SYNOPSIS

Internet Protocol Television (IPTV) is a system where television services are delivered using the internet protocol instead of traditional radio frequency, broadcast, satellite signal and cable television formats. It consists of two technologies Internet Protocol (IP) and Television (TV). In this technology TV program can be delivered to PC, TV or even in mobile screen. Currently Europe is the largest and most active IPTV market, but in future Asia-Pacific is expected to leave it behind, as it will grow in terms of subscribers, service revenue, infrastructure etc. American market is expected to be the most competitive IPTV market in the world largely due to high existing pay-TV penetration, stiff prices and service competition. At the end of 2008 global IPTV subscriber base was 23 million which increased to 26.7 million and it is further expected to grow at a CAGR of 32% to 81 million by 2013 in which America and Western Europe are expected to be the biggest markets on revenue per user basis. IPTV is a digital television service that uses the internet protocol format to deliver video service via a broadband connection, thus telecom companies are mostly engaged with this service. In India leading telecom providers BSNL and MTNL have launched IPTV services on their network with their franchisees. Bharti has launched its commercial service in NCR Delhi. Reliance has launched friendly trials but is yet to start commercial service.

IPTV has become an increasingly admired product in the fields of entertainment. The few reasons behind rapidly increasing popularity of IPTV are Flexibility in channel selection, Fast channel change (milliseconds vs. one/two seconds for digital cable) Caller ID facility, E-Mail and voice mail on the Television. Instant messaging via the TV, e-mailing through TV, Personal video recorder (PVR), Video on Demand Option, Multiple Camera Angle, Watch four to six Programs in one time, Video Conferencing etc. Moreover, IPTV has three inherent features addressability, interactivity and measurability by which immediate effect of promotional activities can be measured an actions can be taken by marketers. However, such functions need user involvement, and are ineffective if the usage intentions are unclear. Therefore, it is important to conduct research in order to know the important factors that lead to acceptance of IPTV. A few
studies have been done relating to IPTV’s acceptance level and it is almost new to Indian scenario. Bawa (2010) suggests that marketer need to be disciplined when they formulate business modules. They need to customize and localize and need to be as close as they can to the customer whose needs and expectations sometimes changes with every 100KM. Therefore, this study proposes to evaluate the effect of IPTV on consumers.

**Rationale of Study**

The study is important because it proposes to elaborate up the status of IPTV in India. The questions like where IPTV trend is going, will IPTV replace our normal Satellite, Cable and Terrestrial television, how will IPTV affect the television and motion pictures industries are important and needs to be answered.

It seems providing more services like fast channel change, e-mail, video on Demand (VoD), Voice over Internet Protocol (VoIP), KARAOKE, Multiple camera angle will attract more and more customer to IPTV. However, here the marketers need to know what percentage of broadband customer base would be willing to change their passive TV viewing habits and pay for the ‘value added’ interactive services that an IPTV platform enabled.

IPTV provides different types of services and the service providers need to know which service will be more popular for their targeted customer and how to advertise those services in order to make consumers aware and hence influence their purchase decisions.

**Objective of the study**

The objectives of this research are:

i) To study the Advertising strategies of IPTV providers in India.

ii) To study the consumers awareness and acceptance level of IPTV in India.
Data source and sample

Secondary data were collected from different academic work and other published sources related to the theories in interactive advertising, Technology Acceptance Model, and IPTV. Primary data were collected from respondents who are using IPTV by structured questionnaire. For this study two stage cluster sampling was chosen. The samples were drawn equally from subscribers of this system belonging to the all level of income group, age group, their level of education and covering all working groups namely student, Working in Govt. /PSU sector, working in private sector, Housewife, Self-Employed / Business personnel. The sample size was estimated to be 500.

Methodology

Constructs affecting the acceptance of new technology are identified from literature related to Technology Acceptance Model (TAM) (Davis, 1989). The basis of identification of these constructs is largely dependent on the existing empirical literature available on the subject.

A review of literature on this subject reveals that most of the work in this area has been undertaken in industrially advanced countries of Europe, USA and Asia. The issue of IPTV in developing countries like India has received little attention till date. Earlier studies on technology acceptance behavior have been inconclusive about the applicability of a western-developed model of technology acceptance in other non-western countries.

The TAM (Davis, 1989) frameworks were developed for relatively simple and mainly work or job related technologies (e.g. word processing tools and e-mail). However, as IPTV service is not directly related to job or work place, adopting all TAM constructs may not be a useful idea. Therefore, new items were generated related to IPTV technology. To generate new items, the focus group study was conducted and opinions were taken from experts in this field.

For the purpose of the study, six hypotheses were developed. These hypotheses are as follows-
Hypothesis 1: There is a relationship between perceived usefulness and intention to use IPTV.

Hypothesis 2: There is a relationship between perceived ease of use and intention to use IPTV.

Hypothesis 3: There is a relationship between perceived enjoyment and intention to use IPTV.

Hypothesis 4: There is a relationship between perceived complexity and intention to use IPTV.

Hypothesis 5: There is a relationship between perceived price level and intention to use IPTV.

Hypothesis 6: There is a relationship between perceived system quality and intention to use IPTV.

A preliminary survey was carried out for pretesting of the instrument; the tool for this survey was a questionnaire consisting of both open ended and close-ended questions to get the initial feedback on the issues concerned. All the items were presented in the form of statements using a five-point Likert scale, with ranging from “strongly disagree” to “strongly agree.” Finally, 27 key variables were identified for including in the scale. Out of 500 circulated questionnaires 357 were received completely filled condition.

Validity and reliability analysis of the instrument were done to ensure that the obtained responses are valid and reliable for further analysis. Exploratory factor analysis (EFA) represented by principal components analysis (PCA) with Varimax rotation were performed. The factor analysis showed nine orthogonal factors with eigen values greater than 1.0, together accounting for 79.95% of the variance, with item communality ranging between .646 and .920. All required criterion were achieved. Scree plot and Kaiser-Guttman criterion were applied in order to extract factors having eigen values equal or greater than one. Overall, the factor analysis showed a simple loading pattern with high convergent and discriminant validity. The hypotheses were examined using linear regression method. The study revealed that factors Perceived usefulness,
Perceived enjoyment, Perceived complexity and Perceived price level have an impact on intention to use of IPTV.

**Implications of the study**

This study provides a theoretical and empirical analysis to demonstrate factors affecting a potential user’s acceptance of IPTV, which in turn proposes practical implications for the industry. The results highlight various implications for IPTV providers with regard to the development of new services over IPTV to increase users’ intentions to use the services.

Primarily ‘Perceived usefulness’, ‘Perceived enjoyment’ and ‘perceived price level’ are identified as antecedents of intention; so this has some practical implications in enhancing the attitude toward using IPTV service. IPTV service provider should first develop more features for customers in order to attract novice users to accept IPTV service. Following that Perceived usefulness of IPTV emerges as an important issue in attracting new users and should be carefully designed in terms of users’ requirements to reflect perceived usefulness of this service.

The summaries of implications of this research to the developing IPTV industry are as follows:

1. Identification of advantageous combinations of services, pricing options which improve the customer experience, and promote the customer’s tendency to buy additive services and stay with the provider longer.

2. Assistance in developing effective marketing strategies which are more consumer-centric and can therefore increase consumer satisfaction.

3. Assisting providers in developing innovative, value-laden, consumer-centric business models which maximize consumer satisfaction and ultimately, company financial performance.

4. It provides an Idea about recent Indian IPTV market and potential threats and challenges.
Limitations of Study

Though all attempts have been made to ensure that the work is carried out in the right manner and on the right path but the chance of minor slippages cannot be ruled out. One of the main limitations of this study is that it used cross-sectional surveys and data collection was carried in only one point of time during pilot and another instance during the main study. Therefore, the inferences are not as robust as in a longitudinal study. There is a possibility that some articles may have been missed in the literature survey process, though extensive efforts were taken to review all available literature. Additionally, there might be other factors which could not be revealed in this research, which may have influences on acceptance of IPTV. Even though a rigorous process was followed in this research, possible measurement errors and sample error cannot be completely ruled out. Finally, the sample is restricting the sample to one zone so it may not be suitable for all geographical regions.

Organization of Thesis

The thesis is compiled in five chapters.

The first chapter begins with the introduction of the thesis and provides a background of the study by discussing the importance of IPTV service. It also identifies the objectives of the research along with an outline of the data collection and methodology used in the study.

The second chapter provides a brief review of theoretical models and empirical literature. The chapter discusses the research works relating Technology Acceptance Model (TAM) and IPTV across various countries. It also makes a review of the empirical studies on various determinants influencing IPTV acceptance in different countries. The review of literature also provides a discussion on the various models being proposed and developed globally.

The third chapter presents the detailed methodology adopted for carrying out the research. It deals with data collection methodology, the survey instrument, sampling design and methodology used for in conducting the survey and analyzing the survey findings.
The fourth chapter provides a detailed discussion of results and interpretation of the factor analytic model. A set of critical factors are identified in this chapter and their influences on intention to use IPTV have been identified using a multiple regression analysis.

The fifth and final chapter summarizes the findings of the study, discussing its inherent limitations and identifies the scope for further research in the area of adoption of new technology like IPTV.