> <li>• I like to ensure that I have considered most available information before making a decision.</li> <li>• I enjoy trying to determine if what I read or hear is true.</li> <li>• I enjoy learning.</li> <li>• The actions people take and the reasons for those actions are fascinating.</li> </ul>	0.600 0.788 0.559 0.545 0.524 0.559 0.738 0.632 0.800 0.530 0.608 0.714 0.693 0.672 0.757 0.557	
<b>Perceived Behavioral Control</b>		0.759
<ul style="list-style-type: none"> <li>• All necessary resources for filing taxes online are accessible to me.</li> <li>• Filing taxes online is completely under my control.</li> <li>• If I wanted to, I would be able to file taxes online.</li> <li>• If I wanted to, I am confident I could file taxes online.</li> </ul>	0.783 0.635 0.780 0.845	
<b>Behavioral Intentions</b>		0.791
<ul style="list-style-type: none"> <li>• Given both the options to file taxes online and manually (paper-based), I intend to use online tax filing frequently.</li> <li>• Given both the options to file taxes online and manually (paper-based), I intend to recommend online tax filing to other people.</li> <li>• Given both the options to file taxes online and manually (paper-based), I intend to use online tax filing service whenever I have a need.</li> </ul>	0.855 0.817 0.847	

This study examines construct validity using convergent and discriminant validity. Table 4 reports the correlations among latent variables with square roots of average variance extracted (AVE). Udo, Bagchi, and Kirs (2010) suggest that a construct demonstrates the convergent validity when AVE is at least 0.50. Table 4 shows the AVE values in the diagonal. All values are greater than the cut-off point of 0.50. Therefore, the constructs displays convergent validity. This research also

evaluates combined loadings with cross-loadings and structure loadings with cross-loadings to assess convergent validity. All loadings are greater than 0.5 and their associated p-values are lower than 0.05 (Hair, Anderson, & Tatham, 1987; Hair, Black, Babin, & Anderson, 2009), which suggests that instrument has a good convergent validity.

To assess discriminant validity of a latent variable, Fornell & Larcker (1981) suggest that all correlations of that latent variable should be less than the square root of the AVE. The results show that the square root of the AVE of any latent variable is greater than any of the correlations of that latent variable. Thus the construct displays convergent and discriminant validity (Table 4).

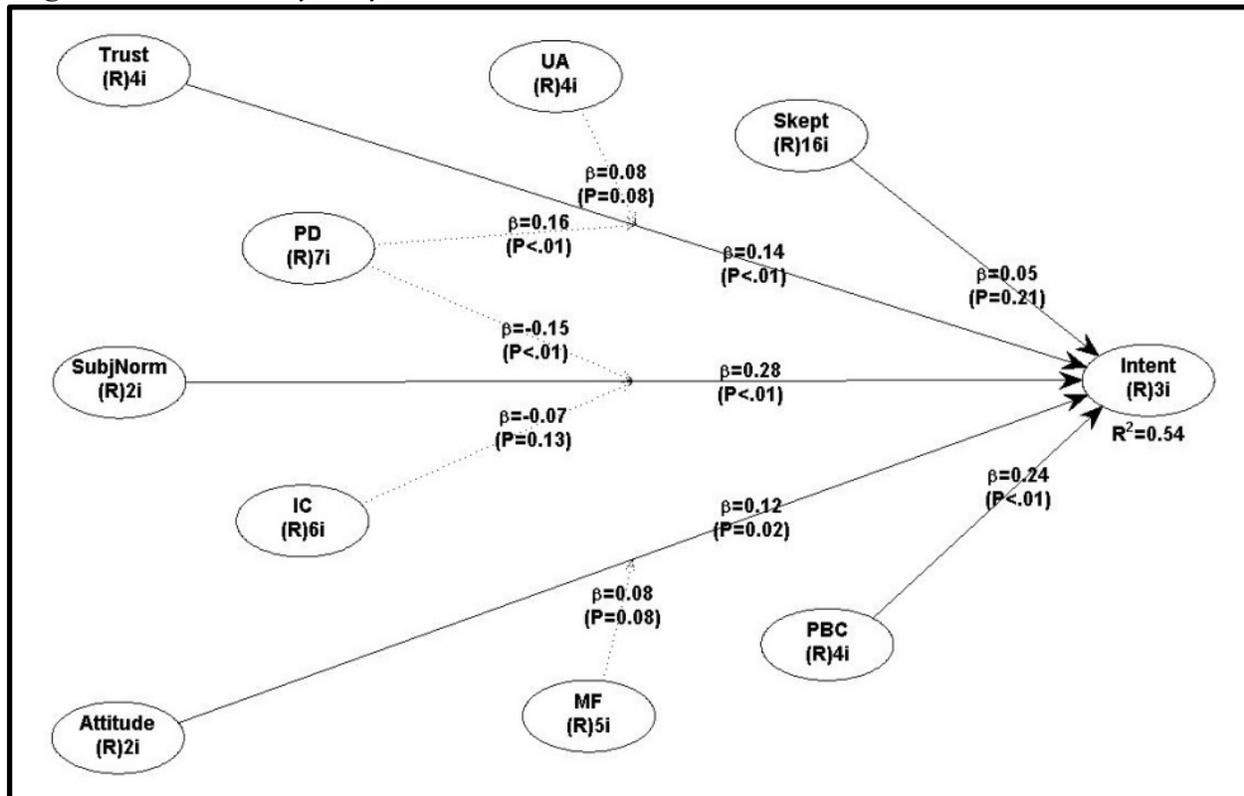
This study uses partial least square structural equation modeling to test the hypotheses (Figure 2). The results for H1, high (low) skepticism leads to lower (higher) intentions of using online tax payment system for filing current year or future year income taxes, are not found to be significant ( $p=0.21$ ). Therefore, H1 is not supported. However, this research finds support for H2, perceived trust is positively and significantly ( $P<0.01$ ) associated with behavioral intentions to adopt online tax filing.

Consistent with H3, results suggest that subjective norm is positively and significantly ( $P<0.01$ ) associated with behavioral intentions to adopt online tax filing system. Consequently, H3 is supported. The results show a positive and significant ( $P<0.05$ ) association between attitude and behavioral intentions to adopt online tax filing system. Therefore, H4 is supported. In addition, the results show support for H5. The relationship between perceived behavioral control and behavioral intentions is positive and significant ( $p<0.01$ ). Overall, this study finds strong support for the hypotheses related to the theory of planned behavior.

**Table 4:** Correlations among latent variables (diagonal represents square root of AVE values)

	SubjNorm	Trust	Attitude	Intent	PD	IC	UA	MF	Skept	Control
SubjNorm	0.913									
Trust	0.186 <sup>***</sup>	0.695								
Attitude	0.464 <sup>***</sup>	0.214 <sup>***</sup>	0.899							
Intent	0.543 <sup>***</sup>	0.376 <sup>***</sup>	0.438 <sup>***</sup>	0.840						
PD	0.051	-0.099	-0.126 <sup>*</sup>	-0.194 <sup>***</sup>	0.666					
IC	0.276 <sup>***</sup>	0.229 <sup>***</sup>	0.213 <sup>***</sup>	0.126 <sup>*</sup>	0.071	0.661				
UA	-0.052	0.245 <sup>***</sup>	0.106	0.017	0.043	0.248 <sup>***</sup>	0.724			
MF	0.080	-0.054	-0.038	-0.062	0.331 <sup>***</sup>	0.074	-0.024	0.779		
Skept	0.127 <sup>*</sup>	0.342 <sup>***</sup>	0.205 <sup>***</sup>	0.220 <sup>***</sup>	-0.188 <sup>***</sup>	0.266 <sup>***</sup>	0.282 <sup>***</sup>	0.015	0.649	
Control	0.606 <sup>***</sup>	0.342 <sup>***</sup>	0.489 <sup>***</sup>	0.551 <sup>***</sup>	0.122 <sup>*</sup>	0.233 <sup>***</sup>	0.108	-0.028	0.203 <sup>***</sup>	0.765

<sup>\*\*\*</sup> Significance at  $p < 0.01$ ; <sup>\*\*</sup> Significant at  $p < 0.05$ ; <sup>\*</sup> Significant at  $p < 0.10$

**Figure 2:** Confirmatory analysis model with results

Contrary to H6a, the results show significant ( $p < 0.01$ ) but negative relationship between subjective norm and intentions to adopt electronic tax filing moderated by espoused power distance. Therefore, H6a is not supported. Similarly, no support is found for Hypothesis 6b. The results show significant ( $p < 0.01$ ) but positive relationship between trust and behavioral intentions moderated by power distance. The relationship between subjective norm and intentions to adopt electronic tax filing moderated by espoused collectivism is not found to be significant ( $p < 0.13$ ). Therefore, H7 is not supported. Furthermore, the results show no support for H8. The results show significant ( $p < 0.10$ ) but positive relationship between trust and behavioral intentions moderated by uncertainty avoidance. Hypothesis 9 in the area of cultural dimensions is related to masculinity-femininity. The results show significant ( $p < 0.10$ ) but positive relationship between attitude and behavioral intentions to adopt online tax filing moderated by masculinity.

Overall, the results (Table 5) show that perceived trust, subjective norm, attitude, and perceived behavioral control are positively and significantly associated with behavioral intentions to adopt online tax filing. However, the association between professional skepticism and behavioral intentions of filing taxes online is not statistically significant. No support for hypotheses in the area of espoused cultural dimensions is found.

## Discussion

This study examines the influence of espoused national culture on the acceptance of e-services (i.e., online tax filing) in a developing country. Udo and Bagchi (2011) suggest that cultural reasons behind the acceptance of online services need to be understood. This study aims to explore

behavioral intentions of taxpayers to use government and other private vendor tax filing websites to e-file their taxes. This research uses Hofstede (1980) cultural dimensions, integrates the theory of planned behavior (Ajzen, 1991), and incorporates the impact of trust (Gefen et al., 2003) in tax web vendors on tax filers' skepticism (Hurt, 2010) towards accepting online tax filing. The study contributes to literature by examining the influence of espoused national culture on acceptance of an accounting e-service, i.e. online tax filing in an emerging nation.

**Table 5:** Results

Hypotheses	Supported
H1: High (Low) skepticism leads to lower (higher) intentions of using online tax payment system for filing current year or future year income taxes.	No
H2: High Perceived Trust in online tax vendor leads to higher behavioral intentions of filing taxes online.	Yes
H3: Higher subjective norms lead to higher intentions of using online tax payment system for filing current year or future year income taxes.	Yes
H4: Positive attitude towards behavior leads to higher intentions of using online tax payment system for filing current year or future year income taxes.	Yes
H5: Higher perceived behavioral control leads to higher intentions of using online tax payment system for filing current year or future year income taxes.	Yes
H6a: Espoused power distance moderates the relationship between subjective norm and intentions to adopt electronic tax filing.	No
H6b: Espoused power distance moderates the relationship between trust and intentions to adopt electronic tax filing.	No
H7: Espoused collectivism moderates the relationship between subjective norm and intentions to adopt electronic tax filing.	No
H8: Espoused uncertainty avoidance moderates the relationship between trust in online tax vendor and behavioral intentions to adopt electronic tax filing.	No
H9: Espoused masculinity moderates the relationship between attitude and intentions to adopt electronic tax filing.	No

The level of individual's skepticism has an influence on individual's intentions to adopt online tax filing system. It is hypothesized (H1) that higher (lower) skepticism leads to lower (higher) intentions of using online tax payment system for filing current and future year income taxes. This study expects to find a negative relationship between skepticism and behavioral intentions to adopt online tax filing system. However, no support is found for this hypothesis. A reduced number of items to measure the skepticism scale could be a possible cause for this. Skepticism is a 30-item scale. However, a number of items are unable to load on the scale, and therefore, are dropped from further analysis. The final skepticism scale consists of only 16 items.

Trust can influence repeat consumers' intentions to engage in online activities (Gefen et al., 2003). Therefore, the study expects to find a positive relationship between the consumers' perceived trust in the web vendor and the behavioral intentions to engage in online activity. Consistent with H2, the results show that increased trust in online tax payment system is positively associated with taxpayers' intentions to adopt online tax payment system.

The next three hypotheses (H3, H4, and H5) are related to the theory of planned behavior (TPB). Harrison et al. (1997) use TPB model to understand executives' intentions to make IT adoption decisions. Pavlou and Fygenson (2006) also use TPB model and find considerable support

for this theory. The results suggest that higher subjective norms lead to higher intentions of using online tax payment system (H3). The results also show that positive attitude towards behavior leads to higher intentions of using online tax payment system for filing current year or future year income taxes (H4). Hypothesis H5, which suggests that there is a positive relationship between perceived behavioral control and behavioral intentions to adopt online tax filing system, is also supported. Overall, the results suggest that higher subjective norms, positive attitude, and higher perceived behavioral control lead to higher behavioral intentions to adopt e-filing system. Therefore, H3, H4, and H5 are supported.

Furthermore, it is hypothesized (H6a) that espoused power distance moderates the relationship between subjective norm and taxpayers' intentions to adopt electronic tax filing. The study expects to find that the higher the espoused power distance, the larger the effect of subjective norm on taxpayers' behavioral intentions to adopt online tax filing. However, contrary to H6a, significant but negative relationship is found. Furthermore, Yoon (2009) states that in low power distance countries, superiors and subordinates are interdependent because they are more likely to consider each other equal. Given this interdependence, superiors and subordinates will exhibit more interpersonal trust. Due to the increased trust, this study posits that the higher the espoused power distance, the smaller the effect of trust on taxpayers' behavioral intentions to adopt online tax filing. However, contrary to H6b, significant but positive relationship between trust and behavioral intentions moderated by power distance is found. This suggests that the higher the espoused power distance, the larger the effect of trust on taxpayers' intentions to adopt online tax filing. Hypothesis 6b is not supported.

Furthermore, Individuals with high espoused collectivism are more likely to be concerned about what group members have to say about their actions. Therefore, the study posits that the higher the espoused collectivism, the larger the effect of subjective norm on taxpayers' behavioral intentions to adopt online tax filing. However, results show no support for H7. Hypothesis 8 suggests that the higher the espoused uncertainty avoidance, the smaller the effect of trust on taxpayers' behavioral intentions to adopt online tax filing. However, contrary to H7, the results show significant but positive relationship between trust and behavioral intentions to adopt online tax filing moderated by uncertainty avoidance. This suggests that the higher the espoused uncertainty avoidance, the larger the effect of trust on taxpayer's behavioral intentions to adopt online tax filing.

Furthermore, the study hypothesize that espoused masculinity moderates the relationship between the attitude and intentions to adopt electronic tax filing. Udo and Bagchi (2011) propose that individuals with feminine characteristics are more likely to assign greater importance to online service system because of the quality of work-life issue. Therefore, the higher the espoused masculinity, the smaller the effect of attitude on taxpayers' behavioral intentions to adopt online tax filing. However, contrary to this hypothesis, the results show significant but positive association between attitude and behavioral intentions to adopt online tax filing moderated by espoused masculinity. This suggests the higher the espoused masculinity, the higher the effect of attitude on a taxpayers' behavioral intentions to adopt online tax filing.

## Conclusion

This paper examines the impact of espoused national culture on the individuals' acceptance of online tax filing services in India. The study integrates the theory of planned behavior (Ajzen, 1991), trust (Gefen et al., 2003), professional skepticism (Hurt, 2010), and cultural dimensions (Hofstede, 1980) to evaluate their influence on taxpayers' intentions to file taxes electronically. Specifically, this study examines the moderating effect of espoused national culture on taxpayers'

intentions to file taxes online using either government or private vendor tax filing portals. To test the impact of culture, trust, skepticism, attitude, perceived behavioral control and subjective norm on taxpayers' behavioral intentions to adopt online tax filing, several hypotheses are developed. Partial support is found for the proposed hypotheses (Table 5).

This research enhances knowledge on adoption of electronic tax filing technology in a multicultural nation. It also provides insights on important policy implications for government of India in making technology diffusion decisions. Findings from this research will help policymakers in making technology diffusion decisions in countries with diverse subcultural groups. In addition, this study provides guidance about the increased need for government efforts to enhance taxpayers' knowledge of tax laws. Enhancing taxpayers' knowledge may be required before successful adoption of online tax filing system.

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