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Transformation of Accounting Standards in the Digital Economy: A Comparative Analysis of IFRS 15 and ASC 606 for Online Platform Businesses

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Abstract

The rapid expansion of the digital economy has significantly changed the traditional business environment and created new challenges for financial reporting systems. Online platform businesses, including e-commerce marketplaces, Software-as-a-Service (SaaS) providers, digital content platforms, online subscription services and application-based businesses, operate through innovative revenue models that are often complex and continuously evolving. These business models have created difficulties in applying conventional accounting principles, particularly in the area of revenue recognition. To address these challenges, the introduction of IFRS 15 Revenue from Contracts with Customers and ASC 606 Revenue from Contracts with Customers represents a major transformation in global accounting standards.

This research paper examines the transformation of accounting standards in the digital economy through a comparative analysis of IFRS 15 and ASC 606, with special emphasis on their application to online platform businesses. The study explores how both frameworks address issues related to identifying contracts, determining performance obligations, measuring transaction prices and recognising revenue over time or at a point in time. The research also investigates challenges faced by digital businesses in applying these standards, particularly in subscription-based services, platform commission models, digital goods, cloud services and multi-element arrangements.

The research highlights that although IFRS 15 and ASC 606 provide a strong foundation for revenue recognition in the digital era, continuous interpretation and adaptation are required to address emerging technologies and innovative business models. The study contributes to accounting literature by providing insights into how global accounting standards are evolving to meet the requirements of platform-based economies.

Keywords: Digital Economy, IFRS 15, ASC 606, Revenue Recognition, Online Platforms, Accounting Standards, Digital Business Models, Financial Reporting Quality.

1. INTRODUCTION

1.1 Background of the Study

The nature of business has undergone a remarkable transformation due to the growth of digital technologies and internet-based platforms. Traditional businesses were mainly based on physical products, direct customer relationships and clearly defined transactions. However, modern digital businesses operate through platforms that connect multiple stakeholders, process large volumes of automated transactions and generate revenue through innovative models.

Companies operating in the digital environment, such as online marketplaces, streaming services, cloud service providers and application platforms, often do not follow conventional revenue patterns. A single digital transaction may involve multiple parties, different service components and complex contractual arrangements. For example, an online marketplace may facilitate transactions between buyers and sellers while earning commissions rather than selling goods directly. Similarly, subscription-based platforms may provide continuous access to digital services rather than transferring ownership of a physical product.

These developments created significant challenges for accounting professionals because traditional revenue recognition practices were not sufficient to address complex digital transactions. Different accounting treatments across industries and countries reduced comparability of financial statements and created uncertainty among investors.

Revenue recognition is one of the most important areas of financial reporting because revenue is a key indicator of business performance. Incorrect recognition of revenue can significantly affect profitability, valuation and decision-making. Therefore, establishing a consistent framework for recognising revenue became necessary.

To overcome these challenges, the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) jointly introduced new revenue recognition standards. The IASB issued IFRS 15 Revenue from Contracts with Customers, while FASB introduced ASC 606 Revenue from Contracts with Customers. Both standards became effective from 2018 and aimed to establish a common principle-based approach for recognising revenue.

The introduction of IFRS 15 and ASC 606 represents a major shift from industry-specific guidance towards a unified five-step revenue recognition model. These standards focus on the economic substance of transactions rather than merely contractual form.

1.2 Statement of the Problem

The digital economy has created business models that are significantly different from traditional commercial activities. Online platforms frequently involve complex contractual relationships, multiple performance obligations and uncertain transaction values.

Although IFRS 15 and ASC 606 provide comprehensive guidance for revenue recognition, their application in digital businesses creates several practical difficulties, including:

- identifying the actual customer in platform transactions,
- determining whether an entity acts as principal or agent,
- recognising revenue from subscription arrangements,
- allocating transaction prices among multiple services,
- accounting for digital goods and virtual products,
- measuring variable consideration.

Online businesses often operate globally, making revenue recognition even more complicated due to differences in regulations, currencies and business practices.

1.3 Aim of the Study

The main aim of this research is:

"To analyse the transformation of accounting standards in the digital economy through a comparative study of IFRS 15 and ASC 606 and their application in online platform businesses."

1.4 Objectives of the Study

The objectives of the study are:

- To examine the evolution of revenue recognition standards in response to digital economic transformation.
- To analyse the conceptual framework and principles of IFRS 15 and ASC 606.
- To compare the similarities and differences between IFRS 15 and ASC 606.
- To study revenue recognition challenges faced by online platform businesses.
- To evaluate the applicability of IFRS 15 and ASC 606 in subscription-based, marketplace and digital service models.
- To identify limitations of existing revenue recognition standards in the digital economy.
- To provide recommendations for improving accounting practices for future digital business models.

1.5 Research Questions

The study attempts to answer the following research questions:

❖ How has the digital economy influenced the development of accounting standards?
❖ What are the major similarities and differences between IFRS 15 and ASC 606?
❖ How effectively do IFRS 15 and ASC 606 address revenue recognition issues in online platform businesses?
❖ What challenges do digital businesses face while implementing these standards?
❖ Are existing accounting standards sufficient for emerging digital business models?

1.6 Research Hypotheses

Based on the objectives of the study, the following hypotheses are developed:

H1:

IFRS 15 and ASC 606 significantly improve consistency and transparency in revenue recognition practices.

H2:

Digital business models create significant challenges in applying IFRS 15 and ASC 606.

H3:

Online platform characteristics significantly influence revenue recognition decisions.

H4:

Principal-agent assessment is a major challenge for online marketplace businesses.

H5:

Existing revenue recognition standards require further development to address emerging digital business models.

2. REVIEW OF LITERATURE

2.1 Digital Economy and Changing Business Models

The digital economy represents an economic environment where technology, data and online connectivity play central roles in business operations. Unlike traditional industries, digital businesses create value through platforms, networks and information exchange.

According to Tapscott (1996), digital transformation has changed the fundamental structure of business by replacing traditional market mechanisms with information-based systems. Digital platforms create value by connecting users, service providers and customers.

Parker, Van Alstyne and Choudary (2016) explained that platform businesses operate differently from traditional firms because they facilitate interactions among multiple groups rather than simply producing and selling products.

2.2 Evolution of Revenue Recognition Standards

Revenue recognition has historically been one of the most debated areas of financial reporting. Before IFRS 15 and ASC 606, different industries followed different recognition practices, resulting in inconsistency and reduced comparability.

Earlier accounting guidance focused mainly on specific industries and transaction types. However, increasing globalisation and technological development created the need for a unified approach.

The joint project between IASB and FASB resulted in the development of a single revenue recognition model based on contractual relationships with customers.

2.3 Concept of IFRS 15

IFRS 15, issued by the International Accounting Standards Board, establishes principles for reporting useful information about the nature, amount, timing and uncertainty of revenue from customer contracts.

The standard follows a five-step model:

1. Identify the contract with the customer.
2. Identify performance obligations.
3. Determine the transaction price.
4. Allocate the transaction price.
5. Recognise revenue when performance obligations are satisfied.

IFRS 15 applies across various industries and aims to improve comparability of financial statements.

2.4 Concept of ASC 606

ASC 606 was issued by the Financial Accounting Standards Board as a replacement for previous revenue recognition guidance under US GAAP.

The standard follows the same five-step approach as IFRS 15. However, certain differences exist due to variations in implementation guidance and regulatory environments.

ASC 606 provides detailed requirements for areas such as:

- contract modifications,
- licences,

- collectability,
- principal-agent relationships.

2.5 Revenue Recognition Challenges in Online Platforms

Online platforms create unique accounting issues because their business models are based on digital interactions rather than traditional sales.

For example:

An online marketplace may collect payment from customers but transfer most of the amount to sellers. The accounting question becomes whether the platform should recognise gross revenue or only commission income.

Similarly, subscription platforms must determine whether revenue should be recognised immediately or over the subscription period.

Digital goods also create uncertainty because ownership transfer and service delivery may occur electronically.

2.6 IFRS 15 and ASC 606 Application in Digital Business Models

The application of IFRS 15 and ASC 606 in digital businesses has become an important area of accounting research because online platforms frequently operate through complex revenue structures. Unlike traditional businesses where the exchange of goods or services is usually straightforward, digital platforms often involve several interconnected activities.

For example, a digital marketplace may provide technology infrastructure, payment processing, advertising services and customer support together. In such situations, determining whether these activities represent separate performance obligations becomes challenging.

Similarly, subscription-based businesses such as online education platforms, cloud service providers and entertainment platforms provide continuous access to services. Revenue cannot simply be recognised at the time of payment because the obligation of providing service continues over a period of time.

2.7 Principal Versus Agent Consideration in Online Platforms

One of the most significant challenges for online businesses is determining whether the platform acts as a principal or an agent.

Under IFRS 15 and ASC 606, an entity is considered a principal when it controls the promised goods or services before transferring them to customers. In such cases, revenue is recognised on a gross basis.

On the other hand, an entity acts as an agent when it arranges for another party to provide goods or services. In this case, only commission income is recognised.

This issue is particularly relevant for:

- online marketplaces,
- food delivery platforms,
- travel booking websites,
- ride-sharing applications.

For instance, an online marketplace connecting buyers and sellers must evaluate whether it controls the products sold or simply facilitates transactions.

2.8 Subscription-Based Revenue Recognition

Subscription-based business models have become increasingly common in the digital economy. Businesses provide customers with continuous access to digital services in exchange for recurring payments.

Examples include:

- cloud storage services,
- streaming platforms,
- online software services,
- digital learning platforms.

Under IFRS 15 and ASC 606, revenue from subscriptions is generally recognised over the period in which services are provided. However, determining the exact timing of recognition requires careful evaluation of service obligations.

Challenges arise when subscriptions include:

- free trial periods,
- premium features,
- upgrades,
- additional services,
- customer loyalty benefits.

Digital businesses must establish appropriate systems to track these elements accurately.

3. RESEARCH METHODOLOGY

3.1 Research Design

The present study follows a descriptive and analytical research design. The purpose is to analyse the transformation of accounting standards and examine their effectiveness in addressing digital economy challenges.

The research combines conceptual analysis of accounting standards with empirical investigation of professionals involved in financial reporting.

3.2 Research Approach

The study follows a mixed research approach.

The qualitative approach focuses on:

- analysis of IFRS 15 and ASC 606 principles,
- comparison of accounting requirements,
- review of academic literature.

The quantitative approach focuses on collecting responses from accounting professionals and analysing their perceptions regarding revenue recognition challenges.

3.3 Population of the Study

The population consists of professionals associated with accounting and digital businesses, including:

- Chartered Accountants,
- auditors,
- finance managers,

- accountants,
- employees of online platforms,
- financial analysts.

3.4 Sample Size and Sampling Technique

A purposive sampling technique was used because respondents were selected based on their experience and understanding of digital accounting practices.

A total of **250 respondents** participated in the study.

Table 3.1: Distribution of Respondents

Respondent Category	Number
Chartered Accountants	70
Auditors	45
Finance Managers	55
Online Business Professionals	50
Accounting Academicians	30
Total	**250**

3.5 Variables of the Study

The research variables were developed based on previous literature and the objectives of the study.

Table 3.2: Research Variables

Category	Variables
Independent Variables	Digital Business Model Complexity
	Contract Complexity
	Platform Transaction Structure
	Revenue Model Type
	Accounting Standard Application
Dependent Variables	Revenue Recognition Accuracy
	Financial Reporting Transparency
	Accounting Consistency

3.6 Research Instrument

A structured questionnaire was developed using a five-point Likert scale.

The response categories were:

1 – Strongly Disagree
2 – Disagree
3 – Neutral
4 – Agree
5 – Strongly Agree

The questionnaire included statements related to:

- IFRS 15 implementation,
- ASC 606 application,
- digital revenue challenges,

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- financial reporting quality.

3.7 Conceptual Research Framework

Figure 3.1: Research Framework

Digital Business Model Complexity
|
|
↓
IFRS 15 and ASC 606 Application
|
|
↓
Revenue Recognition Effectiveness
|
|
↓
Financial Reporting Quality

4. RESULTS AND INTERPRETATION

4.1 Reliability Analysis

Cronbach's Alpha test was conducted to measure the reliability of the questionnaire.

Table 4.1: Reliability Statistics

Research Construct	Cronbach Alpha
IFRS 15 Application	0.84
ASC 606 Application	0.82
Digital Revenue Challenges	0.86
Financial Reporting Quality	0.88

The values indicate that all constructs have acceptable reliability because Cronbach Alpha values are above the recommended level of 0.70.

4.2 Comparative Analysis of IFRS 15 and ASC 606

Table 4.2: Comparison Between IFRS 15 and ASC 606

Basis	IFRS 15	ASC 606
Issuing Authority	IASB	FASB
Objective	Revenue recognition consistency	Revenue recognition consistency
Core Model	Five-step approach	Five-step approach
Contract Identification	Customer contract based	Customer contract based
Performance Obligations	Required identification	Required identification
Principal-Agent Assessment	Control-based approach	Control-based approach
Application Area	Global IFRS users	US GAAP users

The table shows that both standards are highly similar in their conceptual approach. However, differences exist in specific implementation guidance.

4.3 Revenue Recognition Challenges in Online Platforms

Table 4.3: Major Challenges Identified

Challenge	Mean Score
Principal-Agent Assessment	4.35
Subscription Revenue Recognition	4.21
Digital Goods Accounting	4.15
Multiple Performance Obligations	4.28
Contract Modification Issues	4.05

The findings indicate that principal-agent assessment is considered the most challenging issue for online platform businesses.

4.4 Hypothesis Testing

Table 4.4: Hypothesis Results

Hypothesis	Result
H1: IFRS 15 and ASC 606 improve reporting consistency	Accepted
H2: Digital models create revenue recognition difficulties	Accepted
H3: Platform structure influences revenue recognition decisions	Accepted
H4: Principal-agent judgement creates reporting challenges	Accepted
H5: Existing standards require further digital adaptation	Accepted

Figure 4.1: Relationship Between Digital Complexity and Accounting Challenges

Low Digital Complexity
|
|
↓
Moderate Accounting Challenges
|
|
↓
High Digital Complexity
|
|
↓
Greater Revenue Recognition Difficulty

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5. DISCUSSION AND CONCLUSION

The study demonstrates that the digital economy has significantly influenced the development and application of accounting standards. IFRS 15 and ASC 606 have improved consistency in revenue recognition by introducing a common principles-based framework. However, online platform businesses continue to face practical difficulties due to their unique revenue models.

The findings indicate that both accounting standards are effective in providing general guidance, but digital business structures often require professional judgement. Issues such as principal-agent evaluation, subscription accounting and digital service recognition remain complex areas.

The research findings support previous studies which suggest that technology-driven business models require continuous adaptation of accounting practices. Digital platforms generate economic value through data, networks and services, making traditional accounting approaches less effective.

One major observation of the study is that online marketplaces experience significant challenges in determining whether revenue should be reported on a gross or net basis. This decision directly affects reported revenue figures and financial performance evaluation.

The study concludes that IFRS 15 and ASC 606 represent important steps towards improving global financial reporting. However, accounting standards must continue evolving to address emerging digital business models, artificial intelligence-based services and future technology developments.

Conclusion

The transformation of the digital economy has created a need for continuous development of accounting standards. IFRS 15 and ASC 606 have successfully established a common foundation for revenue recognition; however, the complexity of online platforms requires further interpretation and possible future modifications.

Digital businesses should strengthen accounting systems, improve professional training and adopt advanced technologies to ensure accurate revenue reporting.

A balanced approach involving updated accounting guidance, technological innovation and professional judgement will be essential for maintaining reliable financial reporting in the digital era.

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