
Soft Systems Methodology to Aid Group Interactions in Scenario Writing: The Case of ICICI Prudential Mutual Funds

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Abstract

This paper aims to prove the usefulness of decision scenarios complemented by Soft Systems Methodology with reference to ICICI Prudential for Kashmir, India. The work is based on reflections derived of Literature Review chapter on a PhD Thesis on Scenario Planning for ICICI. Research shows that to reach widely accepted decisions consensus is required of anyone working on scenario decisions. However, although much has been said about scenarios being capable to preparing organizations for several equally plausible futures and of the capability of SSM to help teams reach consensus, few studies attempt to link scenario writing with SSM, and none in banking and consumer investment. Part 1 of the study asserts the validity of scenario planning while Part 2 provides an account of SSM. Subsequently, Part 3 links the two through a real-life group decision scenario exercise merging scenarios with SSM to assert the validity and applicability of this combined technique in strategic management implementation practise.

Keywords: Soft Systems Methodology, Team Building, Strategy, Scenario Planning, Decision Making

JEL Classification: M14, M16, Y20

1. Introduction To Decision Scenarios

Decision scenarios can be regarded as instruments assisting firms notice alternative future conditions in which situations one may take decisions (Schwartz, 1991). The aim of employing scenarios in an organizational setting is to achieve an operative and efficient daily management practice, so that personnel at all areas of a firm might work with longstanding aims in their day after day decision making (Van der Heijden, 2005; Nathania, 2024). Previous projects of scenario planning in the banking business have revealed that the technique proved to be valuable to diverse kinds of monetary institutes, big and tiny, public and private. As an instance, scenario planning projects in big public banks like the Bank of England helped the business to comprehend upcoming scenarios, and allowed it to reach the correct decisions (Bank of England, 2021). Similarly, smaller private banks like the Union Bank and Trust Co. of Nebraska have employed the scenario planning method to anticipate changes (Schwartz, 1991). Even so, in case scenario planning is not executed suitably the method appears to suffer of a number of flaws. To understand

the pros and cons of the scenario planning technique, it is required to briefly review the scenario planning rules and to elucidate in what way the method works in practice.

How Decision Scenarios Work

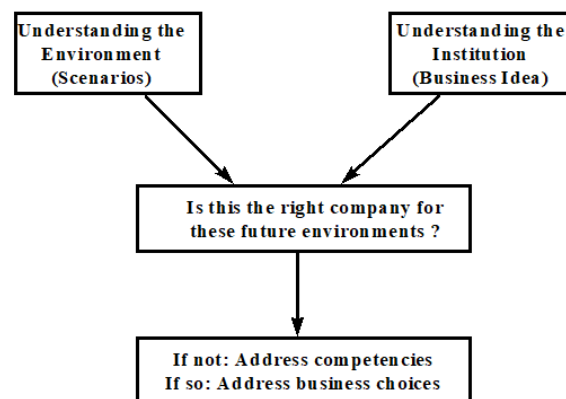
Once predetermined elements are identified (predetermined elements can be any changes which are foreseeable) in the macro environment along with the uncertainties (uncertainties are the macro-environmental changes which could or could not take place), management may be able to recognize a few driving forces which may well be employed to reach equally probable but diverse scenarios vis-à-vis different futures (Moyer, 1996). A 'driving force' is conceived as a foremost drift affecting present changes in the macro environment (Serrat, 2017). Although specialized strategists may possibly craft apt scenarios, scenarios written by teams are, seemingly, better. As Schwartz marks, the real value of the scenarios originates to the collaboration amid the persons taking a decision and the persons that apply this decision (Schwartz, 1991). Perbara and Sunityioso (2023) have proven the applicability of team scenario planning by

studying the Islamic banking industry of Indonesia. Consequently, the current study will argue, by analogy, that considering the views of a broader variety of stakeholders like floor workers, supervisors, customers, suppliers, brokers, government, FIN Techs, shareholders, the public and even competitors in the scenario planning workout for ICICI Prudential Mutual Funds, offers an improved understanding of upcoming choices for the particular company.

Based on these views, a team of diverse participants has then been employed in the scenario planning project for ICICI Prudential and its geographical market of Kashmir in India. Based on the results of the exercise, during which the authors of this work acted as facilitators, the writers intend to demonstrate the decision scenario applicability for the particular geographical territory and the specific business. Nevertheless, as Eden and Ackermann show, one ought also to take into consideration the varying degrees of interest and power that stakeholders in and around the firm may have and might want to exercise in the course of applying any strategic choices resulting of scenario planning (Eden and Ackermann, 1998). This appears to be a thought-provoking argument, which alarmed the authors during the workshops and afterward, that might upturn any strategy reached by the practice of scenario planning in the particular firm, and the writers intend to discuss more this argument below.

Goodwin and Wright (2005) hold that businesses can employ decision scenarios on two instances. Firstly, a company could use scenarios to emphasize the capabilities and confines of the business compared to quite a few but similarly possible futures. Once embracing the diverse scenarios, the scenario writing squad may well map the resulted decision scenarios to the business idea of the organization and to advise of any alterations required (Goodwin and Wright, 2005). Prahalad and Hamel have labelled a 'business idea' as an exemplification of the distinctive (or core) competences which a business longs to gain in order to furnish buyer value (Prahalad and Hamel, 1990). In brief, a 'business idea' is a graphic illustration of in what way a company may create its inimitable assets (core or distinctive competencies) which distinguish it of other firms. Hence, the scholar can then map the resulted decision scenarios to the forces of the rivalry in the market or the markets in which the particular firm functions (Van der Heijden, 2005; Schirmer et al, 2023). Doing this, may in turn assist management to frame its strategic decisions (Van der Heijden, 2005;

Porter, 1979; Borjeson et al, 2006). The above points imply that scenario planning is linked with both the macro or external environment and the task or micro-environment of a business and this is how it is thought of in the present work. Figure 1 shows this situation:



Source: Van der Heijden (2005)

Figure 1: Fit between the scenarios and the business idea

As Figure 1 demonstrates scenario planning is a custom-made activity that is performed for a particular firm or condition. The mistake into which scenario planners fall, is, presumably, omitting to contemplate client requirements. As van der Heijden puts it, the primary rule of scenario-based planning is to recognize your client's need (Van der Heijden, 2005). Consequently, scenario planning appears to be a tailored activity; widespread scenarios have diminutive meaning for business demeanour (Van der Heijden, 2005).

Besides, the major advantage of scenario planning over other strategic planning approaches is that it does not only permit a business to form its business strategies but the firm can employ the resulted scenarios to review lower-level plans or procedures (Goodwin and Wright, 2005). Actually, this comprises decision making at every business level. In master-planning, one will be capable to use the resulted scenarios to construct his or her understanding of the likely hazards existed in framing a master-plan in conditions of diverse but accurately focused scenarios (De Geus, 1988; Chermack, 2004). Those working with projects will also be able to employ the resulted scenarios in project management to evaluate the financial effectiveness of the business compared to several equally feasible futures (Eden, 1987). Eden marks that the understanding of the scenarios in this situation could enable managers to calculate the risk tangled in the several surfaces of a project (Eden, 1987).

Moreover, in budget planning even if the budget development takes place as a part of a yearly sequence, it is important that the strategic implementation process does not start from zero, and that scheduling boils down to refinement of the former year's plans to deal with current changes and statistics, so scenario planning is appropriate too (Van der Heijden, 2005; Sramova et al, 2021). The above argument implies that as scenario planning can be applicable in quite a few cases and has an extensive scope, it seems like to be an appropriate and valid strategic planning technique for the purposes of this study.

Decision Scenarios Pros and Cons

Research shows that decision scenarios are capable of assisting a firm to better decision making in pre-decision-making conditions, in decision-making conditions, and in post-decision-making conditions (Goodwin and Wright, 2005). In addition, scenario planning may possibly assist a business to employ scenarios as stimuli for organizational change (De Geus, 1988). By now the reader is able to perceive that decision scenarios are not merely a tool enabling a business to shape decisions, but they also appear capable of assisting the enterprise to apprehend in what way the future will be moulded by its decisions (Bhat, Agarwal, and Barmpas, 2024). Hence, a business might utilize scenario planning to form its future. In contrast, however, Godet and Roubelat state that there might be a strain in attempting to transmit the comprehensions resulted of scenarios in particular cases throughout a firm (Godet and Roubelat, 1996). Furthermore, Freeman notes that a number of corporations which have not been capable of institutionalizing scenarios, have met a dismay in executing decisions (Freeman, 2004). 'Institutionalizing' denotes making scenario planning habitual with every person in the business and having every person reason strategically in terms of diverse but similarly probable futures in daily circumstances (Phadnis, Sheffi, and Caplice, 2022). As a result, it appears to be uncertain if the paybacks of scenario planning could be appreciated if the resulted scenarios are not broadly recognized in an enterprise, and fusing scenarios with a company-wide applied and agreed problem-solving technique such as Soft Systems Methodology (SSM) could be the reply to this problem (Anderson and Gandolin, 2020; Lindqvist, Piirainen, and Tuominen, 2008). However, no attempt is done to do so in banking and investment situations. The writers will explicate more these points below.

It has been claimed that scenarios are eloquent only if the firm has complete understanding of its capabilities or distinctive competencies (Godet and Roubelat, 1996). Schwartz advocates that for scenarios to be useful, directors should alter their conduct in the right direction once working with diverse but similarly probable futures (Schwartz, 1991). Once more, the application of a problem-solving method, that is capable of supporting employees to alter conduct and reach consensus decisions, like SSM examined in the present work, appears to be helpful. Van der Heijden argues that for scenarios to function they ought to target to the heart of the decision and to be straightforward, passionate, and bold to gash through impediments (Van der Heijden, 2005). This seems to occur for the reason that the real world might not allow even the finest scenario to materialize (Bradfield et al, 2005). To be possible to obtain some profit from scenario planning it is vital to have confidence in all the different futures resulted of scenario writing (Tevis, 2010; Chermack and van der Merwe, 2003). This once more implies the idea presented above, that scenario planning owes to be a tailored exercise allied to the business idea of a particular firm (Mietzner and Reger, 2005). Considering these insights, the current study will tdebate that non-firm-specific scenarios created for countries, markets etc, may not be the correct method to deal with the future of a specific firm.

Similarly, people who compose scenarios need to be broadminded and ready to listen and work to accomplish consensus (Korte, 2008; Fernandes, De Spouza and Revillion, 2022). This understanding once more has moved the writers of the current study to utilize SSM as a means of triggering consensus decisions in the scenario writing application for ICICI Prudential in Kashmir. That which seems to be important in scenario planning is not just the scenario author's thoughts of somewhat but that which is imperative to every one of the stakeholders of a firm taking part in a scenario writing group (Eden and Radford, 1990). Thus, grounded on the results underneath, this study aims to uphold that the insights gotten of the ICICI Prudential Mutual Funds scenario writing project, ought to be reached over consensus. Else, the lessons someone expects to learn of practising with scenarios will not be comprehended correspondingly by ICICI Prudential and its several stakeholders. Accordingly, the researchers here embrace the opinion that for scenarios to be appropriately applied, they need to spring of a constant strategic conversation involving all the scenario

planning contributors, and SSM, as explicated and used underneath, appears to support this argument.

An additional complication in executing strategic options resulting of scenarios is conflict of interest (see: Gervais and Cossette, 2007; Luehrman, 1998; Von der Gracht and Stillings, 2013). Different executives might gaze inversely to diverse futures. Several business managers might not want to see themselves in the organization any longer if particular changes happen in the future. Such employees would frequently attempt to impose their thoughts and preconceptions regarding the future to the remaining agents of the scenario planning crew (Gervais and Cossette, 2007; Ralston and Wilson, 2006). Involving these people in a scenario planning exercise enriched by SSM to reach consensus, may be the solution in the particular case. For scenario planning to be efficient, one needs to consider organizational growth over individual growth (Ramírez *et al.*, 2017), and consensus decisions through SSM as shown below seem to support this idea. As previous studies illustrate, in businesses in which employees have targeted own rewards, scenario planning was not being wholly executed and, in several instances, collapsed (Van der Heijden, 2005; Rodriguez-Villalobos and Garcia Martinez, 2018; Teece, Pisano and Shuen, 1997). This realization appears to appoint the practice of SSM in decision scenario teams as a likely way out of the above complications.

2. Soft Systems Methodology (SSM) and Decision Scenarios

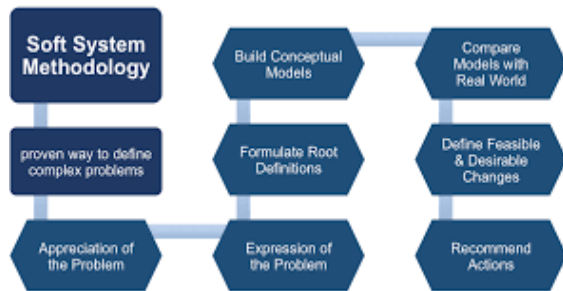
Soft Systems Methodology (SSM) is an action-oriented technique that apparently supports businesses to enhance strategic thinking. In SSM the participants build models assuming that those models can be pertinent to the actual difficulties of executing strategy. When this is done the creators use those models to map them against views of the factual world in a course of assessment (Checkland and Scholes, 1990). In fact, SSM originates of the concept of “systems thinking” (Checkland, 1981). “Systems thinking” infuses a focused practice of the concept of ‘holism’ or ‘holon’ (wholeness or whole) caught in the term “system”, to systematize one’s insights (Checkland and Scholes, 1990). ‘Holism’ or ‘holon’ is the awareness that every part of a system, whether physical, biological, social, or political, is interconnected and for this purpose the different parts have to be deemed as a whole (Ralston, 2011). This view of ‘holism’ or ‘holon’ inaugurates to the classic Greek thinker and scientist Aristotle in his *Metaphysics*. Aristotle catches the idea of ‘holon’ in

the expression ‘the whole is more than the sum of its parts’ (Zahle, 2003). The idea is recurrent in Aristotle’s *Politics* 1: τὸ γὰρ ὅλον πρότερον ἀναγκαῖον εἶναι τοῦ μέρους (the whole is more than the sum of its parts) (Aristotle, *Politics* 1, 1252b27-1253a39). This notion upholds that the parts of a whole (as an instance, the parts of the human body) are in ultimate interconnectedness, so that it is not possible for them to exist separately of the whole (in this instance, the human body), or cannot be perceived without linking them to the whole (Otto and Bubandt, 2010). Linguistically, the terms ‘holism’ and ‘holon’ originate of Greek, meaning ‘wholeness’ and ‘whole’ (Collins COBUILD English Dictionary 2024). Additionally, “systems practice” implies utilizing systems thinking to introduce decisions one forms in the actual world (Checkland, 1981).

Peter Checkland founded SSM in the late 90’s at the Department of Operations Research in Lancaster University, UK. Originally it was perceived as a modeling technique, but later on it has been realized as a coaching and perception enhancement mechanism (Strielkowski *et al.*, 2024). Whereas SSM creates models, the models are not intended to represent the “actual world”, but by employing systems values like Aristotle’s ‘the whole is more than the sum of its parts’, permit a scholar to form one’s reasoning in an all-inclusive way (getting together all the constituents which instigate a problem in a consensus illustration) actually mirroring the real world (Checkland, 1981). Also, the models are neither imaginative nor normative, even if they may carry characteristics of both (Checkland, 1981). What catches the eye as regards to SSM is that it conjoins one’s reasoning so that one can escalate his or her reckoning constantly contemplating the concept of ‘holism’. It is to be claimed here that this concept appears to be at the heart of the current study as the writers aim to shape communal decision scenarios by getting together diverse individuals (the parts of the whole) with varied experiences who will nevertheless have to work together as a squad (the whole or holon). Consequently, the existing study deems that the team is the specific scenario writing experience is the ‘holon’ (the system), and the people working on it or are depending of it, are the parts of the ‘holon’.

Furthermore, the substance of SSM is an appraisal amid the world as it is, and models of the world as it could be (Checkland and Winter, 2006). Out of this judgement sprouts an all-encompassing perception of the world, and different ideas for perfecting the world

(Checkland and Winter, 2006; Otto and Bubandt, 2010). Thus, consensus and novelty might result by



Source: Checkland, & Poulter, (2006). P. 21

Figure 2: The Steps of SSM

reviewing the mental models of the decision-making members in a team environment (Lindqvist, 2009). Figure 2 shows the stages of SSM. The stages are straightforward. To begin with, the team members state the problem situation in a sentence which all the participants approve. To continue with, the group drafts rich pictures – drawings permitting the team members to describe their opinions pictorially – in a brainstorming meeting. (A rich picture for producing ideas to assist scenario writing in ICICI Prudential in this study is presented below in Figure 3). Hence, rich pictures (or condition synopses) are employed to depict intricate situations (Checkland and Winter, 2006). They are an effort to grasp the existent circumstances on an unrestricted, sketch of every idea conveyed by the agents of an SSM application, planning, setups, relationships, effects, cause-and-effect, and so on (Checkland and Winter, 2006). These pictographic diagrams - the rich pictures -, exemplify idiosyncratic matters such as the dispositions of the diverse accomplices in a problem-solving situation and their physiognomies, their opinions and presumptions, their inward self and their human nature (Zahle, 2003). For instance, if somebody is engaged with a client, he or she should endeavour to portray those rich pictures, at least in the beginning, from the perception of that client instead of focusing on his or her own perception of the situation (Checkland and Winter, 2006). The same appears to occur in a team environment in which every one of the partakers has not the same beliefs and views of a problem situation.

Once the team agrees on the final rich picture, the next step is to prepare a CATWOE worksheet (C for Customers, A for Actors, T for Transformation Process, W for Worldview or Weltanschauung, O for Owners, and E for Environment). The CATWOE

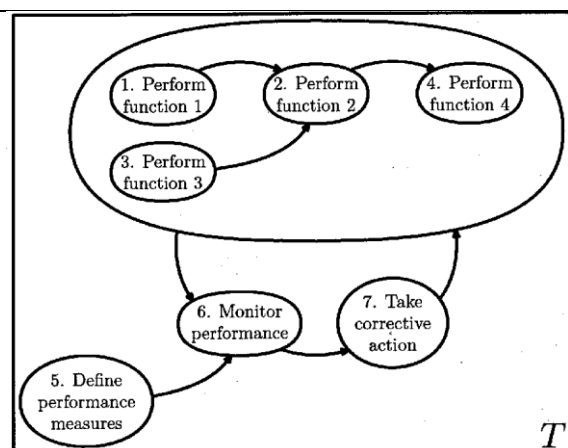
worksheet assists to label the shared visions of anybody (the ‘holon’) impacting on the problem situation (Sgourou et al, 2012). An account of every single one of the constituents of the CATWOE list is provided in Table 1 below:

Table 1: CATWOE Analysis explained

Customers	those who are on the getting side of whatever it is that the problem solvers attempt to solve.
Actors	those who participate in the problem-solving exercise, habitually planners or problem-solving teams.
Transformation Process	that which the system does to its inputs to transform them to outputs.
Worldview or Weltanschauung	a narrative of why it is worthy to solve a certain problem.
Owners	entities round the business that have power over the state of affairs to affect it supportively or discouragingly
Environment	the macro-environmental restrictions that the Actors have to consider the minute they work for a way out of a problem

(Source: Sgourou et al, 2012, p.192)

The next step in SSM is to sketch a conceptual model showing the consensus actions (the actions approved by all team members) which are expected to solve a certain problem in a rational order and where real-life activities are suggested in a consensus environment too. The way a conceptual model functions, is presented below in Figure 3. Actions numbered 1 to 4 in the upper part of the diagram represent the order of the execution of a group of actions (1 to 4)



Source: Checkland and Poulter, (2006). p. 24

Figure 3: A Conceptual Model in SSM

decided in consensus by the contributors of the problem-solving squad in an SSM workout. Conversely, actions 5, 6, and 7, that are illustrated in the lower part of the drawing, outside the circle on the upper part, is that which is anticipated to occur in the actual world beyond the problem-solving team once the squad will submit their proposed resolutions (actions 1 to 4) to management. In other words, actions 1 to 4 in the diagram are the activities adopted in the SSM exercise by the team whereas actions 5 to 7 signify in what way the management would respond to actions 1 to 4. In this sense, Action 5 (Define performance measures) in Figure 3 sets the guidelines set up by management in the real world and delineates the limits of anticipated performance. Subsequently, Action 6 (monitor performance) seeks out to monitor that instigating the actions 1 to 4 suggested by the team in the top is what is thought to happen in the actual world by management. Lastly, Action 7 (Take corrective action) stirs up for amendments if any adjustments are wanted. To sum up, these actions in the model which are located inside the big circle are the actions determined by the planning crew during a workshop in a series from 1 to 4 in the figure 3 above. Whatever is beside the circle is representing the real life of the business outside the planning team (typically management) which puts the rules, monitors, and if required, alters any actions that require to be attuned.

The last phase of SSM encompasses an assessment of the conceptual model with the rich picture drafted in consensus at the earlier phases and the suggested alterations to the judgements decided by the architects of an SSM workshop, succeeded by a suggested action (Checkland, & Poulter, 2006). Jackson marks that SSM may be employed in scenario writing grounded

on theoretically operating the activities of the team members, mentally or on a paper, to comprehend the way scenarios could function in the future (Jackson, 2000). Also, captivatingly, Checkland and Holwell show that SSM is valid in strategy and could be employed to support the process of scenario writing (Checkland and Holwell, 1998). Rose (1997) has excitingly used SSM in combination with scenario planning to work out the future of the National Health System (NHS) in the UK (Rose, 1997). However, no other studies attempt to connect scenario writing to SSM and there is also a seeming absence of such research in the banking and consumer investment sectors (Prasanna, 2020). Therefore, the authors of the current paper have employed SSM in Action to test whether the method can empower scenario writing in a group setting for the particular firm and whether the insights of this process may be applied, correspondingly, to other banking and insurance corporations.

SSM Complementing Scenario Planning in ICICI Prudential

In the current work the team members have sketched rich pictures on the wall separately in a practicum sitting. Next, the participants fetched these rich pictures in the centre of the room and mingled the concepts previously put in the sketches as illustrations into a generally approved rich picture for the whole team. The commonly approved rich picture by the members of the planning group resembled the drawing below in Figure 4. This Rich Picture is inspired by work that Professor M.C. Jackson (2003) did on Systems Thinking and Creative Holism for managers in the University of Hull in the UK and the method is widely accepted for identifying problem situations in academia and universities. The Rich Picture in Figure 4 is meant to portray in a basic cartoon-like sketch the problem situation in ICICI Prudential. The Table below the Rich Picture with letters going from A to H will help the reader to follow the steps of the improvements in ICICI Prudential policies. ICICI is shown in the form of a house in the lowest left part of the rich picture (see: letter A). The company seems to have several questions about its future in the Kashmir market. On the centre of the rich picture the team members (see letter B) intervene as advisors working in a group setting to assist the firm endure any obstacles with the mutual funds industry in Kashmir. An arrow was drawn leading to market research to identify opportunities in the region (see: letter C). Next, one more arrow was pulled heading to novel and

improved financial products and solutions in the upper left part of the illustration (see: letter **D**), that in turn the business sells to happy households (see: letter **G**). Another arrow on top right shows how younger generations consumers, that are particularly fond of online solutions, are happy with ICICI Prudential's improved services (see: letter **F**). Lastly, the team members have drawn an arrow taking someone back to the lowest left part of the rich picture where at this time ICICI Prudential is taking pleasure in the paybacks of its novel and superior product policy by collaborating with strategic IT and FinTech firms to improve operations (see: letter **H**). If one observes deeper at the drawing, he or she might notice an amused situation and happy households looking to a prolific future both for themselves and ICICI Prudential.



KEY	SITUATION	RESULT
A	ICICI Prudential at present	Static + Market pressures
B	The SSM Team formed	New Ideas for improvement
C	Doing Market Research	Coming up with suggestions
D	New products high in demand	New Product offerings
E	Opening more Branches	Increase in market share
F	Attracting Mobile customers	Increase in market share
G	Attracting traditional customers	Stabilize market share
H	ICICI Prudential + FinTechs	ICICI Prudential as innovative

Figure 4: The situation improved in ICICI Prudential

When the rich picture was ready, the team members got together again and drafted a CATWOE checklist as illustrated in Table 2. Here one may observe how the practice of SSM assisted the planning squad to arrive in consensus regarding the micro and macro environmental developments which would help them to apply the strategies derived of scenarios or else halt

them. Likewise, this explicit CATWOE checklist drew the Customers (recipients) of executing the activities, that in this example were the business and its clients that are working to make it

Table 2: CATWOE Analysis for ICICI Prudential in the Kashmir market

Customers	ICICI Prudential, clients, scenario planning group, the community
Actors	ICICI Prudential, scenario planning group, the community
Transformation Process	need to stay alive in Kashmiri market ----- need encountered through improved services
Worldview (Weltanschauung)	Novel and better-quality services will assist us expand our market share in Kashmir
Owners	ICICI Prudential, the State, RBI, Mumbai stock exchange, clients, Fin Techs, Brokers
Environment	Environmental kerbs make us re-design our business processes offering 24/7 client support; ICICI Prudential MF culture upgraded

happen, such as ICICI Prudential administration and workers, the scenario planning team members, the community, the likely result, and for what reason it is virtuous for the firm in undertaking this project (the Worldview or Weltanschauung).

Once evaluating the results of the CATWOE and composing a rough root definition in which the central aim of the SSM workshop was defined, - that was, ‘working to develop a system that finds and evaluates changes in the environment which will affect ICICI Prudential business operations’, a rough SSM model was shaped in the team and the sequence of the actions were outlined, drafted, and arranged from top to bottom in the model. Essentially, the rough root definition articulated a transformation process with an input, expressed in the term ‘develop a system’, a transformation, stated by the sentence ‘that finds and evaluates changes in the environment’ and the output, conversed by the sentence ‘which will affect positively ICICI Prudential business operations. The conceptual model is presented in Figure 5. The model was constructed by considering environmental changes and the uncertainty of the future and meant to guide ICICI Prudential to adopt a system to handle change and then

to employ this system for decision making under all likely scenarios. Consequently, the SSM model in Figure 5 was turned into the basis of Table 3 below

citing the actions of the model in an everyday portfolio strategies order.

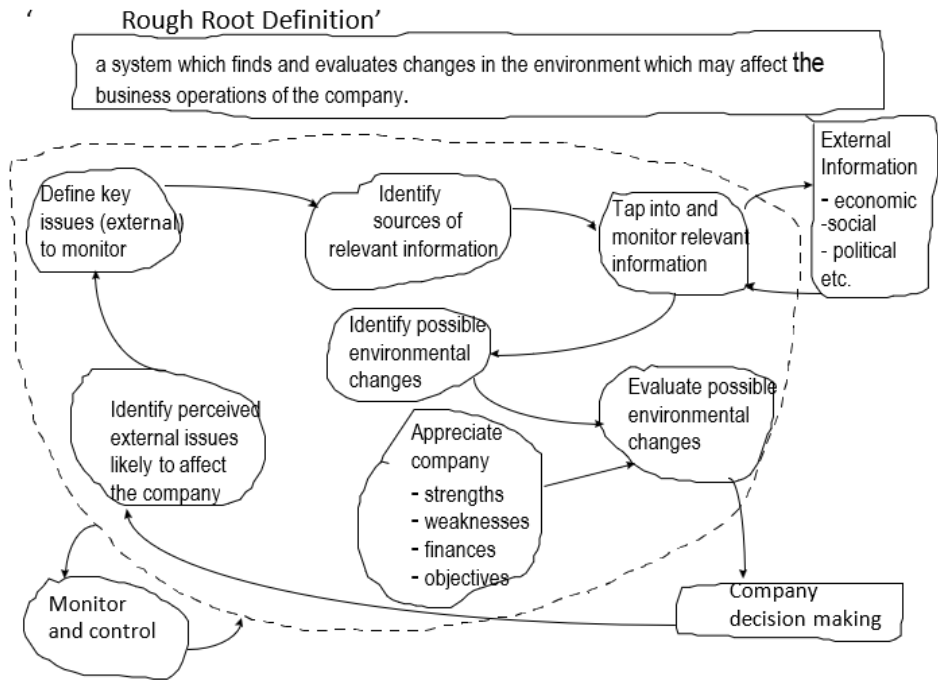


Figure 5: A model used in the ICICI Prudential MF, externally oriented

Table 2 demonstrates what it was probably expected to occur in the actual world with reference to the sequence of actions acknowledged in the conceptual model. The lessons from the SSM exercise are demonstrated in Table 2 (resulting of the model in Figure 5). The decision scenario team that undertook

to draft the model in the present work was finally capable of comparing the actions recommended by the model to what might come out to be in the actual world and to consent on the strategies resulting of scenarios as articulated in the actual world.

Table 3: Comparison between model and real world based on model in Figure 5

ACTIVITIES IN MODEL	REAL WORLD
Identify external issues likely to affect the company	Decision makers do base on knowledge of procedures. Instinctive. Evaluation with others' limitations. Significantly depend on familiarity with individuals/teams. Not official. Previous knowledge might not be acceptable.
Define key issues (external) to be monitored	Restricted by feasibility of what may be achieved. Does not distinguish among important and contingent issues
Identify source of relevant information	Research, interviews, library, databases, suppliers, advertisements, the media, previous records, etc. Knowledge, advisers. Unions, corporate figures, administration, etc.
Tap into and monitor relevant information	Pay for/conduct research. Study volumes of data. Establish subscriptions. Start tutoring/training workshops. Hire employees/management to perform.
Identify possible environmental changes	Set up interviews with employees. Take advise from experts. Draft a SWOT to identify prospects and risks. Search for drifts
Evaluate possible environmental changes	Scenarios as a tool for testing the Business Idea. Creation of strategies, Owners with diverse grades of power and interest. Different aims might not be clear-cut.

3. Conclusion

As Burge (2015) marks, root definitions, rich pictures, CATWOE studies, and Conceptual Models in SSM depend upon the practice of defensible logic (Burge 2015). The point which the writers of the present study want to emphasize is that the rich pictures, CATWOE, conceptual models, and the other SSM instruments used in the work are not models of the actual world that one perceives and senses, but rational models of that which might probably be. This being said, they look similar to decision scenarios. As Checkland and Winter write, SSM is not in reality problem solving in the sense of considering the actual world to discern the root causes of complications (Checkland and Winter, 2006). Central, though, to the building of the models is the practice of defensible logic which is assumed of an assertion of the objective captured in a Root Definition of a relevant system (Burge 2015). The authors here will argue that this notion of defensible logic seems to be at the heart of the specific scenario writing project. It is imperative to emphasize at this point that the conceptual models and the other SSM tools employed in this study are models of that which realistically has to be accomplished in order to achieve the objective identified in the root definition and purpose to illustrate that defensible logic is pertinent in the particular cases applied. Conceptual models are an archetypal of whatever “virtuous” appears to be that is possible to be linked to real life in order to find out where change can be grasped (Checkland and Scholes, 1990). In the present paper this concept appears to tie ideally with scenario writing as decision scenarios are likewise models of the “virtuous” that which is about to come – what is probable to happen - as in the situation in ICICI Prudential. Four such scenarios were built by the team for ICICI Prudential focusing to the future or possible futures of the firm in the geographical area of Kashmir in India. Named as ‘Abundance’, ‘Sagacity’, ‘Slump’, and ‘Intelligence’, all four scenarios claimed to be plausible and as such they have been institutionalized in the firm. This study shows that the use of SSM in Action by the scenario writing team in this specific case has empowered the process, systematized the scenario writing team’s priorities, and enabled reaching consensus. Subsequent research shows that the above-mentioned points are at the heart of scenario planning (see: Bhat, 2024). To return to SSM, disagreeably, for Burge, the language of SSM is not one of regular routine and it is to employed less in strategic management (Burge 2015). However, also grounded on the outcomes of the Bhat (2024) study and previous studies (see: Barbas,

2014), the present work shows that the language of SSM is at the center of strategic scenario writing in a collective environment with reference to the application done for ICICI Prudential and has decidedly assisted the firm to form strategic options. Therefore, the authors here will consider that conceptual models in the sense of SSM linked to the actual world are useful strategy implementation instruments. SSM in the current study has allowed the ICICI Prudential scenario writing squad to cultivate consensus associated to the implementation of the decision scenarios built for the business. Moreover, the scenario writing team in this exercise has witnessed that the language of SSM is not dissimilar to the language of scenario planning as together they endeavor to illustrate that which would be and how to get ready for diverse futures (‘occasions’ in SSM). Besides, scenarios at this point could also be perceived as depictions of the “virtuous” that is around to occur, similarly to SSM models. That which is also noteworthy here is that as the SSM model created for ICICI Prudential appears to be likely to muddle through with any of the ICICI scenarios, SSM may then, evidently, be employed jointly with scenario planning in new situations, and in future research to help grow consensus thinking in a decision scenario writing group.

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References

- [1] Anderson, T, and Gandolin C., (2020) “Understanding institutional work through social interaction in highly institutionalized settings: Lessons from public healthcare organizations”, in *Scandinavian Journal of Management*, Vol.36, pp.1-10. DOI: <https://doi.org/10.1016/j.scaman.2020.101107>.
- [2] Aristotle, Politics 1, 1252b27-1253a39. In Book: *Ανθολογία Αρχαίας Ελληνικής Γραμματείας* by Κ. Στεφανόπουλου, Στ. Τσιτσιρίδη, Λ. Αντζουλή, Γ. Κριτσέλη. Available at: https://www.greek-language.gr/digitalResources/ancient_greek/an

- thology/literature/browse.html?text_id=324. Assessed: 21 June 2024.
- [3] Bank of England, Guidance for participants of the 2021 Biennial Exploratory Scenario: Financial risks from climate change, June 2021. [Online]. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/stress-testing/2021/the-2021-biennial-exploratory-scenario-on-the-financial-risks-from-climate-change.pdf>. Assessed: 24 April 2023.
- [4] Barbas M., (2014) "Reconsidering impacts of technology to work design: an integrationist Perspective", *International Journal of Mangement Issues and Research*, Volume 3, Issue 1, June 2014, pp.41-18. Available at: https://www.academia.edu/97892391/Reconsidering_Impacts_of_Technology_to_Work_Design_An_Integrationist_Perspective. Assessed: 02 August 2024.
- [5] Bhat, M, Agrawal A, and Barmpas M., (2024) "Differentiation, Cost Leadership, or Ending Up in the Middle? A Reflection on the Viability of Porter's Generic Strategies through a Case Study Comparison of McDonalds and Starbucks", *Athens Journal of Business & Economics*, Volume 10, Issue 3, July 2024, pp. 217-238. DOI: <https://doi.org/10.30958/ajbe.10-3-3>.
- [6] Bhat, M., Scenario Planning to determine the viability of mutual funds in the Kashmir region: the case of ICICI Prudential Mutual Funds, Unpublished PhD Thesis, Sharda University, Delhi NCR, India.
- [7] Borjeson, L., Hojer, M., Dreborg, K.-H., Ekvall, T. and Finnveden, G. (2006), "Scenario types and techniques: towards a user's guide", *Futures*, Vol. 38, pp. 723-39. DOI: <https://doi.org/10.1016/j.futures.2005.12.002>.
- [8] Bradfield, R., Wright, G., Burt, G., Cairns, G., and Van Der Heijden, K. (2005) "The origins and evolution of scenario techniques in long range business planning", *Futures*, 37(8), pp. 795–812. DOI: <https://doi.org/10.1016/j.futures.2005.01.003>.
- [9] Burge, S., (2015) "An Overview of the Soft Systems Methodology", in © Burge Hughes Walsh 2015. [Online]. Available at: <https://www.burgehugheswalsh.co.uk/Uploads/1/Documents/Soft-Systems-Methodology.pdf>. Assessed: 03 September 2023.
- [10] Checkland, P. (1981). *Systems Thinking, Systems Practice*. Chichester: John Wiley & Sons. DOI: [https://doi.org/10.1002/1099-1743\(200011\)17:1+<::AID-SRES383>3.0.CO;2-Q](https://doi.org/10.1002/1099-1743(200011)17:1+<::AID-SRES383>3.0.CO;2-Q).
- [11] Checkland, P., and Scholes, J. (1990) *Soft Systems Methodology in Action*, Chichester: John Wiley & Sons. DOI: <https://doi.org/10.1177/13505076920230012>.
- [12] Checkland, P., and Holwell, S. (1998). "Action research: Its nature and validity". *Systemic Practice and Action Research*, Vol.11 (Issue 1), pp. 9–21. DOI: <https://doi.org/10.1023/A:1022908820784>.
- [13] Checkland, P., and Poulter, J. (2006). *Learning for action: a short definitive account of soft systems methodology and its use, for practitioners, teachers and students*. London: John Wiley and Sons Ltd. ISBN: 9781118393017.
- [14] Checkland, P., and Winter, M. (2006). "Process and content: Two ways of using SSM". *Journal of the Operational Research Society*, Vol.57, pp.1435–1441. DOI: <https://doi.org/10.1057/palgrave.jors.2602118>.
- [15] Chermack, T.J.L. and van der Merwe, L. (2003), "The role of constructivist learning in scenario planning", *Futures*, Vol. 35, pp. 445-60. DOI: [https://doi.org/10.1016/S0016-3287\(02\)00091-5](https://doi.org/10.1016/S0016-3287(02)00091-5).
- [16] Chermack, T.J. (2004), "Improving decision-making with scenario planning", *Futures*, Vol. 36, pp. 295-309. DOI: [https://doi.org/10.1016/S0016-3287\(03\)00156-3](https://doi.org/10.1016/S0016-3287(03)00156-3).
- [17] Collins COBUILD English Advanced Learner's Dictionary, Birmingham: HarperCollins Publishers. [Online]. Available at: www.collinsdictionary.com. Assessed: 12 July 2024.
- [18] De Geus, A.P. (1988), "Planning as learning", *Harvard Business Review*, Vol.66, No 2, pp.70–74. Available at: <https://hbr.org/1988/03/planning-as-learning>. Assessed: 14 June 2024.
- [19] Eden, C. (1987) "Problem solving or problem finishing?", in Jackson, M. and Keys, P. (eds), *New Direction in Management Sciences*, Gower, Aldershot. Available at: https://www.researchgate.net/publication/330798366_New_Directions_in_Management_Science. Assessed: 02 August 2024.

- [20] Eden C., and Radford, K.J., (1990) *Tackling Strategic Problems*, London: Sage Publications. DOI:10.1057/JORS.1991.104.
- [21] Eden, C., and Ackermann, F., (1998) *Making Strategy: the journey of strategic management*. London: Sage Publications Ltd. DOI: <https://doi.org/10.4135/9781446217153>.
- [22] Fernandes A.M., De Spouza A.R.L, and Revillion J.P.P, (2022) “Contributions to scenario methodology from approach to sociotechnical transitions: a theoretical-methodological essay”, in *Technology Analysis and Strategic Management*, Vol.10: pp. 130-143. DOI: 10.1080/09537325.2022.2069004.
- [23] Freeman, S. (2004) “The Stakeholder Approach Revisited”, in *Zeitschrift für Wirtschafts- und Unternehmensethik (ZFWU)*, Vol. 5 (Issue 3): pp.228-241. DOI: 10.5771/1439-880X-2004-3-228.
- [24] Gervais, J., and Cossette P., (2007) “Knowledge management and cognitive maps: A study about interorganizational collaboration”, in *Annals of Telecommunications*, Vol.62 (Issue 7), pp.786-807. Available at: https://www.researchgate.net/publication/289720777_Knowledge_management_and_cognitive_maps_A_study_about_interorganizational_collaboration. Assessed: 11 July 2024.
- [25] Godet, M., and Roubelat, F., (1996), "Creating the future: The use and misuse of scenarios", *Long Range Planning*, Vol.29, No. 2, pp.164-171. Available at: <https://www.semanticscholar.org/paper/Creating-the-future%3A-The-use-and-misuse-of-Godet-Roubelat/358fb23401593d87863ce1fff5f96dde880cf89c>. Assessed: 11 June 2024.
- [26] Goodwin, P., and Wright, G. (2005) *Decision Analysis for Management Judgement*, 2nd ed., Chichester: John Wiley & Sons. DOI: 10.2307/2584371.
- [27] Jackson, M.C., (2000). *Systems Approaches to Management*. New York: Kluwer/Plenum. Available at: https://www.researchgate.net/publication/200026618_Systems_Approaches_to_Management. Assessed: 12 July 2024.
- [28] Jackson, M.C., (2003) *Systems Thinking: Creative Holism for Managers*, Chichester: John Wiley & Sons, Ltd.
- [29] Korte, R.F., (2008) “Applying Scenario Planning Across Multiple Levels of Analysis”, in *Advances in Developing Human Resources*, Vol.10 (No.2): pp.179-197. DOI: 10.1177/1523422307313319.
- [30] Lindqvist, A., Piirainen, K. and Tuominen, M. (2008), “Utilising group innovation to enhance business foresight for capital-intensive manufacturing industries”, Proceedings of the 1st ISPIIM Innovation Symposium, Singapore. Available at: https://www.researchgate.net/publication/262198583_Utilising_group_innovation_to_enhance_business foresight_for_capital-intensive_manufacturing_industries. Assessed: 02 September 2023.
- [31] Lindqvist, A. (2009), “Engendering group support-based foresight for capital intensive manufacturing industries – case paper and steel industry scenarios by 2018”, *Acta Universitatis Lappeenrantaensis*, 364, Lappeenranta University of Technology, Lappeenranta. Available at: <https://www.semanticscholar.org/paper/Engendering-Group-Support-Based-Foresight-for-Case-Lindqvist/70e819ce4a4ea632bc1464ca1e522e905d846d1f>. Assessed: 01 September 2023,
- [32] Luehrman, T.A., “Strategy as a Portfolio of Real Options”, in *Harvard Business Review*, September-October 1998. Available at: <https://hbr.org/1998/09/strategy-as-a-portfolio-of-real-options>. Assessed: 12 July 2023.
- [33] Mietzner, D. and Reger, G. (2005) “Advantages and disadvantages of scenario approaches for strategic foresight”, *International Journal of Technology, Intelligence and Planning*, 1(2), pp. 220–239. DOI: <https://doi.org/10.1504/ijtip.2005.006516>.
- [34] Moyer, K. (1996) "Scenario Planning at British Airways - A Case Study", *Long Range Planning*, Vol. 29, No. 2, pp.172-181. Available at: <https://www.bl.uk/britishlibrary/~media/bl/global/business-and-management/pdfs/non-secure/t/o/w/towards-a-processualrelational-approach-to-scenario-planning.pdf>. Assessed: 10 July 2024.
- [35] Nathania, M., (2024) “Scenario Planning for Employee Engagement Development”, *International Journal of Innovative Science and Research Technology*, Volume 9, Issue 4,

-
- pp.1367=1369.
DOI:10.38124/ijisrt/IJISRT24APR1655.
- [36] Otto, T., and Bubandt, N., (2010) *Experiments in Holism: Theory and Practice in Contemporary Anthropology*, London: John Wiley & Sons Ltd. ISBN 978-1-4443-3323-7.
- [37] Perbara G.A., and Sunitiyoso Y., (2023) "Scenario Planning of Islamic Banking Industry Development in Indonesia", *European Journal of Business and Management Research*, Vol 8, Issue 4, pp.187 – 190. DOI: 10.24018/ejbmr.2023.8.4.2008.
- [38] Phadnis S., Sheffi Y., and Caplice, C., (2022) "Scenario Planning: A Tool for Organizational Learning and Foresight". In book: *Strategic Planning for Dynamic Supply Chains*. Palgrave Executive Essentials. Palgrave Macmillan, Cham. DOI: https://doi.org/10.1007/978-3-030-91810-1_3.
- [39] Porter, M. E. (1979) "How Competitive Forces Shape Strategy", *Harvard Business Review*, March/April 1979. Available at: <https://hbr.org/1979/03/how-competitive-forces-shape-strategy>. Assessed: 10 July 2024.
- [40] Prahalad, C. K., and Hamel, G. (1990) "The Core Competence of the Corporation", *Harvard Business Review*, May/June, pp.79-91. Available at: <https://hbr.org/1990/05/the-core-competence-of-the-corporation>. Assessed: 10 July 2024.
- [41] Prasanna, S.S.M., (2020) "A study on personalized banking services – A step towards rural development", in *Global Journal for Research Analysis*, Vol.1(Issue 3): pp.156-165. DOI: 10.36106/gjra/1308069. Assessed: 12 November 2023.
- [42] Ralston, B. and Wilson, I. (2006), *The Scenario-Planning Handbook: A Practitioner's Guide to Developing and Using Scenarios to Direct Strategy in Today's Uncertain Times*, Thomson/South-Western, Crawfordsville, IN. Available at: <https://archive.org/details/scenarioplanning000Orals>. Assessed: 14 July 2024.
- [43] Ralston, S., "Holism", in *SSRN Electronic Journal*, August 2011, pp.1-6. Available at: <https://www.ssrn.com/index.cfm/en/>. Assessed: 10 July 2024.
- [44] Ramírez, R., Churchhouse, S., Palermo, A., and Hoffmann, J. (2017) 'Using scenario planning to reshape strategy', *MIT Sloan Management Review*, 58(4), pp.31-37 Available at: <https://sloanreview.mit.edu/article/using-scenario-planning-to-reshape-strategy/>. Accessed: 10 July 2024.
- [45] Rodriguez-Villalobos, M., and Garcia-Martinez, J., (2018) "Economies of Scale and Minimization of the Cost: Evidence from a Manufacturing Company", *Journal of Eastern Europe Research in Business and Economics*, Vol. 2018, pp.1-16. Available at: https://www.researchgate.net/publication/330767458_Economies_of_Scale_and_Minimization_of_the_Cost_Evidence_from_a_Manufacturing_Company. Assessed: 10 July 2023.
- [46] Rose J., (1997) "Soft Systems Methodology as a Social Science Research Tool", in *Systems Research and Behavioral Science*, Vol.14 (Issue 4): pp.249-258. DOI: 10.1002/(SICI)1099-1743(199707/08)14:43.0.CO;2-S.
- [47] Schirmer M., Burgert F, Mayer C, and Mütze-Niewöhner S., "Developing Intelligent Technologies to Support Employees in Manufacturing Planning: Applying a Scenario Planning Method to Consider Future of Work", Conference Paper, Human Aspects of Advanced Manufacturing, Vol. 80, pp.126–137. DOI: 10.54941/ahfe1003515.
- [48] Schwartz, P. (1991) *The Art of the Long View*, New York: Doubleday Currency. Available at: <https://lifeandleadership.com/book-summaries/schwartz-the-art-of-the-long-view/>. Assessed: 10 July 2024.
- [49] Serrat, O., (2017) *Knowledge Solutions: Tools, Methods, and Approaches to Drive Organizational Performance*, NY: Springer Open. Available at: https://www.academia.edu/41267193/Knowledge_Solutions_Tools_Methods_and_Approaches_to_Drive_Organizational_Performance. Assessed: 10 June 2024.
- [50] Sgourou E., Katsakiori P, Papaioannou I, Goutsos S, and Adamides E., (2012) "Soft Systems Methodology as a systemic approach to safety performance evaluation", in *Procedia Engineering*, Vol.45, pp.185-193. DOI: 10.1016/j.proeng.2012.08.141.
- [51] Sramova V., Corejova T., Andrea C., and Jaros J., (2021) "The Use of Scenarios in Company's Planning", Knowledge Management in Organizations, 15th International Conference, KMO 2021, Kaohsiung, Taiwan, July 20-22,

-
- 2021, Proceedings (pp.252-263). DOI:10.1007/978-3-030-81635-3_21.
- [52] Strielkowski, W., Cuzmin E., Suvorova SA., and Gorlova O. (2024) “Sustainable organizational development and human capital in the context of soft systems methodology”, *Terra Economicus*, Vol.22(Issue 1): pp. 137–150. DOI: 10.18522/2073-6606-2024-22-1-137-150.
- [53] Teece, D.J, Pisano., G, and Shuen A., “Dynamic Capabilities and Strategic Management”, *Strategic Management Journal*, Vol. 18, No. 7. (Aug., 1997), pp. 509-533. Stable URL: <http://links.jstor.org/sici?sici=0143-2095%28199708%2918%3A7%3C509%3AD-CASM%3E2.0.CO%3B2-%23>. Assessed: 10 December 2023.
- [54] Tevis, R.E., (2010) “Creating the future: Goal-oriented Scenario Planning”, in *Futures*, Vol.42 (Issue 4): pp.337-344. DOI: <https://doi.org/10.1016/j.futures.2009.11.019>.
- [55] Van der Heijden, K. (2005) *Scenarios, the Art of Strategic Conversation*, 2nd Ed., Chichester: John Wiley & Sons. Available at: https://www.researchgate.net/publication/47562150_Scenarios_The_Art_of_Strategic_Conversation_K_van_der_Heijden. Assessed:10 July 2024.
- [56] Von der Gracht, H. A. and Stillings, C. (2013) “An innovation-focused scenario process: A case from the materials producing industry”, *Technological Forecasting and Social Change*, Vol.80(Issue 4), pp. 599–610. DOI: <https://doi.org/10.1016/j.techfore.2012.05.009>.
- [57] Zahle, J., (2003) “The Individualism-Holism Debate on the Intertheoretic Reduction and the Argument from Multiple Realization”, in *Philosophy of the Social Sciences*, Volume 33, Issue 1, pp.311-341. Available at: <https://philpapers.org/rec/ZAHTID>. Assessed: 01 June 2024.