

Study on ABCD Analysis Technique for Business Models, business strategies, Operating Concepts & Business Systems**Dr. P. S. Aithal**

School of Business Administration, Srinivas University, Mangalore - 575 001, INDIA

ABSTRACT

Studying the implications of a business model, choosing success strategies, developing viable operational concepts or evolving a functional system, it is important to analyse it in all dimensions. For this purpose, various analysing techniques/frameworks are used. This paper is a discussion on how to use an innovative analysing framework called ABCD model on a given business model, or on a business strategy or a operational concept/idea or business system. Based on four constructs Advantages, Benefits, Constraints and Disadvantages, this system considers all determinants in key areas through analyzing the major issues and identifying the critical constituent elements. The overarching framework for four specific instances in hand namely Business model, Business strategy, Operational concept and Functional system are outlined here. Finally ABCD analysing framework is compared with other known analyzing techniques like SWOC, Competitive Profile Matrix (CPM) analysis, EFE & IFE Matrices, BCG analysing frameworks, Porter's Five Forces Model, and PESTLE Analysis.

Keywords : Business model analysis, Strategy analysis, Concept analysis, System analysis, ABCD analysis framework.

I. INTRODUCTION :

A business model or functional system is a set of process/activities that results in sustainable profit through desired revenue and customer value. The business model spells out how a company makes money by specifying its position in the value chain. The business model combines the roles and relationships among a firm's customers, allies, and suppliers; the major flows of product, services, information, and money; and the major benefits to the participants. The model includes eight ingredients of business like value proposition, revenue model, market opportunity, competitive environment, competitive advantage, market strategy, organizational development, and management team. The model also includes the business elements such as customer management (including value proposition); product and service portfolio, processes, and activities; required resources, suppliers and business networks; and financial viability (including revenue sources). Most of the business models are developed and monitored based on their advantages and disadvantages to the organization to fulfil its objectives and their benefits to the stakeholders. This also include the constraints of doing business in competitive business environment.

- According to the first school of thought proposed by Timmers, a business model is an architecture for product, service and information flows including a description of the various business actors and their roles; and a description of the potential benefits for the various business actors; and a description of the sources of revenue" (Timmers, 1998). Rappa (2001) suggests a business model is a method of doing business by which a company can sustain development. This definition directly spells out how a company makes money in the market. The business model is categorized into nine generic forms, which include brokerage, advertising, infomediary, merchant, manufacturer, affiliate, community, subscription and utility. Thus, although the differences of the above two classifications are noticeable, these taxonomies share some common features.

- In the second school of thought, the emphasis of defining business model has gradually shifted from business model taxonomy to the components or elements of business models (Pateli and Giaglis, 2004). Linder and Cantrell (2000) understand a business model as an organization's core logic for creating value. Further, they decompose a business model into sub-models that link together, which includes Pricing Model, Convenience Model, Commodity-plus Model, Experience Model, Channel Model, Intermediary Model, Trust Model, and Innovation Model. Hamel (2000) defines a business model as the business concept implemented in practice, which is a radical innovation that can lead to the value creation and the change of the rules governing the industry. Instead of giving the simple lists of business model components, this definition includes a real-life description of business model elements including customer interface, core strategy, strategic resource, and value network.
- The third school of thought began to model the components of business model in the form of reference models or ontology. Gordijn, Akkermans and van Vliet (2001) propose a business model ontology that focuses on the linkage between business and information technology. This ontology specifies value flows between business actors.
- The fourth school of thought is concerned with identifying criteria for either assessing the feasibility and profitability of business models or evaluating a business model in various applications.

Hamel (2000) has identified four factors that determine a business model's value potential: efficiency, uniqueness, fit, profit booster, respectively. Afuah and Tucci (2003) define three levels of measurement for the performance of an business model, which includes: the profitability of a firm comparing to its competitors; a firm's profit margin and market share; business model component attributes. Around this value-centered theme, they provide a framework that attributes the value creation of a business model to eight elements. Some perceive the business model as an abstract business concept that describes the logic of make profits for a company (Linder and Cantrell, 2000; Hamel, 2000; Timmers, 1998; Rappa, 2001), while others link it with strategy, business processes as well as business information systems (Afuah and Tucci, 2003). Different criteria have been used to decompose or categorize business models. However, value and value creation are the common foci. Moreover, in general, in examining the mechanism of value creation for a business model, people consider firm's capability and the firm boundary. This is based on taking into account the specific environment and information technology characteristics.

The success or failure of a business model, strategy, operational concept or business system depends on various determinant issues like (1) the organization, (2) the business operations, (3) various stake holders, (4) the environment/society, (5) the Technology, and (6) the strategy the organization follows and any analyzing framework should address these pertinent issues and related underline factors. Accordingly, the business model or strategy, or working concept or business system can be analyzed using these issues by finding the various factors affecting the business.

II. VARIOUS TECHNIQUES FOR BUSINESS MODEL ANALYSIS :

A business model is a set of propositions that creates customer value through sustainable and desired outcome. The business model explains how an organization generates profit by specifying its position in the value chain. Identifying suitable business models that enhance customer value and revenue, analyzing the model systematically is the current challenge for organizations. A model in business management is a simplified representation of an operation, or a process in which only the basic aspects or the most important features of a typical problem under investigation are considered. Many types of analysis frameworks are available (Ballantyne and Brignall, 1994). According to Wu (1992), good framework should guide toward a method or solution uniquely suitable to the particular situation in question. Lee and Ko (2000) proposed a framework for strategic business analysis by integrating SWOT (strengths, weaknesses, opportunities, and threats), balanced score card (Kaplan, 1992) and quality

function deployment. Although many analytical techniques, such as SWOT, SLEPT (social, legal, economic, political, technical) (de Witt and Meyer, 1998), and the BSC (Balanced Score Card) analysis, can be used to identify an organization's strategic needs, none provides a direct mechanism to prioritize the needs and convert them into operational processes or to then translate those processes into a specification that can be used to develop or acquire supportive software systems. In contrast to this, other analytical techniques such as Porter's (1985) Value Chain Analysis (VCA), facilitate the analysis of processes within a company but do not provide an easy mechanism to link these to high-level business objectives. A business model is a theory that is continually being tested in the marketplace (Magretta, 2003). Therefore a good business model remains essential to every organization, whether it is a new venture or an established player (Magretta, 2002). A business model describes (Kagermann and Österle, 2006), (Müller-Stewens and Lechner, 2005), the customers, products, sales channels and the revenue structure of an enterprise, the position of an enterprise within its value network and the nature of its business relationships, and the underlying economic logic of an enterprise. Kagermann and Österle (2006) predict that in future business model innovation is more important for business success than product innovation. The business model concept is not used consistently both in research and in business practice (Magretta, 2002), (Hedman and Kalling, 2003) because the dynamic characteristics of a business model are difficult to predict, value networks are full of interdependencies, and such networks often display complex feedback dynamics (Serman, 2000 & Warren, 2002). A consistent method to analyze the structure, behaviour and the dynamics of a business model should allow to identify possible optimizations governing the business models, to assess the impact of innovative changes and to identify critical success factors before the changes are implemented within a particular environment. Various techniques are used to analyze individual characteristics or organizational effectiveness & strategies in a given environment like SWOT analysis, SWOC analysis, PEST analysis, McKinsey 7S framework, ICDT model, Portor's five force model etc. But there is a need for simple but systematic analyzing technique for business models analysis.

The paper is a discussion on a new technique namely ABCD analysing framework adopted for studying a given business model, business strategy, concept/idea or on a business system. ABCD is an acronym that stands for Advantages, Benefits, Constraints, and Disadvantages. Application of ABCD analysis results in an organized list of a business advantages, benefits, constraints, and disadvantages in a systematic matrix. This includes how various issues should be identified for models/concepts/systems based on a generalized framework and then how to derive a specific framework for either a business model or a concept or a system specifically. A general guideline is given on how to identify various factors affecting these determinant issues based on the four constructs advantages, benefits, constraints and disadvantages. Finally ABCD analysing framework is compared with other known business model frameworks like SWOT, **Competitive Profile Matrix (CPM)** analysis, EFE & IFE Matrices, BCG analysing frameworks, Porter's Five Forces Model, and PESTLE Analysis. The entire framework is divided under various issues/area of focus under various issues, deployment factors affecting the business/concept in terms of advantages, benefits, constraints, and disadvantages, and suitable critical effective elements. This analyzing technique being simple, gives guideline to identify and analyze the effectiveness of any business model and new concepts developed.

While applying ABCD framework for a system, one has to be careful in identifying major issues governing/ related to the system. The issues should all the dimensions such as organization, operation, administration, actors within the organization and dependent on the organization, the technology and the business environment. Once the issues for analysing are identified, the various factors affecting these issues have to be discovered through focus group discussion under four identified constructs advantages, benefits, constraints and disadvantages of ABCD framework. Finally, the constituent critical elements for each affecting factors should be identified and listed under ABCD constructs. The

importance of the system/model/concept can be discussed based on comparing constructs which is based on analyzing the factors affecting in each constructs. Weightage to each factor affecting various constructs can be given based on importance of identified constituent critical elements. By comparing the weightage, one can decide the usefulness of the system/ model/concept.

III. LITERATURE REVIEW ON ABCD FRAMEWORK :

Recently Aithal P.S. et. al. (2015^a) developed ABCD analyzing framework to analyze any business model/strategy/concept/system and to study its effectiveness in providing value to its stake holders and sustainable profit through expected revenue generation. Application of ABCD analysis results in an organized list of a business advantages, benefits, constraints, and disadvantages in a systematic matrix. The entire framework is divided under various issues/area of focus and various business deployment factors affecting the business/concept can be identified and analyzed under each issues by identifying suitable critical effective element. This analyzing technique being simple, gives guideline to identify and analyze the effectiveness of any business model, business strategy, business concept/idea, and business system.

Reshma et. al. (2015) [22-23], have analyzed the characteristics of "Working from Home" e-business model using 'ABCD Analysis Technique'. Based on various factors which decides the Working from Home system, a model of various factors and their constituent critical elements affecting under organizational objectives, employers point of view, employees point of view, customers/students point of view, environmental/societal point of view and system requirements are derived by a qualitative data collection instrument namely focus group method. It is found that the factors supporting advantages and benefits are more effective compare to constraints and disadvantages of this model, so that working from home model may become more popular from the prospective of employers and employees in the organization in the future.

ABCD analysis framework have been used for analysis of a business strategy called 'Black ocean strategy' (Aithal P.S. 2015) [24-25]. The advantages, benefits, constraints, and disadvantages of black ocean strategy on organizational issues, administrative issues, employee's issues, business issues, external environmental issues and operational issues for an organization are identified and analyzed by identifying various affecting factors and their constituent critical elements.

ABCD analysis framework was used for analysis of NAAC Accreditation System (Aithal P.S. 2015) [26]. The advantages, benefits, constraints, and disadvantages of NAAC Accreditation System on organizational issues, Faculty performance Issues, Students development/ progression Issues, Social/Environmental/Community engagement issues, Infrastructure and Learning resources issues, and strategic issues like Innovations Creativity and Best Practices are identified and analyzed by identifying various affecting factors and their constituent critical elements.

ABCD analysis framework has been used for analysis of a concept "Higher Education Stage Model". The characteristics of the concept are evaluated based on identifying and analyzing the advantages, benefits, constraints, and disadvantages. The result supported the logic of using ABCD analyzing technique in any concept/idea performance evaluation [Aithal P.S. 2015] [27-28].

IV. STRUCTURE OF ABCD ANALYSIS FRAMEWORK :

Advantages, Benefits, Constraints and Disadvantages (ABCD) of a System can be used to analyze and understand the model/system in an effective way. As per this analysis technique [Aithal P. S. et. al., 2015^a), the effectiveness of a business model/strategy/ concept/system can be studied by identifying and analyzing the advantages, benefits, constraints, and disadvantages of various affecting factors by considering various determinant issues as shown in fig. 1. The various factors contributing under the

four identified constructs like advantages, benefits, constraints, and disadvantages are derived by a qualitative data collection instrument namely focus group method (Rogers and Hunt, 1994, Morgan and Hunt, 1994) and the constituent critical elements supporting these factors are identified.

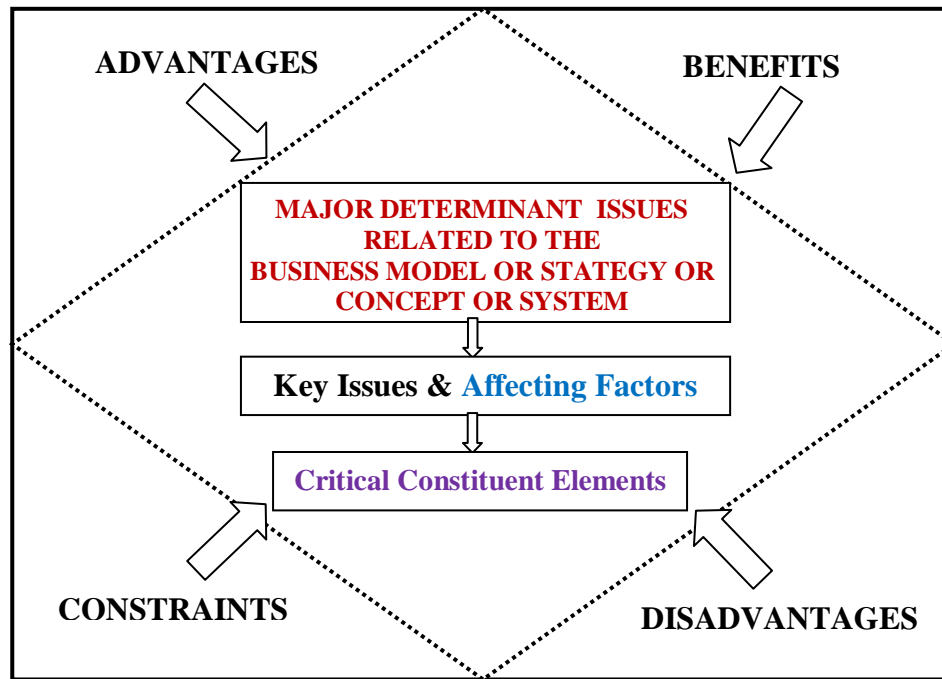


Fig. 1 : Block diagram of issues affecting the Business model, or Concept or System as per ABCD framework.

(a) Determinant Issues to be Identified :

(i) For Business Models

Followings may be the determinants of a general business model :

1. Organizational Issues
2. Operational Issues
3. Employees Issues
4. Administrative issues
5. Customers Issues
6. Technological issues
7. Strategic Issues
8. Environmental & Social issues etc.

(ii) For Business Strategy

Followings may be the determinants of a general business strategy :

1. Organizational Issues
2. Business Issues
3. Operational Issues
4. Stakeholders Issues
5. Administrative issues
6. Users/customers Issues
7. Technological Issues
8. Environmental & Social Issues

9. Financial Issues etc.

(iii) For Operating Concepts/Ideas

Followings may be the determinants of a general business ideas/operating concepts :

1. Organizational Issues
2. Business Issues
3. Idea Implementation Issues
4. Operational Issues
5. Stakeholders Issues
6. Administrative issues
7. Users Issues
8. Technological issues
9. Environmental & Social issues etc.

(iv) For Business/functional Systems

Followings may be the determinants of a general business/functional systems :

1. System Requirement Issues
2. Operational Issues
3. Input Issues
4. Output Issues
5. Performance Issues
6. Users Issues
7. Technological Issues
8. Environmental & Social Issues
9. Issues on Innovative Processes etc.

(b) Finding Factors Affecting:

After finalizing the “determinant issues” of the business model/strategy/concept/system for analysis, the various affecting factors for each determinant issue should be determined based on focus group method under all the four ABCD constructs of this model : advantages, benefits, constraints, and disadvantages. The result can be listed as suitable tables for each issue with affecting factors for each construct. The various possible affecting factors for different chosen determinant issues for given business model/strategy/concept/system are listed in Table 1 :

Table 1 : List of determinant issues and their possible affecting factors

S. No.	Determinant Issues	Affecting factors
1	Organizational issues	Organisational policy, procedure, structure, rules, regulation, goals, vision, mission, objectives, values, long term strategy, short term strategy, risk, innovation, sustainability and organisational culture.
2	Operational issues	Structure, systems, processes, policies, alignment, investment, infrastructure, resources. Quality issues, control & management issues, work culture issues, wastages and delay issues.
3	Employees issues	Attracting talented workforce, retaining workforce, motivating employees, developing and training the work force, maintaining performance standards, diversified employees, motivated work force, learning work culture, HR,

		policy, procedure and strategy.
4	Administrative issues	Rules, regulation, procedure, resources, infrastructure, easy of transaction, documentation, cost & expenditure incurred time keeping, law enforcement, governance etc.
5	Customer issues	Demographic details, consumption patterns, changes, products, services, pricing promotion, customer delight, customer service, loyalty, contentment, customer grievance handling etc.
6	Technological issues	Research latest technology, up gradation, integration issues, back-up and disaster, recovery challenges, security risks, strategic IT planning, technological change, cost and investment issues with technology, user friendliness etc.
7	Strategic issues	Affecting factors for Strategic issues include factors related to firms corporate strategy, organizational strategy, operating strategy, competitive strategies or monopoly strategies, brand-building strategies, marketing strategies, growth strategies etc.
8	Environmental & social issues	Strategy, values, ethics, risk & risk oversight, financial performance, external reporting, reliability of information, stake holder relations, consideration of nature & environment, environmental citizenship.
9	Business issues	Nature of business, scope of business, business objectives, leadership, culture, values and ethics in business, system, style and structure.
10	Stakeholder issues	customer's employees, suppliers, vendor relationships, shareholders, the public and society, law, regulation, business code, brand, safety and quality considerations.
11	User issues	Easy of understanding, Flexibility, eco friendly, procedures, quality, time, and cost consideration.
12	Input issues	Resources, land, labor, capital, technology, Assets, data and information, money, Skill, Know –how, machinery etc.
13	Issues on innovative processes	Profitability, costs, efficiency, productivity, employee job satisfaction, customer satisfaction, learning culture, risk taking behavior ,out of the box thinking etc.

As per ABCD analysis framework, all these affecting factors should be categorized under advantages, benefits, constraints and disadvantages (ABCD). At this point, for convenience, each determinant issue can be further divided into *key issues* and for each key issue, affecting factor under the constructs ABCD can be listed. Each factor of above determinant issues includes *constituent critical elements* which vary depending on person who analyze the model.

(c) Identifying Constituent Critical Elements :

As per ABCD analysis framework, all these affecting factors should be categorized under advantages, benefits, constraints and disadvantages. Each factor of above determinant issues includes constituent critical elements which vary depending on person who analyze the model. Constituent critical elements (CCE) are those characteristics, conditions, or variables which when maintained and sustained, can have significant impact on the factor affecting that particular determinant issue. The critical constituent

elements can be tabulated for affecting factors for all four constructs : advantages, benefits, constraints and disadvantages as separate tables.

V. ADVANCED ABCD ANALYSIS :

At the most, ABCD analysis is qualitative and considered to be only a reference to further quantitative analysis. Based on "prioritization of factors" we can further improve the analysis method as advanced ABCD analysing technique. An advanced ABCD goes a step further to make it quantitative.

In a simple ABCD, advantages and disadvantages or benefits and constraints are equal to each other therefore a minor disadvantage can balance a major advantage. Without prioritization, some factors might be given too much or too little emphasis and the most relevant factors might simply be overlooked. The aim of advanced ABCD is to identify the most significant factors of the analysis from all the items listed on it. How to perform it?

Step 1 : Identify the various determinant issues.

Step 2 : Select some key issues under each determinant issues.

Step 3 : For each key issue, identify various factors affecting under the constructs advantages, benefits, constraints, and disadvantages.

Step 4 : Prioritize the factors affecting by evaluating importance, weightage and score.

While prioritizing the factors and the constitutional critical elements, the factors affecting under advantages, benefits, constraints, and disadvantages are evaluated on 3 categories:

- **Importance.** Importance shows how important is a construct for the identified determinant issue. For a given analysis, either advantage, or benefit or constraint or disadvantage may be more important than others. A number from 0.01 (not important) to 1.0 (very important) should be assigned to each construct. The sum of all weights should equal 1.0 (including all four constructs).
- **Rating.** A score from 1 to 3 is given to each factor to indicate whether it is a major (3) or a minor (1) construct. The same rating should be assigned to all the constructs where 1 would mean a low priority to the construct and 3 a high priority to the construct.
- **Score.** Score is a result of importance multiplied by rating. It allows prioritizing the constructs. The researcher should rely on the most important advantages and benefits and try to convert the constraints and disadvantages in to the opportunities.

Their evaluation includes:

- **Importance.** It shows to what extent the external factor might impact the business model/strategy/concept/system. Again, the numbers from 0.01 (no impact) to 1.0 (very high impact) should be assigned to each item. The sum of all weights should equal 1.0.
- **Probability.** Probability of occurrence is showing how likely the opportunity or threat will have any impact on business model/strategy/concept/system. It should be rated from 1 (low probability) to 3 (high probability).
- **Score.** Importance multiplied by probability will give a score by which the researcher must be able to prioritize the affecting factors. The researcher should pay attention to the factors having the highest score and ignore the factors that will not likely affect the business model/strategy/concept/system.

VI. ABCD ANALYSIS IN EXPLORATORY RESEARCH :

Exploratory research is research conducted for a problem that has not been clearly defined. It often occurs before we know enough to make conceptual distinctions or posit an explanatory relationship (Shields et.al., 2013). Exploratory research helps determine the best research design, data collection method and selection of subjects. It should draw definitive conclusions only with extreme caution. Given its fundamental nature, exploratory research often concludes that a perceived problem does not actually exist. Exploratory research often relies on secondary research such as reviewing

available literature and/or data, or qualitative approaches such as informal discussions with consumers, employees, management or competitors, and more formal approaches through in-depth interviews, focus groups, projective methods, case studies or pilot studies. The Internet allows for research methods that are more interactive in nature. For example, RSS feeds efficiently supply researchers with up-to-date information; major search engine search results may be sent by email to researchers by services such as Google Alerts; comprehensive search results are tracked over lengthy periods of time by services such as Google Trends; and websites may be created to attract worldwide feedback on any subject. Exploratory research investigates into a problem or situation which provides insights to the researcher. The research is meant to provide details where a small amount of information exists. It may use a variety of methods such as trial studies, interviews, group discussions, experiments, or other tactics for the purpose of gaining information. When the purpose of research is to gain familiarity with a phenomenon or acquire new insight into it in order to formulate a more precise problem or develop hypothesis, the exploratory studies (also known as formulative research) come in handy. If the theory happens to be too general or too specific, a hypothesis cannot be formulated. Therefore an exploratory research helps to gain experience that will be helpful in formulative relevant hypothesis for more definite investigation as suggested by Sue Greener, and Joe Martelli (2015).

ABCD analysis framework supports exploratory research by identifying various affecting factors under different constructs and identifying constituent critical elements using a suitable method out of the available methods such as trial studies, interviews, group discussions, focus group methods, experiments, or other tactics for the purpose of gaining information. The information gathered can be used for prioritizing the factors and the constituent critical elements.

VII. ABCD ANALYSIS IN EMPIRICAL RESEARCH :

Empirical research is research using empirical evidence. It is a way of gaining knowledge by means of direct and indirect observation or experience. Empiricism values such research more than other kinds. Empirical evidence (the record of one's direct observations or experiences) can be analyzed quantitatively or qualitatively. Through quantifying the evidence or making sense of it in qualitative form, a researcher can answer empirical questions, which should be clearly defined and answerable with the evidence collected (usually called data). Research design varies by field and by the question being investigated. Many researchers combine qualitative and quantitative forms of analysis to better answer questions which cannot be studied in laboratory settings, particularly in the social sciences and in education. The word empirical means information gained by experience, observation, or experiment. The central theme in scientific method is that all evidence must be empirical which means it is based on evidence. In scientific method the word "empirical" refers to the use of working hypothesis that can be tested using observation and experiment. Empirical research is based on observed and measured phenomena and derives knowledge from actual experience rather than from theory or belief. Key characteristics to look for :

- Statement about the methodology being used.
- Research questions to be answered.
- Definition of the group or phenomena being studied.
- Process used to study this group or phenomena, including any controls or instruments such as tests or surveys.

ABCD analysis framework supports empirical research by developing a methodology to identify working hypothesis that can be tested either by using observation and experiment or through a suitable instrument such as tests or surveys, to collect the data and to find the relationship between the constituent critical elements and the corresponding affecting factors under different constructs for each

identified issues. By analyzing the Business model/strategy/concept/system, one can develop a research model to prioritize the factors and the constituent critical elements.

VIII. COMPARISON OF ABCD FRAMEWORK WITH OTHER ANALYSIS TOOLS:

(a) ABCD and SWOT :

SWOT analysis is a framework that allows managers to synthesize insights obtained from an internal analysis of the company's strengths and weaknesses with those from an analysis of external opportunities and threats. Strengths are those factors that give an edge for the company over its competitors. Weaknesses are those factors that can be harmful if used against the firm by its competitors. Opportunities are favourable situations which can bring a competitive advantage. Threats are unfavourable situations which can negatively affect the business. The comparison of ABCD analysing framework and SWOT analysing framework is given in table 2.

Table 2 : Comparison of ABCD and SWOT analysing frameworks.

S. No.	ABCD Analysis Framework	SWOT Analysis Framework
1	ABCD is a mnemonic denoted A for Advantages, B for Benefits, C for Constraints, and D for disadvantages.	SWOT is a mnemonic denoted S for Strength, W for Weakness, O for Opportunities, and T for Threats.
2	Used as a tool for analysing business models, operating concepts/ideas, business strategies, business/ functional systems.	Used as a tool by organizations and individuals to know their ability of doing their business by knowing internal and external factors which have, or may have, an impact on business.
3	The framework contains various factors different determinant issues under four constructs advantages, benefits, constraints and disadvantages and then identifying constituent critical elements.	The framework allows managers to synthesize insights obtained from an internal analysis of the company's strengths and weaknesses with those from an analysis of external opportunities and threats.
4	Constituent critical elements (CCE) are those characteristics, conditions, or variables which when maintained and sustained, can have significant impact on the factor affecting that particular determinant issue.	SWOT can be done by one person or a group of members that are directly responsible for the situation assessment in the company. Basic swot analysis is done fairly easily and comprises of only few steps: Step 1. Listing the firm's key strengths and weaknesses. Step 2. Identifying opportunities and threats.
5	Each of the factors may be different to different kinds of Determinant issues for business models, operating concepts/ideas, business strategies, business/functional systems.	SWOT is widely accepted tool due to its simplicity and value of focusing on the key issues which affect the firm. The aim of swot is to identify the strengths and weaknesses that are relevant in meeting opportunities and threats in particular situation.
6	It is possible to classify an affecting factor under advantage, disadvantage, benefit, or constraints easily.	It is hard to tell if a characteristic is a strength (weakness) or not. <i>For example</i> , firm's organizational structure can be a strength, a weakness or neither!
7	Can be used for quantitative study	Can be used for quantitative study through

	through prioritization of factors and constituent critical elements.	Prioritization of factors by identifying importance, giving ratings and calculating the score of strengths and weaknesses. Opportunities and threats are prioritized slightly differently by identifying importance, probability and score.
--	--	---

(b) ABCD and CPM :

Competitive Profile Matrix (CPM) analysis is a framework tool that compares the firm and its rivals and reveals their relative strengths and weaknesses. In order to better understand the external environment and the competition in a particular industry, firms often use CPM. The comparison of ABCD analysing framework and CPM analysing framework is given in table 3.

Table 3 : Comparison of ABCD and CPM analysing frameworks.

S. No.	ABCD Analysis Framework	CPM Analysis Framework
1	ABCD is a mnemonic denoted A for Advantages, B for Benefits, C for Constraints, and D for disadvantages.	Competitive Profile Matrix (CPM) analysis compares the firm and its rivals and reveals their relative strengths and weaknesses.
2	Used as a tool for analysing business models, operating concepts/ideas, business strategies, business/functional systems.	The matrix identifies a firm's key competitors and compares them using industry's critical success factors.
3	The framework contains various factors affecting different determinant issues under four constructs advantages, benefits, constraints and disadvantages and then identifying constituent critical elements.	The analysis reveals company's relative strengths and weaknesses against its competitors, so a company would know, which areas it should improve and, which areas to protect.
4	Constituent critical elements (CCE) are those characteristics, conditions, or variables which when maintained and sustained, can have significant impact on the factor affecting that particular determinant issue.	Critical success factors (CSF) are the key areas vary between different industries or even strategic groups and include both internal and external factors.
5	Each of the factors may be different to different kinds of Determinant issues for business models, operating concepts/ideas, business strategies, business/functional systems.	The more critical success factors are included the more robust and accurate the analysis is.
6	Can be used for quantitative study through prioritization of factors and constituent critical elements.	Can be used for quantitative study through Prioritization. Each critical success factor is given weightage and factors are rated. Score is calculated by multiplying weight and rating.

(c) ABCD and EFE & IFE Matrices :

The internal and external factor evaluation matrices have been introduced by Fred David (2009) in his book 'Strategic Management. Internal Factor Evaluation (IFE) Matrix is a strategy tool used to evaluate firm's internal environment and to reveal its strengths as well as weaknesses. External Factor Evaluation (EFE) Matrix is a strategy tool used to examine company's external environment and to identify the available opportunities and threats. The comparison of ABCD analysing framework and CPM analysing framework is given in table 4.

Table 4 : Comparison of ABCD and EFE & IFE Matrix frameworks.

S. No.	ABCD Analysis Framework	EFE & IFE Matrices Analysis Framework
1	ABCD is a mnemonic denoted A for Advantages, B for Benefits, C for Constraints, and D for disadvantages.	Internal Factor Evaluation (IFE) Matrix is a strategy tool used to evaluate firm's internal environment and to reveal its strengths as well as weaknesses. External Factor Evaluation (EFE) Matrix is a strategy tool used to examine company's external environment and to identify the available opportunities and threats.
2	Used as a tool for analysing business models, operating concepts/ideas, business strategies, business/functional systems.	Both tools are used to summarize the information gained from company's external and internal environment analyses. The summarized information is evaluated and used for further purposes, such as, to build SWOT analysis or IE matrix.
3	The framework contains various factors affecting different determinant issues under four constructs advantages, benefits, constraints and disadvantages and then identifying constituent critical elements.	Even though, the tools are quite simplistic, they do the best job possible in identifying and evaluating the key affecting factors.
4	Constituent critical elements (CCE) are those characteristics, conditions, or variables which when maintained and sustained, can have significant impact on the factor affecting that particular determinant issue.	When using the EFE matrix we identify the key external opportunities and threats that are affecting or might affect a company simply by analysing the external environment with the tools like PEST analysis, Porter's Five Forces, or Competitive Profile Matrix. When using the IFE matrix, Strengths and weaknesses are used as the key internal factors in the evaluation.
5	Each of the factors may be different to different kinds of Determinant issues for business models, operating concepts/ideas, business strategies, business/functional systems.	The general rule is to identify 10-20 key external factors and additional 10-20 key internal factors, but you should identify as many factors as possible.
6	Can be used for quantitative study through prioritization of factors and constituent critical elements.	Can be used for quantitative study through Prioritization of factors. Each key factor should be assigned a weight, rating, weighted scores & total weighted score.

(d) ABCD and BCG Matrix :

BCG matrix (or growth-share matrix) is a corporate planning tool, which is used to portray firm's brand portfolio or SBUs on a quadrant along relative market share axis (horizontal axis) and speed of market growth (vertical axis) axis. BCG matrix is a framework created by Boston Consulting Group to evaluate the strategic position of the business brand portfolio and its potential. The comparison of ABCD analysing framework and BCG analysing framework is given in table 5.

Table 5 : Comparison of ABCD and BCG analysing frameworks.

S. No.	ABCD Analysis Framework	BCG Matrix Framework
1	ABCD is a mnemonic denoted A for Advantages, B for Benefits, C for Constraints, and D for disadvantages.	Boston Consulting Group's (BCG) growth-share matrix is a corporate planning tool, which is used to portray firm's brand portfolio in the form of a graph on a quadrant along relative market share axis (horizontal axis) and speed of market growth (vertical axis) axis.
2	Used as a tool for analysing business models, operating concepts/ideas, business strategies, business/functional systems.	Developed as a business tool, which uses relative market share and industry growth rate factors to evaluate the potential of business brand portfolio and suggest further investment strategies.
3	The framework contains determining various factors affecting under different determinant issues under four constructs advantages, benefits, constraints and disadvantages and then identifying constituent critical elements.	The framework is used to evaluate the strategic position of the business brand portfolio and its potential. It classifies business portfolio into four categories based on industry attractiveness (growth rate of that industry) and competitive position (relative market share). These two dimensions reveal likely profitability of the business portfolio in terms of cash needed to support that unit and cash generated by it.
4	Constituent critical elements (CCE) are those characteristics, conditions, or variables which when maintained and sustained, can have significant impact on the factor affecting that particular determinant issue.	The general purpose of the analysis is to help understand, which brands the firm should invest in and which ones should be divested.
5	Each of the factors may be different to different kinds of Determinant issues for business models, operating concepts/ideas, business strategies, business/functional systems.	There are four quadrants into which firms brands are classified: (1) Dogs hold low market share compared to competitors and operate in a slowly growing market. (2) Cash cows are the most profitable brands and should be "milked" to provide as much cash as possible.

		(3) Stars operate in high growth industries and maintain high market share. Stars are both cash generators and cash users. (4) Question marks are the brands that require much closer consideration.
6	Can be used for quantitative study through prioritization of factors and constituent critical elements.	Being a qualitative method can be used for finding proportion of business revenue generated by each brand.

(e) ABCD and Porter's Five Forces Model :

Porter's five forces model is an analysis tool that uses five forces to determine the profitability of an industry and shape a firm's competitive strategy (Porter, M.E., 2008). It is a framework that classifies and analyzes the most important forces affecting the intensity of competition in an industry and its profitability level. These forces determine an industry structure and the level of competition in that industry. The stronger competitive forces in the industry are the less profitable it is. The comparison of ABCD analysing framework and BCG analysing framework is given in table 6.

Table 6 : Comparison of ABCD and Porter's Five Forces analysing frameworks.

S. No.	ABCD Analysis Framework	Porter Five Forces Analysis Framework
1	ABCD is a mnemonic denoted A for Advantages, B for Benefits, C for Constraints, and D for disadvantages.	The five forces model is an analysis tool that uses five forces to determine the profitability of an industry and shape a firm's competitive strategy.
2	Used as a tool for analysing business models, operating concepts/ideas, business strategies, business/functional systems.	The tool is very useful in formulating firm's strategy as it reveals how powerful each of the five key forces is in a particular industry.
3	The framework contains various factors affecting different determinant issues under four constructs advantages, benefits, constraints and disadvantages and then identifying constituent critical elements.	The framework that classifies and analyzes the most important forces affecting the intensity of competition in an industry and its profitability level. These forces determine an industry structure and the level of competition in that industry. The stronger competitive forces in the industry are the less profitable it is. An industry with low barriers to enter, having few buyers and suppliers but many substitute products and competitors will be seen as very competitive and thus, not so attractive due to its low profitability.
4	Constituent critical elements (CCE) are those characteristics, conditions, or variables which when maintained and sustained, can have significant impact on the factor affecting that particular determinant issue.	It is every strategist's job to evaluate company's competitive position in the industry and to identify what strengths or weakness can be exploited to strengthen that position. The tool is very useful in formulating firm's strategy as it reveals how powerful each of the five key forces is in a

		particular industry.
5	Each of the factors may be different to different kinds of Determinant issues for business models, operating concepts/ideas, business strategies, business/functional systems.	Porter's five forces framework is used to analyze industry's competitive forces and to shape organization's strategy using 4 steps : (1) Gather the information on each of the five forces. (2) Analyze the results and display them on a diagram. (3) Formulate strategies based on the conclusions.
6	Can be used for quantitative study through prioritization of factors and constituent critical elements.	Used as qualitative tool to analyze industry's structure and use the results to formulate firm's strategy, it has its limitations and requires further analysis to be done, such as SWOT, PEST or Value Chain analysis.

(f) ABCD and PESTLE Analysis :

PESTLE analysis, which is sometimes referred as **PEST analysis**, is a concept in marketing principles. This concept is used as a tool by companies to track the environment they're operating in or are planning to launch a new project/product/service etc. The comparison of ABCD analysing framework and PESTLE analysing framework is given in table 7.

Table 7 : Comparison of ABCD and PESTLE analysing frameworks.

S. No.	ABCD Analysis Framework	PESTLE Analysis Framework
1	ABCD is a mnemonic denoted A for Advantages, B for Benefits, C for Constraints, and D for disadvantages.	PESTLE is a mnemonic which in its expanded form denotes P for Political, E for Economic, S for Social, T for Technological, L for Legal and E for Environmental.
2	Used as a tool for analysing business models, operating concepts/ideas, business strategies, business/functional systems.	Used as a tool by companies to track the environment they're operating in or are planning to launch a new project/product/service etc.
3	The framework contains various factors affecting different determinant issues under four constructs advantages, benefits, constraints and disadvantages and then identifying constituent critical elements.	The framework gives a bird's eye view of the whole environment from many different angles that one wants to check and keep a track of while contemplating on a certain idea/plan.
4	Constituent critical elements (CCE) are those characteristics, conditions, or variables which when maintained and sustained, can have significant impact on the factor affecting that particular determinant issue.	There are certain questions that one needs to ask while conducting this analysis , which give them an idea of what things to keep in mind.
5	Each of the factors may be different to different kinds of Determinant issues for	Each of the factors may be different to different kinds of industries, but it is

	business models, operating concepts/ideas, business strategies, business/functional systems.	imperative to any strategy a company wants to develop that they conduct the PESTLE analysis as it forms a much more comprehensive version of the SWOT analysis.
6	Can be used for quantitative study through prioritization of factors and constituent critical elements.	Used for qualitative study on external environmental analysis of a company.

IX. CONCLUSION :

The paper contain discussions on how to use ABCD analysing framework on a given business model, or on a business strategy or on a Concept/idea or on a business system. This includes how various issues should be identified for models/strategy/concepts/systems based on a generalized framework and then how to derive a specific framework for either a business model or a concept or a system specifically. A general guideline is developed on how to identify various factors affecting based on the four constructs : advantages, benefits, constraints and disadvantages. Finally ABCD analysing framework is compared with other known business model frameworks like SWOT, **Competitive Profile Matrix (CPM)** analysis, EFE & IFE Matrices, BCG analysing frameworks, Porter's Five Forces Model, and PESTLE Analysis. Based on "prioritization of factors" and calculating the scores, we can further improve the analysis method and named it as advanced ABCD analysing technique. An advanced ABCD goes a step further to make it quantitative. The possibility of using ABCD analysis framework for exploratory research and empirical research are also discussed.

X. REFERENCES

- [1] Afuah, A., Tucci, C. (2003) *Internet business models and strategies: Text and Cases*. McGraw-Hill, 2nd edition, Boston.
- [2] Aithal P. S, Shailashree V. T., Suresh Kumar P. M., (2015^a) "A New ABCD Technique to Analyze Business Models & Concepts", *International Journal of Management, IT and Engineering*, 5 (4), pp 409 - 423.
- [3] Aithal P. S. & Suresh Kumar P. M., (2015^b) Black Ocean Strategy - A Probe into a New type of Strategy used for Organizational Success, *GE International Journal of Management Research*, 3 (8), pp. 45 - 65.
- [4] Aithal P. S., Shailashree V.T., & Suresh Kumar P.M., (2015^c) Application of ABCD Analysis Model for Black Ocean Strategy, *International Journal of Applied Research*, 1 (10) pp 331 – 337.
- [5] Aithal P. S., Shailashree V.T., & Suresh Kumar P. M., (2015^d) ABCD analysis of NAAC Accreditation System, Submitted to International Journal of Management, IT and Engineering, 2015.
- [6] Aithal P. S. & Suresh Kumar P. M., (2015^e) Enhancement of Graduate attributes in Higher Education Institutions through Stage Models, IMPACT: International Journal of Research in Business Management, 3 (3) pp 121 – 130.
- [7] Aithal P. S., Shailashree V. T., & Suresh Kumar P. M., (2015^f) ABCD analysis of Stage Model in Higher Education, Communicated to International Journal of Management, IT and Engineering, 2015.
- [8] Ballantyne, J., and Brignall S., (1994), *A Taxonomy of Performance Measurement Frameworks*, Research Paper 135, Warwick Business School.
- [9] David, F.R. (2009). *Strategic Management: Concepts and Cases*. 12th ed. FT Prentice Hall.

- [10] de Wit, B., and Meyer R., (1998), *Strategy, Process, Content and Context*, 2nd ed. Thomson Learning, London.
- [11] Gordijn, J., Akkermans, J. M., van Vliet, J.C. (2001) Designing and evaluating e-business models, *IEEE Intelligent Systems*, 16(4), pp 11-17.
- [12] Hamel, G. (2000) *Leading the revolution*, Harvard Business School Press, Boston.
- [13] Hedman, J. and Kalling T., (2003), The business model concept: theoretical underpinnings and empirical illustrations. *The European Journal of International Security*, 12, pp. 49 - 52.
- [14] Kaplan, R., Norton, D., (1992), The Balanced Scorecard - Measures That Drive Performance. *Harvard Business Review* Jan-Feb, pp 71-79.
- [15] Kagermann, H. and Österle H., (2006), *Geschäftsmodelle 2010 - Wie CEOs Unternehmen transformieren*. Frankfurter Allgemeine Buch, pp 276.
- [16] Lee S. F., and Ko, A. S. O., (2000) Building Balanced Scorecard with SWOT Analysis, and Implementing, Sun Tzu's The Art of Business Management Strategies' on QFD Methodology. *Managerial Auditing Journal* 15 (1-2) pp 68-76.
- [17] Linder, J., Cantrell, S. (2000) Changing business models: Surveying the landscape, *Accenture Institute for Strategic Change Report*.
- [18] Magretta, J. (2003). What management is - How it works and why it's everyone's business. *Profile Books*, pp 44.
- [19] Magretta, J. (2002), Why business models matter. *Harvard Business Review* 2002, pp 33-36.
- [20] Morgan R. M., and Hunt S.D., (1994) The commitment-trust theory of relationship marketing", *Journal of Marketing*, 58 (6), pp 20-38.
- [21] Müller-Stewens, G. and C. Lechner (2005). Strategisches Management - Wiestrategische Initiativenzum Wandelführen, Schä_er-Pöschel, pp 410.
- [22] Pateli, A.G., Giaglis, G.M. (2004) A research framework for analysing e-Business models, *European Journal of Information Systems*, 13(4), pp 302-314.
- [23] Porter, M. E. (1985), *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: The Free Press.
- [24] Porter, M.E. (2008). The Five Competitive Forces That Shape Strategy. *Harvard Business Review*. Available at: <http://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy/>
- [25] Rappa, M. (2001) Managing the digital enterprise - business models on the Web, *North Carolina State University Working Paper*.
- [26] Reshma, Aithal P. S., and Sridhar Acharya P., (2015^a) Relevance of On-line Office Administration through Working from Home in Future Education System, *International Journal of Application or Innovation in Engineering & Management*, 4 (4), pp. 345 - 355.
- [27] Reshma, P. S. Aithal, Shailashree V. T., P. Sridhar Acharya, (2015^b) An empirical study on Working from Home: A popular e-business model", *International Journal of Advance and Innovative Research*, 2 (2-I), pp. 12 - 18.
- [28] Rogers E.M., (1995) *Diffusion of Innovation*, The Free Press, NY.

[29] Shields, Patricia and Rangarjan, N. (2013), *A Playbook for Research Methods: Integrating Conceptual Frameworks and Project Management*. Stillwater, OK: New Forums Press. See chapter Five for an extensive discussion of exploratory research.

[30] Sterman, J. (2000). *Business Dynamics*. Wiley, pp 22.

[31] Sue Greener, Joe Martelli, (2015) *An introduction to Business Research Methods*, 2nd Ed., Bookboon.com.

[32] Timmers, P. (1998) Business models for e-commerce, *Electronic Markets*, 8(2), pp 3-7.

[33] Warren, K. (2002). *Competitive Strategy Dynamics*. Wiley, pp 20.

[34] Wu, B. (1992), *Manufacturing Systems Design and Analysis*, Chapman and Hall, London.
