

A NEW ABCD TECHNIQUE TO ANALYZE BUSINESS MODELS & CONCEPTS

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ABSTRACT

Various techniques are used to analyze individual characteristics or organizational effectiveness like SWOT analysis, SWOC analysis, PEST analysis etc. These techniques provide an easy and systematic way of identifying various issues affecting a system and provides opportunity for further development. Whereas these provide a broad based assessment for individual institutions and systems, it suffers limitations while applying to business context. The success of any business model depends on how a company makes profit by specifying its position in the value chain. Therefore identifying suitable business models which would enhance customer value and generate revenue is the current challenge for organizations. In this paper, we have proposed a new technique namely ABCD Technique to analyze a business model and to study its effectiveness in providing value to its stake holders and sustainable profit through expected revenue generation. ABCD is an acronym that stands for Advantages, Benefits, Constraints, and Disadvantages. Application of ABCD analysis results in an organized list of 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 critical effective elements. This analyzing technique being simple, gives guideline to identify and analyze the effectiveness of any business model and new concepts developed.

Keywords : ABCD technique, Business model analysis, Business deployment factors, Critical effective elements.

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I. Introduction

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. These models/techniques provide an easy and systematic way of identifying various factors/issues affecting individual/organizational system and provide opportunity to further improvement. But there is a need for simple but systematic analyzing technique for business models 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. The objective of a business model is to identify factors and their interrelationships that interact in a systematic manner such that the various elements constituting the model results in better understanding of the business sub-system. The reliability of the results obtained from a model, explains the validity of the model representing the real system. It also represent core aspects of a business, including purpose, business process, target customers, offerings, strategies, infrastructure, organizational structures, trading practices, and operational processes and policies. It is assumed that a good business model will possess the following attributes : (i) It should be capable of taking into account new formulation without alterations in its frame. (ii) The various elements in the frame address all dimensions of the business. (iii) Multitude of factors could be fitted in a given frame. (iv) The causative variables are contained in the analyzing frame. (v) It should not take much time in the analysis of any problem.

In this paper, a new technique namely ABCD Technique to analyze any business model and to study its effectiveness in providing value to its stake holders and sustainable profit through expected revenue generation is proposed. 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. 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 and new concepts developed.

II. Literature Review

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) analyses, 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, 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). 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 (Sternan, 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. One analytical tool that does provide the ability to convert high-level business objectives into processes is QFD (Quality function deployment), which is discussed widely by Akao (1972), Mazur (1992), and more recently by Ko and Lee (2000 "a") and Lee et al. (2000"b"). A glance through prominent and often sighted works reveals the following objectives for studying business models.

1. Understanding the key elements and mechanisms in a specific business domain and their relationships (Osterwalder & Pigneur, 2002).
2. Understanding and sharing the worth of a business model among business stakeholders and technology stakeholders (Gordijn & Akkermans, 2001).
3. Specifying the importance of Information Systems that support the business model (Eriksson & Penker, 2000).
4. Identifying options for changing and improving the current business model (Eriksson & Penker, 2000), thus facilitating change (Osterwalder & Pigneur, 2002).
5. Experimenting with innovative business concepts to determine if current business models can be easily adapted to new concepts (Eriksson & Penker, 2000), as well as to assess the viability of new business initiatives (Weill & Vitale, 2001).

III. ABCD Framework for Business Model Analysis

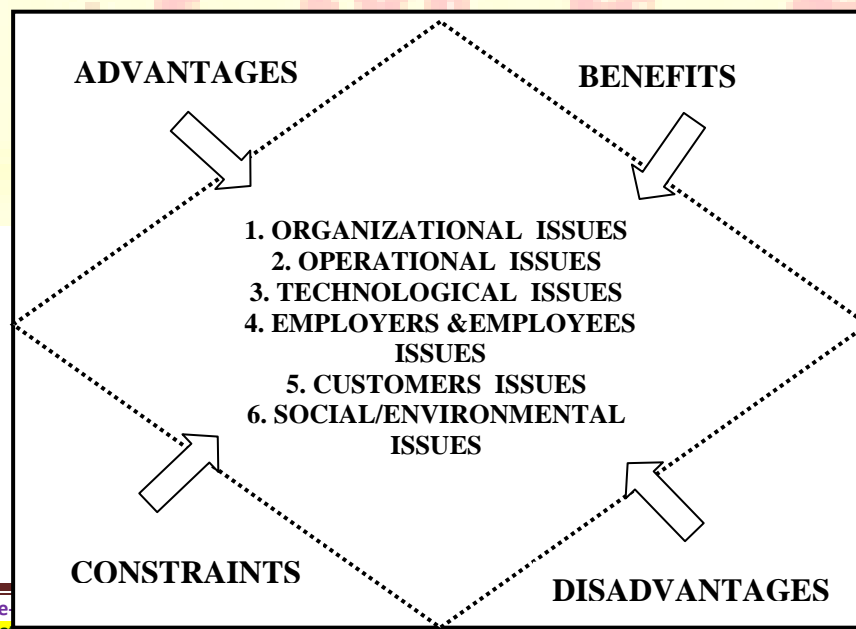


Figure 1 : Block diagram representation of ABCD Technique with common Issues/Area of focus under different constructs.

As ubiquitous technology is emerging as a new paradigm of business industry, business environment has been more complicated. According to this change, many enterprises have focused establishing a business model (BM) for creating a new value. Therefore, the importance of developing a suitable business model has been increasing more and more. In this research, we suggested the business model feasibility analysis (BMFA) framework for evaluating a business model. Also, in order to suggest methodology applications, it is applied to doing business online using internet, called electronic business model. This study is meaningful in suggesting integrated perspective analyzing business model in the frame of reference of organization, operation, technology, employer and employee, customers, and environmental/social issues in ubiquitous technology environments and concretizing the application of framework by case study on both brick and mortar and click and mortar business models. The block diagram of four constructs of our proposed new model along with various issues/focusing areas & business deployment factors affecting the business model under individual constructs are shown in Figure 1. Table 1 identifies various issues/focusing area and business deployment factors under ABCD framework.

Table 1: Various issues/focusing area and business deployment factors under ABCD framework.

S. No.	Issues/Area of Focus	Business deployment factors			
		Advantages	Benefits	Constraints	Disadvantages
1	Organizational Issues	(1) Investment & Return (2) Diversity & Specialization (3) Availability & Depletion (4) Viability & Stagnation (5) Organizational value	(1) Financial stability (2) Product maneuverability (3) Resource Assessment (4) Marketability	(1) Organisational Structure (2) Size of Organisation (3) Strategy (4) Leadership style	(1) Organizational structure (2) Organizational culture (3) Organizational type (4) Organizational strategy
2	Operational Issues	(1) Resource Utilization (2) Cost effectiveness	(1) Process efficiency (2) Product Pricing	(1) Scale of production (2) Labour Force (3) Suppliers	(1) Production planning (2) Co-ordination of all

		(3) Core Competency (4) Time	(3) Product superiority (4) Speed	(4) Finance	functions (3) Operations control (4) Production strategies
3	Technological Issues	(1) Level of technology (2) Degree of dependency on Technology (3) Institutional readiness to use upgraded technology	(1) Availability (2) Technical superiority (3) Ability to handle	(1) Automation (2) Implementation expenses (3) Security breaches (4) Job elimination	(1) Disconnectedness (2) Distractions (3) Cyber crimes (4) Expensive
4	Employees & Employers Issues	(1) Availability (2) Satisfaction level (3) Maintenance cost (4) Sustainability	(1) Utilization (2) Output orientation (3) Organizational Structure (4) Mutuality	(1) Knowledge, skills & competency (2) Career advancement (3) Performance evaluation (4) Reward system	(1) Labour unions (2) Employee disengagement (3) Absence of knowledge workers (4) Lack of learning organizations
5	Customers Issues	(1) Ubiquitous Availability (2) Price (3) Durability (4) User Friendly (5) Perceived Value	(1) Freedom of choice (2) Fitting to the Budget (3) Lasting to use (4) Matching expectations	(1) Market size (2) New needs (3) Customer feedback (4) Brand loyalty	(1) customer preferences & perceptions (2) STP wrongly (3) Customer education promotion (4) Logistics
6	Social/environmental Issues	(1) Eco friendly (2) Employment Generation (3) Stake holders Satisfaction (4) Contribution to Economy	(1) Harmony with nature (2) Expanded workforce (3) Fulfilled interest (4) Improved economy	(1) Legal requirements (2) Social constraints (3) Uncertainty (4) Imbalance to the growth	(1) Environmental hazards (2) Depletion of natural resources (3) Instability in Economic/political environment (4) Social problems and ethical problems

1. Advantages : Various advantages of the business model have to be listed under common factors like (1) Organizational Advantages, (2) Operational Advantages, (3) Technological Advantages, (4)Employees & Employers Advantages, (5) Customers Advantages, (6)

Social/environmental Advantages. The organizational advantages falls under the following factors such as investment and return, diversity and specialization, availability and depletion, viability and stagnation, organizational value etc. These factors contribute to the strength of the organization in all its areas namely capital, resources, workforce, and market. The following factors constitutes the operational advantages. They are resource availability, cost effectiveness, core competency, and time. The technological advantages is constituted by the following factors namely level of technology, extent of use of technology, the degree of dependence on technology and institutional readiness to use upgraded technology. Employer-employee advantages includes factors such as availability, maintenance cost, satisfaction level and sustainability. The customer advantages include factors such as product features, ubiquitous availability, price, durability, usage friendly and perceived value. The social and environmental advantages include employment generation, stakeholder satisfaction, environment friendliness, contribution to economy. The guideline for identifying critical effective elements under each business deployment factor for advantages of the business model are listed in Table 2.

2. Benefits : Various benefits of the business model have to be listed under common factors of (1) Organizational benefits, (2) Operational benefits, (3) Technological benefits, (4) Employees & Employers benefits, (5) Customers benefits, (6) Social/environmental benefits. The constituent attributes of these factors as business benefits have to be identified and analysed. Organisational benefits can be analysed under financial stability, product maneuverability, resource assessment and marketability. Product efficiency, product pricing, product superiority and speed are the factors under operational benefits. Technological benefits are constituted by the following business deployment factors namely availability, technical superiority, ability to handle. The employees and employer benefits criteria includes utilisation, output orientation, organisational structure and mutuality. The customer benefit area focuses on freedom of choice, fitting into the budget, lasting to use and matching expectations. The last criteria namely social / environmental benefits, consider the factors such as harmony with nature, expanded workforce, fulfilled interest and improved economy. The guideline for identifying critical effective elements under each business deployment factor for various benefits of the business model are listed in Table 3.

3. Constraints : Various constraints of the business model have to be listed under common factors of (1) Organizational constraints, (2) Operational constraints, (3) Technological

constraints, (4) Employees & Employers constraints, (5) Customers constraints, (6) Social/environmental constraints. The constituent attributes of these factors as business constraints have to be identified and analyzed. Organisational constraints include the organisational structure, size of the organisation, strategy and the leadership style. Operational constraints consider the factors such as scale of production, labour force, suppliers and finance. Automation implementation expenses, security breaches and job elimination are the business factors considered in the area of technological constraints. The fourth area namely employees and employer constraints include knowledge, skills and competency, career advancement, performance evaluation and reward system. The customer constraints are constituted by the business factors namely market size, newer needs, customer feedback and brand loyalty. The social and environmental constraints need to cope up with legal requirements, uncertainty and imbalance in growth. The guideline for identifying critical effective elements under each business deployment factor for different constraints of the business model are listed in Table 4. Any business entity should try to minimize its constraints and convert them to possible opportunities to grow and succeed in the business arena.

4. Disadvantages : Various disadvantages of the business model have to be listed under common factors of (1) Operational disadvantages, (2) Organizational disadvantages, (3) Technological disadvantages, (4) Employees & Employers disadvantages, (5) Customers disadvantages, (6) Social/environmental disadvantages. The constituent attributes of these factors as business disadvantages have to be identified and analyzed. The organisational disadvantages may includes factors such as organisational structure, organisational culture, type of the organisation and organisational strategy. The operational disadvantages may constitute factors namely production planning, coordination of all function, operational control and production strategies. Disconnectedness, distractions, cyber crimes and expensiveness are the business deployment factors included in technological disadvantages. Employees-employer disadvantages consider labour union, employee disengagement, absence of knowledge workers and lack of a learning organisation as the business factors. The customer disadvantages are ever changing customer preferences and perceptions, wrong segmentation targeting and positioning (STP), customer loyalty education and promotion and logistics. The factors included in social and environmental disadvantages are environmental hazards, depletion of natural resources, instability in the economic and political environment, social problems and ethical values. The

guideline for identifying critical effective elements under each business deployment factor for various disadvantages of the business model are listed in Table 5. Business organisations need to identify the disadvantages as per the above mentioned factors and try to convert the disadvantages into business opportunities and sustain in the market.

Table 2 : Advantages of the business model

S. No.	Areas of Focus	Business Deployment Factors	Critical Effective Elements
1	Organizational Advantages	(1) Investment & Return (2) Diversity & Specialization (3) Availability & Depletion (4) Viability & Stagnation (5) Organizational value	(a) Asset Value (b) Profit Orientation (a) Multi-functional (b) Anticipating cash flow (a) Supply & Demand (b) Pricing (a) Readiness to change (b) Ability to Absorb market trends (a) Revenue generation, (d) Worth of the business
2	Operational Advantages	(1) Resource Utilization (2) Cost effectiveness (3) Core Competency (4) Time	(a) Incessant workflow (b) Balancing demand (a) Price fixation (b) Product design (a) Product quality (b) Service effectiveness (a) Gross output (b) optimum utilization
3	Technological Advantages	(1) Level of technology (2) Degree of dependency on Technology (3) Institutional readiness to use upgraded technology	(a) Extent of sophistication (b) Preparedness (a) Indispensability (b) "Master-servant relationship" (a) Existing conditions (b) Product speciality
4	Employees & Employers Advantages	(1) Availability (2) Satisfaction level (3) Maintenance cost (Cost-Satisfaction Trade-off.) (4) Sustainability	(a) Man power supply (b) Level of skill (a) Compensation rewards (b) recognition (a) Human relations (b) Control Mechanisms (a) Motivation (b) Commitment
5	Customers Advantages	(1) Ubiquitous Availability (2) Price (3) Durability (4) User Friendly (5) Perceived Value	(a) Market absorption (b) Business networking (a) Affordability (b) Competition (a) Enhanced life (b) Superior Innovation (a) Customer nature

			(b) Manner of use (a) Acceptance (b) Importance
6	Social/environmental Advantages	(1) Eco friendly (2) Employment Generation (3) Stake holders Satisfaction (4) Contribution to Economy	(a) Hazards minimized (b) Clean environment (a) Opportunity creation (b) Increased earnings (a) Supplementing necessities (b) Full filling public interest (a) Wealth creation (b) Maintaining Standards

Table 3 : Benefits of the business model

S. No.	Areas of Focus	Business Deployment Factors	Critical Effective Elements
1	Organizational Benefits	(1) Financial stability (2) Product maneuverability (3) Resource Assessment (4) Marketability	(a) Productivity (b) Income generated (a) Adherence to quality (b) Utility value (a) Anticipating inventory (b) Complacence to budget (a) Market sensitivity (b) Product feasibility
2	Operational Benefits	(1) Process efficiency (2) Product Pricing (3) Product superiority (4) Speed	(a) Simple to work (b) low wastage (a) Determine profit (b) Long term goals (a) Quality (b) Features (a) Quick result (b) Ensuring quality
3	Technological Benefits	(1) Availability (2) Technical superiority (3) Ability to handle	(a) Chief & affordable (b) Suited to the requirement (a) Meeting Standard (b) Up to date (a) Easier & safer (b) Skill & familiarity
4	Employees & Employers Benefits	(1) Utilization (2) Output orientation (3) Organizational Structure (4) Mutuality	(a) Equitable load (b) Better performance (a) Break-even (b) Target focus (a) Hierarchies (b) Command & Communication (a) Interaction (b) Dependability
5	Customer Benefits	(1) Freedom of choice (2) Fitting to the Budget (3) Lasting to use (4) Matching expectations	(a) Competing features (b) Suited to desire (a) Paying capacity (b) Attraction & liking (a) Economy

			(b) Preference Factor (a) Consider valuable (b) Good to use
6	Social/environmental Benefits	(1) Harmony with nature (2) Expanded workforce (3) Fulfilled interest (4) Improved economy	(a) Green energy (b) Green habitat (a) More jobs (b) Increasing skills (a) Better returns (b) Meaningful involvement (a) High per capita (b) Better living conditions

Table 4 : Constraints of the business model

S. No.	Areas of Focus	Business Deployment Factors	Critical Effective Elements
1	Organizational Constraints	(1) Organisational Structure (2) Size of Organisation (3) Strategy (4) Leadership style	(a) Span of management (b) Flow of Authority (a) Geographical spread (b) Type of Business (a) Corporate Strategy (b) Business & Functional Strategy (a) Style of leadership (b) Role model
2	Operational Constraints	(1) Scale of production (2) Labour force (3) Suppliers (4) Finance	(a) Machinery (b) Infrastructure (a) Skilled labour (b) Extensive training (a) Resource Utilization (b) Supply of Material (a) Healthy Cash flow (b) Investment funding
3	Technological Constraints	(1) Automation (2) Implementation expenses (3) Security Breaches (4) Job elimination	(a) Newer methods (b) R& D Investment (a) Cost of hardware & software (b) User Licenses (a) Hacking (b) Access to confidential data (a) New Skills (b) Job insecurity
4	Employees & Employers Constraints	(1) Knowledge, skills and competency (2) Career advancement (3) Performance evaluation (4) Reward system	(a) Lack of competent work force (b) Training for skill development (a) Clear job titles (b) Progression in career (a) Control mechanism (b) Constructive feedback (a) Conservative system (b) Motivational tool
5	Customers Constraints	(1) Market size (2) New needs (3) Customer feedback	(a) Ability to tap cell markets (b) Demographic changes in the market

		(4) Brand loyalty	(a) Demand becomes less (b) Too many seller (Competition) (a) Prompt reviews (b) Timely reviews (a) Perception (b) Image
6	Social/environmental Constraints	(1) Legal requirements (2) Social constraints (3) Uncertainty (4) Imbalance in Growth	(a) Abide by laws (b) Complex in nature (a) Taste of consumers (b) Buying pattern (a) Natural calamities (b) Crisis management (a) Economic growth (b) Political instability

Table 5 : Disadvantages of the business model

S. No.	Areas of Focus	Business Deployment Factors	Critical Effective Elements
1	Organizational Disadvantages	(1) Organisation structure (2) Organisational culture (3) Organisational type (4) Organisational strategy	(a) Flat structure/tall structure (b) Reporting authorities (a) Values and belief (b) Strong Vs Weak culture (a) Partnership/Corporation (b) Industrial structure (a) Long/Short term orientation (b) Implementation
2	Operational Disadvantages	(1) Production Planning (2) Coordination of all functions (3) Operations control (4) Production strategies	(a) Forecasting (b) Prediction (a) From supply to sale (b) Tangible to Intangible (a) Quality standards (b) Budget control (a) Long/Short term (b) Implementation/Evaluation
3	Technological Disadvantages	(1) Disconnectedness (2) Distractions (3) Cyber crimes (4) Expensive	(a) People from people (b) People from final product (a) Online gaming (b) Online shopping (a) Frauds (b) Consumer information (a) Purchasing lost (b) Ongoing maintenance expenses
4	Employees & Employers Disadvantages	(1) Labour unions (2) Employee disengagement (3) Absence of knowledge workers (4) Lack of learning organization	(a) Membership (b) Bargaining power (a) % of Employees engaged (b) % of Employees empowered (a) Innovative (b) Creative (a) Continuous improvement (b) Sharing of knowledge

5	Customers Disadvantages	(1) Customer preferences & perception (2) Wrong STP (Segmentation Targeting & Positioning) (3) Customer loyalty Education & promotion (4) Logistics	(a) Ever-changing (b) Unaware (a) Misidentifying target market (b) Wrong positioning & segmenting (a) Differentiation (b) Good Brand management (a) Warehousing (b) Inventory handling
6	Social/environmental Disadvantages	(1) Environmental Hazards (2) Depletion of natural resources (3) Instability Economic/ Political Environment (4) Social problems & Ethical values	(a) Pollution (b) Acid air (a) Wastage (b) Recycle & Reuse (a) Erratic growth (b) Unstable political affairs (a) Imparity in Pay, crime (b) Only profit motive

IV. ABCD Technique applied to Conventional and E-Business Models

ABCD technique can be used to analyse conventional business models called brick & mortar models as well as e-business models called click & mortar models by considering all the above six issues/areas of focus under proposed four constructs of the framework. ABCD analysis technique can be applied to any conventional business models, business case studies and on e-business models like E-education, E-banking, E-retailing etc. will be considered for further research as a continuation of this study.

V. Uses of ABCD Analysis

ABCD Analysis is instrumental in business model identification and selection. It is a strong tool, but it involves a great degree of subjective element. It is best when used as a guide, and not as a prescription like SWOT analysis used in strategy formulation. Successful business models can depend on this to build on their advantages, identifies their benefits and anticipate constraints and counter disadvantages to increase the profit through enhanced revenue and to continuously add value to the stake holders in a complex economic, social and cultural milieu.

VI. Conclusion

The proposed ABCD framework is simple & highly useful and valid approach for evaluating enterprise models. As shown in the technique, almost all of the evaluation criteria which have been suggested in the literature can easily be classified within the framework. There remain a

number of non-classifiable composite criteria, such as overall “quality” and “usability”, but exact and consensus definitions of these tend to be fairly nebulous anyway. Even these composite criteria can benefit from the framework since their constituent attributes in terms of critical success elements can be analyzed as per the given framework.

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