Responding VUCA through PURA —A New Approach and Theory of Future Management

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Abstract: Today, the entire world is under a Volatility, Uncertainty, Complexity, and Ambiguity (VUCA) situation. Before VUCA encumbrance, the world's situations were under predictive nuance. Slowly, since 1987 the world situations have become fashioned by RUPT, i.e. Rapid, Unpredictable, Paradoxic, and Tangled world. Thereby our present has entered into a predictable future through a series of unpredictable phenomena. Thus, the management world has to respond to the unpredictability due to various forces of change, they are - economic, political, societal, technological, and environmental. The emerging horizon of VUCA is under constant pressure of future thinking with an inherent search for new theories.

Based on future thinking, Prospection (P), Understanding (U), Reaction (R), and Adaptiveness (A) in short PURA has become an emergence as a new theory according to the author of this article. This paper articulates the PURA in reversing acronyms as ARUP theory to respond to the VUCA context of management.

Key Words: Predictability, Unpredictability, Reactivity, Understandability, Adaptiveness

I. Introduction

Management theories are the backbone for managing business and work affairs. The traditional theories of management are Scientific Management, Administrative Management, Bureaucratic Management, Human Relations Theory, System Management Theories, and Contingency Management Theory. All management theories help organizations to focus, to communicate, and to evolve. The essence of management theories in a business organization is that they frontwards as the science supporting the management process in achieving the business and organizational goals. Arguably, all management theories emphasize increasing efficiency in the production system (Petriglieri. G, 2020). Every theory of the past never provides the foundation to build the future of business and management using the blueprints of the past. The assumption and principle based on existentialism can never be the background for designing the future. Those theories fail to address the changing horizon which may invite the question of sustenance and death. The management world needs to get an answer about what will work best instead of "what works best?", and how to ensure "what is worth living for?". The futuristic aspects of management are enforcing to consider the change in the future and understand that the 'organizations today frequently operate in the dynamic environment'. As the change is critical, multifaceted, and fast in nature; amid these vortexes, management has to adopt an emerging theoretical recourse.

II. Predictably Unpredictable Future

Gone are the days when we could predict the net course of actions along with the dominant ideology, approaches, and theories (Ndemo. B, 2017). The constant change and consequent disruptions are impacting the predictive elements of the global economic, socio-political, and technological phenomenon. The identification of "Best Guess" on the future is refuted in the work of Maier H.R., & et. al. (2016). A plethora of researchers and futurists are centred around their feelings about the unpredictable future under four cliché words- Volatile, Uncertain, Complex and Ambiguity whose acronym is VUCA. We as the common man feel volatile in situations explained by movement with unpredictable degrees and directions about the normality. Radicalism views uncertainty as a situation which is unpredictable and can not be known. Uncertainty can be understood through synonyms- they are-unpredictability, state of suspense, inconclusive, or the situation of perplexity. Complexities are "characteristics behaviour of system or model whose components interact in multiple ways and follow local rules leading to nonlinearity" (Johnson. S, 2001). Ambiguity is a characteristic or behaviour indicating not having a clear interpretation, or not having clear meaning. At present, combining all common meanings VUCA is understood in the context of

change or the context of the future only. This ongoing VUCA cliché substantiates the nature of the future and the challenges that need to be addressed in the future.

Since 1987- the first use of VUCA, the theoretical discourses of it corroborated leadership perspective. Later on, since the year 2002, it became a frequent point of discussion and emerged as the root of ideas for strategic leadership (Rouvrais, Siegfried; Gaultier Le Bris, Sophie; Stewart, Matthew (July 2018) applied gradually and widely in organizations, from non-profits to educational institutions. Whether the futuristic dimensions are framed under the VUCA or with the alternate RUPT framework (Rapid, Unpredictable, Paradoxic, and Tangled), unpredictability is a common and determining phenomenon in the future. It is a known fact that our present will enter into a predictable future through a series of unpredictable phenomena. In this phenomenal world, we must take a respite with an assurance that the future will no longer work the way we thought (Weinberger. D, 2015). The management world needs to respond to the unpredictability of various forces of change, they are - economic, political, societal, technological, and environmental.

III. PURA as Emerging Horizons from VUCA

In responding unpredictably, the applicability of future thinking and relevant approaches no one can deny. Future thinking enables us to consider what is likely to change and what is likely to stay as same in the future. Future thinking helps in reflecting on "what could happen as a result of decisions, actions, and issues occurring in the present" (Corthell, L. P.). Using future thinking one can visualize the future, to make the change at present. Thinking about the future is a process which is known as "Prospection (P)" - a force that triggers us to visualize multiple directions of our future (Allen, S. 2019). Major challenges of business in the age of VUCA or the RUPT world presuppose everything in future is unpredictable, ambiguous, and complex, where a discovery of apposite theory for management is a must. Responding business in the VUCA and the RUPTured world prospection-based theories and models, trends and megatrends, perspectives and their prescription etc. need a thorough examination to develop and to understand all emerging paradigms for future theory. In the VUCA world, prospection is not enough but needs Understanding (U) and reaction (R) with an ability to be reactive and to remain Agile with an adaptive ability (A). So, joining abbreviations logically, the emergence of PURA was initially assumed as the stepwise arrangement of actions for VUCA that needs a review to examine theoretical relevance.

Prospection-based thinking in the context of business and management was realised in the long past and the same is going on. With global developments, scenarios depicted as global megatrends till 2050, are putting organizations under continuous and dynamic pressure and are compelling to enquire on even the "complexity theory". Considering the business and management to operate under unpredictably changed situations, management needs to apply prospect the situation from uncertain future. Prospecting is not only a strategy but is a horizon (table-1, row-1,column-4) of outlooks and thinking according to Barman. A (2022). To operate in the uncertain synonymized with a state of suspense and perplexity, the management must understand the situations in part or whole on how uncertainty is

influencing business internally or externally within the organisation. Understanding the phenomenon and situations which may be external and internal to the organisation may create

a horizon for managing the organisation through understanding (table-1,row-2, column-4). In the same way, organisation and management under the complexity impacting non-linear situations. Management must react through such non-linearity through non-linear decisions to survive. Thus, the management's reactivity (Table-1, row-3, column-4) becomes the third horizon to face the complexity of the business and organisation. Under VUCA parlance, the last cliché is ambiguity which states the situation of not have a clear meaning and needs to be faced by adaptation and agility. Thus, for the ambiguity of the situation business management must inculcate the culture and practice of adaptation or agility (Table 1, row-4, column-4) as the fourth horizon of management.

Table 1: PURA as Emerging Horizons to Respond to VUCA Phenomenon

VUCA	Main Characteristics	Emerging Horizons
Volatile (V)	Rapid Change, Unpredictability	Prospect-ing
Uncertain (U)	Unpredictability, state of suspense, inconclusive, or the situation of perplexity	Understand-ability
Complex (C)	Interacting in multiple ways follows the local rules leading to nonlinearity	Reactivity
Ambiguous (A) Situations do not have clear interpretation or do not have a clear meaning		Adaptation and Agility

Source: Compiled by Author

By considering all horizons, the author here has coined all these horizons as PURA as an abbreviation of Prospection (P) force through understandability (U) with an effort of translating the prospection through reaction and revolution (R), consequently achieving the results through adaptation as well as agility for sustainability. This proposed PURA theory may be seen as the context theory and a new approach for management challenged in the days to come. It is predicted that PURA theory may be useful for responding to change through many predicted megatrends of the world. Very soon, this PURA theory will take a new "theoretical avatar" during the age of VUCA.

IV. Existing Theories under New Horizon

To develop theoretical propositions deploying the action lines of prospection, understandability, reactivity, and agility with adaptability; a critical synthesis of existing theories is executed in the following four sections.

(i) Under Prospection: Eskildsen, J., & et.al. (2009) stated the need for new design and new concepts to respond to the present market and societal demands and so predicted by their theoretical explorations on the imminent need for organisational renovation, innovation and reinvigoration. Management literature is evidenced by the numerous models for predicting future outcomes which were usually applied by assuming the steady state of the environment (Tulsinsky. I, 2022). To engage with future exponential change, we need to predict the consequences of today's actions assuming the world of tomorrow is going to be dramatically different from the world of today. Mark Wilson, a global design editor at Fast Company realized the fact that "people everywhere in the world wish to look into a crystal ball so that they could see their future in terms of career, investment, and business" (Wilson, M., 2016). In Willson's language, this intention of humans to look into the future is known as "Futurecasting".

Futurecasting delineated 5 steps to predict about future. In step 1, to start futuristic activities, setting a time frame is key to designing the future casting. One must care the span of the future should not be that near or not far away from the present. If one future-cast for far away, say 30 years from the present he must have to predict many other relevant variables. In the 2nd step, the future caster should do good research at best to predict and confirm the possible area of failure. Research is not limited to corporateled research only, but may consider the news, user studies, and scientific research to identify the trends affecting the world at large as megatrends. In step 3, after research one must design the world where we wish to live. This futuristic world is an archetypal world of imagination, fun, and making one practical utopia by borrowing from science fiction. The 4th step is designing the

headlines for the future that might occur under the frame of future realities. Imagining future disruption one must narrow down the multiple headlines from numbers of all possible or the predicted realistic future. At last, the future caster must design the opportunities in future by designing what could be done to address the hypothetical situations. Managing through future casting is beyond managing through forecasting. Willson stated it is about design thinking and design-based management.

Table 2: Forecasting-Based Theories

Sl No	Theory	Assumptions
1	Theory of	Economic phenomena behave rhythmically and explain with the help of the trade
	Economic	cycle, management needs to adjust according to predicted cycles. If there are
	Rhythm (TER)	irregular variations TER can not prospect/predict accurately.
2	Action Reaction Applying Newton's third law of motion, the consequent imp	
	Approach	phenomenon on business is predicted. If at present price level is very high, the
	(ARA)	time will come price level will come down. ARA was management on impending
		future.
3	Sequence	This method assumes the "behaviour of different businesses show similar
	Methods (SM)	movements occurring successively but not simultaneously". Lead-leg means
	of Time Lag	which relationship helps business and management to decide the course of action.
	Method (TLM)	
4	Specific	SHA assumes history repeats itself or in other words what has happened in the
	Historical	past will repeat in future under the same set of circumstances. Management in
	Analogy (SHA)	predicting future, adjustments to be made to that special circumstances.
5	Cross-Cut	The effects of each independent factor are taken into consideration, but not the
1.00	Analysis (CCA)	combined effects of all factors. Management predicts with the help of analysing
	1	one factor isolated.
6	Model Building	In MBA, business and management are modelled by assuming the inter-
Aug.	Approach	relationships of various factors, in predicting management consequence, the
-	(MBA)	expected value of dependent factors are used to put in the values of known
1	(1.22.2)	variables.

Source: Compiled by Author, from Top 6 Theories of Business Forecasting at URL https://www.businessmanagementideas.com/business-forecasting/top-6-theories-of-business-forecasting/3946

As the prospect is a context-specific approach, the existence of prospect theories and approaches may be examined from multiple contexts in reshaping emerging theories. Prospect theory was originally developed by Daniel Kahneman and Amos Tversky in 1979 (Boyce P, 2022). Prospect theory was formulated for finance and investment. This prospect theory "describes how individuals make decisions between alternatives where risk is involved and the probability of different outcomes is unknown". Prospection as an activity in finance and investment assumes that the losses and gains are valued differently to make decisions based on the perceived losses (Chem. J, 2022). Prospection theories support individual decisions under three assumptions, they are

- (1) If there are certain gains then there is no certainty of loss or vice versa.
- (2) Isolation effects occur due to the effect of an individual's focus on differences in phenomenon rather than similarities.
- (3) Where individuals feel losses are greater than their joy of gains, then they try to minimise their losses.

Tversky, A., and Kahneman, D.(1992) experimented with the pattern of risk attitude and confirmed fourfold attitudes, they are-

- Risk aversion for gains
- Risk seeking for Losses of high probability
- Risk seeking for gains
- ➤ Risk aversion for losses of low probability

Prospection theory is a decision-making theory under conditions of risk. We know decisions are always based on the judgement made based on an assessment of the external state of the world (R. R McDermott, 2001).

In the field of marketing, prospecting is used as a background theory, tool, or technique, and as a strategy. Sales prospecting is the act of researching and pursuing potential customers for any business. In marketing, prospecting is considered the first step, which pursues the goal of developing a database of likely customers. After creating a database of customers, prospectors systematically communicate with customers listed in the database with the hope of converting them from potential customers to current customers. In marketing, the prime area is sales where prospecting is a highly useful activity. Sales prospecting is about finding potential buyers or clients for a product and reaching out to the buyers to bring the potential buyers to the sales funnels and converting them finally to ready to buy (Patel. S., 2021).

In business system management, prospect management is about the "formal system of deciding on who can engage a particular prospect, when and for what task?". Prospect management 'encompasses activities of necessary data collection and coding to ensure there is institutional memory for a relationship that is built' by an operator with a prospect (www.apracanada.ca).

In behavioural science, prospecting is contextualised as a personality type which tends to react to their environments rather than try to control them. Prospecting as a personality trait helps a person to make their luck from whatever the world delivers. People with prospecting traits hold their lives as full of possibilities (16Personalities). A person with prospecting traits is flexible enough in the face of challenges, as a consequence, they can seize the unexpected opportunity from the challenge.

(ii) Understanding During Uncertainty: Uncertainty creates a sense of vagueness in humans at the time of actions. Uncertainty also creates confusion about what we can and what should do, do our actions in the situation heighten any insecurity or fear (Mase. C., 2011)? That means uncertainty impedes making quick decisions. In the face of uncertainty hoping for the best and preparing for the worst is the ultimate principle for a rational human being. In the worst-case situation, one must use the inquisitions on the failure that leads to the state of understanding. Understanding gives chances to the human being to deeply explore the situation before taking action but it does not offer any reason to avoid taking action.

Philosophers and theorists interpret uncertainty as the epistemic (i.e. theory of knowledge) situations involving imperfect knowledge and information. Uncertainty is a state of limited knowledge where almost impossible to describe the existing state as well as the future outcome or outcomes (Smithson.M., 1993). If it is not known whether the price or interest rate will increase tomorrow, then we are in a state of uncertainty. If we apply probabilities of possible outcomes using the techniques of interest and money market forecast then we will remain under quantified uncertainty. Say we quantified uncertainty at 90 per cent of possibilities this can be known as objective uncertainty. Objective uncertainty is classified as epistemological and ontological uncertainty. Epistemic uncertainty refers to the uncertainty of models means uncertainty for knowledge due to the limit of data or information (Davis. J, and et.al., 2020). An ontological uncertainty is known as deep uncertainty "when different parties are involved in the same interaction with different conceptualizations about what kind of entities inhibit their world, what kind of interactions these entities have" (Fox. S, 2001).

Another major uncertainty, which can not be quantified through any quantification mechanics or tools is known as subjective uncertainty. There are two types of subjective uncertainty, the are, first one is moral uncertainty and the other one is rule uncertainty. Moral uncertainty is the situation when we need to act under an uncertain but under a given moral theory which is not certain (MacAskill. W., and et.al., 2020). Under subjective uncertainty, another type of uncertainty is rule uncertainty. There is a certain phenomenon where there is no certainty of applicability of a single rule or one single, or single set of rules does apply. One can never make any decision based on a given set of rules, i.e. applicability is uncertain. As an example in management,

It is common sense that management needs to act and react during different kinds of uncertain situations as interpreted above. Management actions or reactions are the results of managers' decisions that emanate from an understanding of the situation in clear as par one's capacity and capability. Understanding the situation promotes an entity to inquire, helps in daring to go ahead leaving the status quo, helps in initiating and actions to adapt to change. Thus, deeper understanding enables organizational resilience. During uncertainty, understanding produces positive results only when the human elements of the organization decide and take action. The theorists on uncertainty construe that decisions are taken according to the type of uncertainty faced by an entity. At the countenance of epistemic uncertainty situations level of knowledge and information guide decisions. On the countenance of ontological uncertainty i.e. deep uncertainty, decisions are to be taken in a quasi-rational way. The interpretation of quasi-rational decision-making is a process which includes "consideration of hunches, intuition, and tacit knowledge often embodied in stories that have meaning to the decision-maker" (Baake. K, 2007). Under ontological uncertainty, management needs to operate with the help of a moral and rule-guided decision system. The face of ontological uncertainty, demands different moral courses, but none is acceptable. In such a situation, management needs to seek ethical solutions where the choice is not clear, out of many moral alternatives. Through the ethical choice of business or company has to choose to do right or wrong (FHSU Digital Press). Rulebased methods are applied by involving the identification of manuals, rules, and procedure that applies to the encountered situation. This process could be done with a high level of conscious effort that prescribes in detail or gives a set of rules. In other words, the rule-based approach dictates human behaviour.

(iii) Reactivity: The etymological origin of the word 'react' is "Re" (again) and "Act" is (doing), meaning hereby tendency to do again. Reactivity is a property of a matter. Reactivity is a common word in chemistry or chemical science. A common interpretation of reactivity is the quality or state of being reactive. In other words, reactivity is the ability of matter to combine chemically with other substances. An example is "iron is highly reactive to oxygen" and after getting mixed iron with oxygen, a new product is produced, called rust. The levels of reactivity are different, some are high level, some are low, and some are very low, which depends on the nature of matters.

In the case of business parlance, reactivity is linked to the crisis or any unplanned events after it takes place (AUTOBCM). The reactivity of a business in a crisis is about the adoption of a response-oriented perspective that relies on past experiences of reacting occurrence of a crisis. Reactivity or reactive ability enables businesses and management to identify the best possible business continuity management at the countenance of a crisis. Reactivity is a short-term behaviour of business, but for continuity management reactivity as a response and as a strategy can not be ignored. Logically, being reactive means responding to an incident through audits and evaluations to discover the cause of the problem (Henderson. C, 2020). Depending upon the level of understanding of the occurrence of any issue or situation, management can promptly address the issue to avoid any repercussions that have the potential to create a threat due to an unaddressed concern. As the situation does allow for planning, therefore the reactionary management often functions in a crisis mode. The wisecrack is "a planned reaction is an outcome of pro-action".

Proactivity and planned reactions are thus connected terms in the context of the complexity and uncertainty of business. The attributes of pro-action enable the application of the arts and science to design the reactions to the situation which is yet to occur. A good reaction is mostly dependent on proactiveness which strategically acts on anticipating problems, complications, and unforeseen circumstances and by nature proactive management seeks to develop a contingency plan assuming all possible scenarios in the future which are yet to come. Wrapping up at a time of uncertainty and complex understanding can create a phenomenon of proactivity which may control the reaction.

(iv) Agile with Ability: VUCA as a phenomenon ends by word ambiguity with its embedded interpretation of the situation which does not have any clear interpretation, or not having clear meaning. Ambiguity is considered one of the most powerful learning environments for human and business enterprises. It allows us to interpret the VUCA mess to find the meaning in the context of social relevance. Agility ensures resilient and adaptable actions by adding just enough ambiguity to the mix (Mase. C, 2011). According to Mase. C, agility dynamic is central to creating a strategy as well as for planning.

We assumed (table-1), the situation of ambiguity connects to the attribute of adaptiveness and agility. The kinds of literature speak about agility and adaptiveness, both are interchangeable terms. But there is a subtle difference in meaning. Adaptability is centred around considering

all possible options, identifying opportunities and devising a plan. In contrast, agility is simply about having the confidence to take swift and decisive action in the face of unexpected change (Harvey. R.). Adaptiveness or adaptability deals with planning for the future, whereas agility deals with the ability to take swift action(s) in response to unforeseen situations. An interesting fact is that the entity with the attribute of adaptiveness can see the opportunities in the world around and they can take action to overcome unforeseen and unexpected obstructions in an agile way. The emerging PURA theory assumes that logically puts up agility and adaptiveness to address ambiguous situations.

V. Delving into the Logical Sequence of the Components of PURA

Whether the arrangement of horizons emerging as PURA theory is logical needs a critical evaluation from the theory-building point of view. As VUCA is considered the challenge common to all in the world, the PURA theory forwarded the horizon for actions to face the challenges in totality. For the logical sequence of arrangement means in PURA, an enquiry was made on Google with four questions. They are –

(1) Does prospection be the first step to facing VUCA situations?

The search results exhibited a total of 100 plus URLs containing the subject matter of sales and marketing management enclosing prospecting as the first step for sales and marketing at the countenance of VUCA situations. The more specific search revealed prospecting is a prime step to face the volatile situation at the URLs connecting to contents of strategic and operational management.

(2) Does understandability be the 2^{nd} step of action for the VUCA situation?

150 URLs in the Google search with this enquiry exhibited understandability as a prime component during uncertain times. Understandably connects uncertainty with a suggestive quote on building flexibility, self-changing, developing worst-case scenarios, risk management, and value-based decision as the cliché. In addition, the interpretation of understandability as the horizon of managerial function at the countenance of uncertain time was found more than a dozen times through URLs.

(3) Does reactivity is a logical answer to the complexity of the VUCA situation?

Interestingly reactivity and proactivity both appeared in almost 200 URLs. The majority were interpreted from the psychobehavioural point of view. A few pieces of literature exhibited in URLs dealing with marketing and organization stated clearly the connection of reactivity at the countenance of complexity. Pieces of literature containing VUCA and reactivity were examined separately and found advocacy of reactivity as a tool for organizational and management strategies.

(4) Does agility connect logically to the situation of ambiguity?

More than 50 numbers of URLs evolved from the Google search and detected the connection between ambiguity and agility. Considering the consequences of the crisis of meaning owing to the VUCA mess agility ensures resilient and adaptable actions. During the last COVID-19 catastrophe, the world realized more where agility meets ambiguity (Burnison. G, 2021). Ambiguity connects agility and adaptability. Global management thinkers, behaviouralists, and psychologists suggest fighting ambiguity through adaptability and agility.

VI. Designing the Skills Matrix from PURA-Theory

To make a blueprint for a skills and actions matrix to apply the PURA in practice, the literature on prospecting, understandability, reactivity, and agility has been synthesized. Initially examined PURA as an action line to countenance the VUCA mess in Table 3.

Table 3: VUCA through PURA

Same and the same	PURA Horizons	Required Actions	
Volatile (V)	Prospect-ing (P)	Accept change as a constant (what change and how long?), Navigate unsettled and unfamiliar situations, and create strong and compelling visions, values, and goals.	
Uncertain (U)	Understand-ability (U)	Build in flexibility, Self-changing, Developing Worst Case Scenario, Risk Management, All questions do not have the answer, Value-based decisions, Resilience	
Complex (C)	Reactivity ®	'Re' (again) 'Act' (a doing), i.e. tendency "to do again" with the connotation of opposite reciprocal force.	
Ambiguous (A)	Agile –Ability (A)	Future planning, Accepting big change, Remaining confident, Planning for a possible alternative, and Making decisions without having all of the facts.	

Source: Compiled by Author

Examining the action lines (in table-3) to execute the PURA approach the lines of the following skill are delineated. They are as follows-

Prospecting

Creating strong visions, values and goals;

Skills for search and exploration during unsettled and unfamiliar situations;

Ability to choose and taking preparation for today to meet tomorrow;

Skills for initiation.

Understand-ability

Inquisitiveness to any type of failure;

The tendency for not to avoid, but to take action;

Ability to make rule-guided or rule-based decisions;

Ability to make a moral-based decision;

Understanding the requirement for self-change;

Ability to develop and guide flexibility;

Ability to take the risk;

Developing and managing resilience.

Reactivity

Knowing the crisis and unplanned events;

Ability to select the best possible action for continuity management;

Response to crises by audit and evaluation to discover the causes of problems;

Promptness in addressing unaddressed issues and concerns;

Planning for proactivity.

Agility

Ability to remain confident during change;

Accepting big change and the learning environment;

Discovering the meaning of ambiguity and finding socially relevant phenomena;

Ability to take prompt and swift action in response to unforeseen situations;

Considering all possible solutions for making a plan for the future;

Looking for opportunities in the world around (him) and overcoming unexpected obstructions in a planned way.

VII.Applicability of PURA-Approach and Conclssion

VUCA is a disarray, that has been occurring at the present juncture of the world. Due to continuous and ongoing geo-political reasons, policy changes, and systemic, technological changes, socio-economic, and business changes VUCA situation creates a continuous mess in the world. Many approaches may be available about VUCA situations that were written down during the last decades. PURA is the approach conceptualized by 2022 through this work of the author, proposing PURA application in multiple areas of social and business situations. The author finds relevance in the PURA approach to responding to the megatrends in shaping the future world. This approach bears its full potential of applicability in marketing and sales, operation management, organization development, managerial and leadership development and human resource training. Considering the potential and future applicability of the approach, the author invites researchers and philosophers to add the required dimensions to make it a mature theory for the perplexed world.

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