

ISSN 2063-5346



THE IMPACT OF DIGITALIZATION AND ENTERPRISE ARCHITECTURE DEPLOYMENT PRACTICE ON ORGANIZATIONAL BENEFIT

Dr. Simran Kaur¹, Narender Chinthamu², Dr. Vikas Pathak³,
Deepak Kumar Ray⁴, Ravi Kalra⁵, Ashish Jain⁶,
Amit Shrivastava⁷

Article History: Received: 01.02.2023

Revised: 07.03.2023

Accepted: 10.04.2023

Abstract

Research into Enterprise Architecture (EA) has, in recent years, shifted its emphasis to theory creation in the literature. Expertise in enterprise architecture (EA) is highly sought after by academics because of its potential to help organizations better coordinate their technology investments with their long-term strategic objectives. Even though there has been more study of EA recently, many questions remain unanswered. The most glaring problems are the lack of concrete evidence on how EA-based capabilities drive business transformation and offer firm advantages, and the lack of a sound theoretical foundation for conceptualizing EA-based capabilities. Using the dynamic capabilities viewpoint as theoretical grounding, this study zeroes in on EA-based capabilities, developing and accessing a novel research model that explains how such capabilities contribute to organizational advantages. Knowledge gained from this study will help businesses reap the benefits of properly identifying and designating the dynamism inherent in their enterprise architecture.

Keywords: - *dynamic capabilities Enterprise Architecture (EA), technology, business transformation.*

¹Associate Professor, Faculty of Commerce, Manav Rachna International Institute of Research and Studies, Faridabad

²MIT (Massachusetts Institute of Technology), CTO Candidate, Enterprise Architect, Dallas, Texas, USA

³Consultant & Head, Department of Commerce, Medi Caps International School, Indore, Madhya Pradesh

⁴Assistant Professor, E&TC, Pune, Bharati Vidyapeeth Deemed to be University College of Engineering Pune

⁵Department of Mechanical Engineering, Lloyd Institute of Engineering and Technology, Greater Noida

⁶Assistant Professor, Department of CSE, GL Bajaj Institute of Technology and Management, Greater Noida

⁷Assistant Professor, Department of IT, Chameli Devi Group of Institutions, Khandwa Road, Village Umrikheda, Indore, Madhya Pradesh

DOI:10.31838/ecb/2023.12.s1-B.195

I.INTRODUCTION

High product quality and efficient procedures alone aren't enough to secure a competitive edge in today's volatile and unpredictable markets. There is a lot of demand on many businesses to revamp their strategies and operations to become more sustainable, innovation-driven, and competitive. In order to effectively adapt to shifting environmental and market conditions, modern businesses should align and integrate their information systems (IS), information technology (IT) assets, and resources with business processes. For this reason, and to gain a competitive edge, businesses have begun to embrace Enterprise Architecture (EA) as a strategic asset. Many experts define enterprise architecture (EA) as "a blueprint of the organization that depicts both the current and desirable future states of organizations' IS/IT infrastructure, data, systems, and important business processes and gives a route to achieve this." In recent years, there has been a lot of focus in the literature on the importance of both solid theoretical foundations and actually revealing the mechanisms driving EA value creation.

This development in the canon of published works deserves serious consideration. A lot of work has gone into the contemporary literature on enterprise architecture (EA) and EA-based capabilities, which use EA to coordinate and deploy the firm's resources

while attempting to harmonize strategic goals, objectives, and the use of information systems and information technology (IS/IT). conceptual, and as a result, not well supported by empirical evidence.

The outline of the paper is as follows. Part one describes the study's theoretical development and presents the analytical framework. The model's associated assumptions are also constructed. Data and methods used to compile it were collected from 299 chief information officers, IT directors, and chief architects and make up the next section of the report. After the first data are presented, a secondary study is conducted to see how EA affects the competitive performance of companies. After discussing the research's theoretical and practical implications, the authors offer some concluding thoughts..

A. Theoretical advancement

An illustration of the research model used in this study is shown in Figure 1. Based on arguments from the resource-based view of the firm (RBV) and the dynamic capability view (DCV), this study concludes that an organization's EA resources are positively correlated with its dynamic enterprise architecture capabilities. The association between these particular abilities and operational potential is positive.

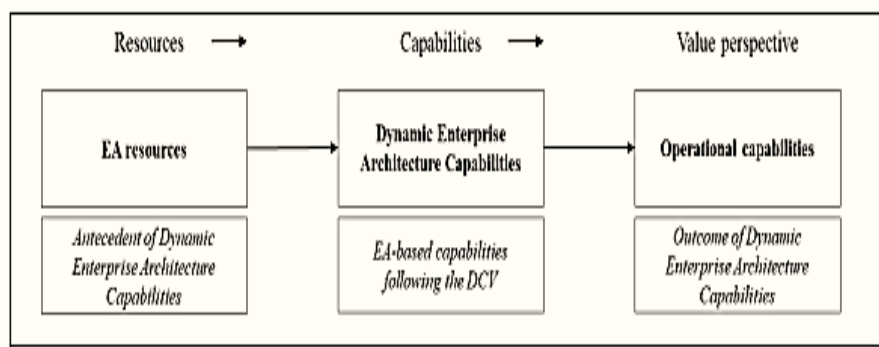


Fig.1 research model

Effortless Activity is a "a widely recognized procedure for coordinating evaluation, planning, organization, and execution of projects, based on a broad

approach that can be relied upon to produce effective new developments and implementations of method. To coordinate relationships through the business,

information, cycle, and advancement changes necessary to carry out their frameworks, try configuration applies underlying norms and practices. In order to identify, persuade, and implement these alterations, these procedures make use of the many components of an effort ". Eventually, EA orchestrating becomes dynamically confused as the pieces and their associations vary over time. Taking a look at the current systems out there, we can see that the unpredictability of parts isn't good enough. We previously worked together to compile a comprehensive report on between the different techniques and studies dealing with the extraordinary piece of enormous business configuration considering an effective arranging overview. Based on the results of this research, we were able to create a matrix outlining the benefits and drawbacks of each method that mediates the trade-offs between the stability and confidence of an EA's static perspective and the credibility and adaptability of an individual one. As such, illustrative ideologies aid to bring a predominating perception: of muddled reality for a strong picture, and a large grasp of the powers of Dynamic EA to bring a wide range of benefits at varying echelons. The accepted precious stone of degeneration of this powerhouse in big business design is laid bare to reveal its many benefits and drawbacks. This is the organization view, the view of endlessly, the view of a dynamic arrangement, and the view of an uncommon cut-off. We proposed to manage an organized approach to managing the various points of view, which are present across the various scales (between association, intra-association, thorough EA vision, dynamic parts) and throughout the various action times of EA (organizing, assessment, illustrating/planning, execution, or assessment). In this way, our survey is crucial for a stage that pre-plans with a great deal of fundamental guidelines to which our model should respond. We looked at how well existing ontologies answered this new

question in EA so that we might reap the benefits of having a model that is both measurable and machine-readable. To ensure we get the best possible outcome of the problem, we've incorporated a CBR estimator that takes into account the lessons learned from the past and applies them to the current situation. The next step was to incorporate new instances into the database via widespread case sharing in a secure manner made possible by blockchain technology.

Over the most recent twenty years, the business had a quick development utilizing the computerized cycle. Computerized change is the modern interaction to make new or adjust the current plan of action utilizing advanced innovations. It includes process as well as culture and client experience. Computerized change is a troublesome cycle in the ongoing advanced age to fulfil the market need and its connected necessities. Processing frameworks are efficiently advanced from actual server models to on-request cloud-based server less frameworks. It is so intriguing to gain the change of the PC field from a centralized computer to a cloud-based framework. This change reflects in the everyday person's life cycle. Allow us to consider the retail bank framework, the record holder has a ton of adaptability with versatile application and cloud anyplace innovations. That is the force of innovation change over the most recent few decades.

This research proposes an approach to EA planning that integrates block chain (BC) and case-based reasoning (CBR) to make full use of the EA information conciliation made possible by the shift in cross-venture information exchange. CBR was used to recover and reuse the most reasonable arrangement by decomposing the closeness between previous cases and the new case with the closest neighbour calculation, and a BC network was used to record the EA arranging information and its related exchanges to ensure the security and dependability of information sharing.

However, carrying out an EA because of a specific modification is an information-intensive operation that depends heavily on the expertise and understanding of the Venture draftsmen. CBR is a well-known deduction and reuse strategy, which has piqued the interest of many scholars who are interested in putting this data to good use. By mimicking human thought processes, CBR can resolve novel problems by swiftly discarding the most similar models from a case base including past cases. CBR is predicated on the principle that equivalent problems require analogous solutions. We suggest a strategy for incorporating cosmology and CBR for dynamic EA, with philosophy used in information demonstration and CBR used to repurpose current EA data. Indeed, these studies have pointed the way toward CBR-based data reuse. However, it should be

noted that traditional CBR is better suited to big and seasoned Undertakings due to the fact that the quantity and quality of examples heavily influence the success of a CBR implementation. Therefore, learning how to securely exchange and reuse data across partnerships is fundamental to overcoming the obstacles of traditional CBR.

B. *Dynamic Venture Design Abilities*

The DCV stretches out the RBV and endeavours to make sense of the cycles through which a firm develops in changing conditions and keeps an upper hand. Because of states of high ecological vulnerability, market instability, and incessant change, some studies have found that traditional functional and current 'asset based' capacity degrade and stop providing competitive gains at an alarmingly fast rate.

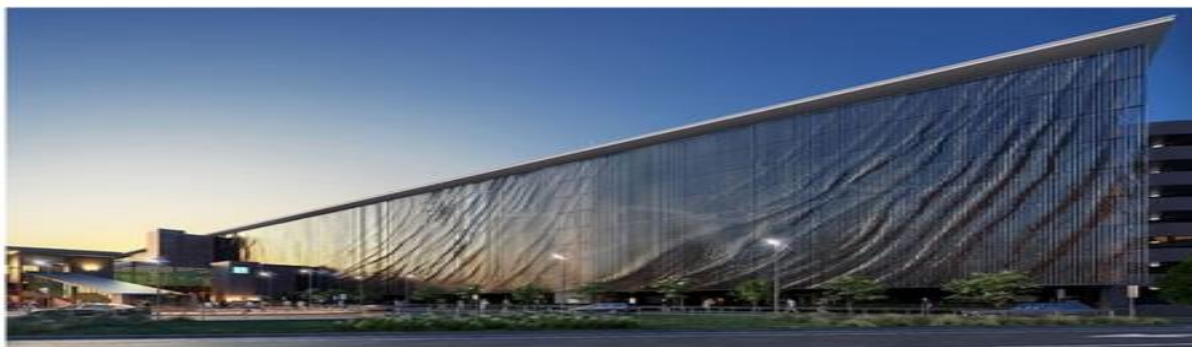


Fig .2 Development of the powerful high rise

Dynamic capacities are by and large viewed as the capacity of associations to incorporate, reconfigure, gain, and delivery assets to match and try and make market change. With regards to vital administration and IS writing, as of late, a few specialists contend that EA based capacities are significant to firms during the time spent utilizing, sending, and dispersion of EA in dynamic cycles, and the hierarchical schedules that drive IT and business. Besides, contend that EA-based capacities are vital for utilizing EA warning administrations inside the firm. In like manner, following the DCV, give central work that demonstrates the way that EA-based capacities can upgrade authoritative

deftness and in a roundabout way improve hierarchical execution. These results are predictable with that show the significance of middle EA empowered results that add to the accomplishment of specific business objectives and goals. Thus, ongoing EA grant contends that correlative EA abilities empower firms to use their EA successfully, add to IT productivity and IT and can drive arrangement among business and IT. This study agrees with this EA-based ability view. It considers dynamic venture engineering capacities as a unique capacity that helps associations distinguish and execute new business and IT drives to guarantee that the associations' resources and assets are current with the necessities of

the business. Following the precepts of the DCV, this study contends that almost certainly, the degree to which EAs are utilized effectively inside the association relies upon the powerful capacities that by and large utilize the EA to detect ecological dangers and business potential open doors, while at the same time carrying out new essential bearings. This study imagines dynamic venture engineering capacities as the company's capacity to take advantage of its EA to share resources, and recombine and restore authoritative assets under quickly changing interior and outside conditions to achieve vital goals and the ideal end state.

C. Business-IT Arrangement and Authoritative Advantages

Accomplishing a condition of arrangement accompanies numerous association benefit gains, including market development, cost control, monetary execution, expanding consumer loyalty levels, and increased standing. Besides, earlier examinations recommend that adjusting the IT procedure to the business system will probably affect process dexterity and, consequently, the manner in which firms can without much of a stretch and immediately reshape their business processes in violent business conditions.

Despite the fact that EA works with dynamic cycles and brings the business and IT speculation choices in nearer arrangement to the authoritative objectives, EA without help from anyone else makes no incentive for the firm. All things being equal, IT and Using the EA, top-level executives may implement innovative changes across their whole organization, providing the company with more opportunities to develop and release new products and services while also effectively executing its new strategic direction. The history of EA-based capacity grants demonstrates that many EA benefits are inconsequential, and that value is achieved through backdoor means. As a result, this research hypothesizes that the business-IT

arrangement mediates the link between distinctive venture engineering capabilities and hierarchical benefits. Thus, business-IT arrangement is a crucial antecedent of hierarchical benefits and an important link in the unique chain of EA esteem generation.

D. Dynamic Venture Engineering Abilities and Cycle Advancement

It is likely that not only does dynamic project design abilities positively affect business-IT arrangement, but also on the cycle inventiveness of the firm, given the extraordinary concept of the powerful endeavor engineering capacities relating to their scope and reach, and their speculated relationship with hierarchical benefits. Researchers have come to different conclusions about the relationship between hierarchical learning and EA asset organization and the development of improved interpersonal interactions, with some pointing to dynamic capacities as the ultimate cause of the latter.

Development comes in many forms, most of which are related to how we handle it (e.g., strategy, power). This research focuses on process innovation (or "cycle inventiveness") because it is a central theme in the existing literature and because it requires businesses to (re)deploy IS/IT and other innovations to boost the efficiency of new product development and commercialization. Generally agree with this assessment, noting specific strengths that might be leveraged to better promote development preparedness at each level of the hierarchy. In order to propel process improvement, businesses must efficiently reallocate resources and refine management and production activity procedures using mechanical advancements.

EA-based detecting capacities help businesses identify, interpret, and pursue new IS/IT and mechanical advancements (such as the cloud, IoT, huge information analysis, simulated intelligence, business knowledge), business and cycle opportunities, or discern potential risks.

These skills enable businesses to tailor their EA offerings to the preferences of their most important business associates, paving the way for the launch of focused efforts to improve processes. Additionally, EA-based capabilities promote hierarchical progress by organizing IT and business characteristics of the venture and its link with the business biological systems to enable development and its capacity to react in relation to the business climate.

Once innovative and business open doors are first witnessed, they should be tended to through keeping up with and working on mechanical abilities and corresponding firm resources. Consequently, an EA-activating capacity permits firms to deliberately coordinate interests in the association's habit-forming nature, use EA during the time spent assessing, focus on and select possible IT and business arrangements, and prepare firm assets in like manner. In this manner, an EA-activating ability is a fundamental element for firms that need to adjust their assets and resources for the persistently advancing client wishes, requests and market, and innovation patterns, and shape their current circumstance through advancement.

This paper offers an outline of the potential advantages that coordinated unique frameworks can bring to structures. It additionally investigates the means by which these frameworks are conveyed all through advancement. For the situation concentrate on introduced, the strategies used to impart basic plan standards were pivotal in productively conveying the intricacy of the calculation. In these circumstances the specialized strategies should be intended to try not to secure the turn of events and conveyance cycle to digest language or innovation, subsequently keeping up with the expectation while contacting a more extensive crowd. The thoughts introduced here depend on the plan standards of the opposition winning plan of the Al-Bahr Pinnacles. As a Lead Specialist in

Development Plan and Exploration at AHR planned and led this venture in close cooperation with Arup. The structures won the Best Advancement Grant 2012 by the Chamber for Tall Structures and Metropolitan Living space (CTBUH). The sets of pinnacles won acknowledgment for its presentation driven structure, and dynamic veneer that works following the development of the sun. To understand this intricate undertaking across different disciplines, a bunch of guidelines was created to impart the standards of Development, Activity, and Plan Execution (CODE). These standards were formed into a solitary open record not attached to a particular programming or industry.

E. Dynamic Capabilities

In vital administration writing, the unique capacities structure has turned into a significant subject of exploration as of late, with its effect likewise extending to the space of data frameworks. A definitive objective of the powerful capacities structure is "to make sense of the wellsprings of big business level upper hand over the long run". The unique abilities system can consequently be viewed as an extension of the RBV (Asset-Based View), an approach that attempts to answer the same question. Yet the RBV has been criticized for failing to adequately value ecological factors. The RBV looks inward, viewing businesses as collections of assets. If these pools of assets meet the criteria for VRIN credits (i.e., they are critical, unique, superior, and non-substitutable), then they are considered to be the basis for the company's claimed competitive advantage. On the other hand, natural shifts are emphasized as essential by the distinct capacities system: The ability to reconfigure current asset configurations is seen as a source of sustainable competitive advantage. The main argument is that a project's asset group's VRIN credits depreciate over time due to climate change. While conventional asset configurations can make sense for a short period of time,

sustainable competitive advantage requires dynamic capacities, which emphasize the re-configuration of existing assets to achieve and maintain arrangement with the environment (including the market). In contrast to the RBV's focus on assets, the unique capacities system prioritizes what are known as "zero-level," "zero-request," or "standard" skills. Businesses can generate revenue sufficient to cover operating costs thanks to their functional capabilities. Defining functional capacities as "those that mirror a capability to play out the essential functional exercises of the company," this definition highlights the need of having the right resources in place. Important examples of functional capacities are production cycles, a data and correspondence basis, sales or marketing capacity, and so forth. Dynamic capabilities study the development of these practical skills. For the purposes of this work, we shall adhere to the definition of dynamic capacities provided by a comprehensive literature review on the study of special skills: The company's "potent capacity is its deliberate handle of challenges, framed by its proclivity to discover open opportunities and risks, to pursue convenient and market-positioned choices, and to transform its asset base." This description highlights the two critical phases of a special skill set: (1) exploration and selection (differentiating

between opportunities and threats and making a decision), and (2) adaptation (changing its functional capacities or asset base).

II.LITERATURE REVIEW

([Abraham, R., 2012] We discuss how enterprise architecture management (EAM) supports many types of enterprise transformation (ET), including planned, proactive change and developing, responsive change. At first, we conceive of EAM as a special skill that can be used to access the extensive documentation of formidable powers. We find that EAM can be built as either a planned, organized capacity to aid proactive ET or as an improvised, basic capacity to aid responsive ET under time pressure, based on assumptions and insights from two contextual investigations. We argue that it is possible for an organization to simultaneously transmit the two configurations of EAM capacities by differentiating between the core components of EAM that are required for the two abilities and special capability explicit extensions. Finally, we discuss administration and critique systems that help modify the goals of flexibility and dexterity associated with dynamic and improvisatory abilities.

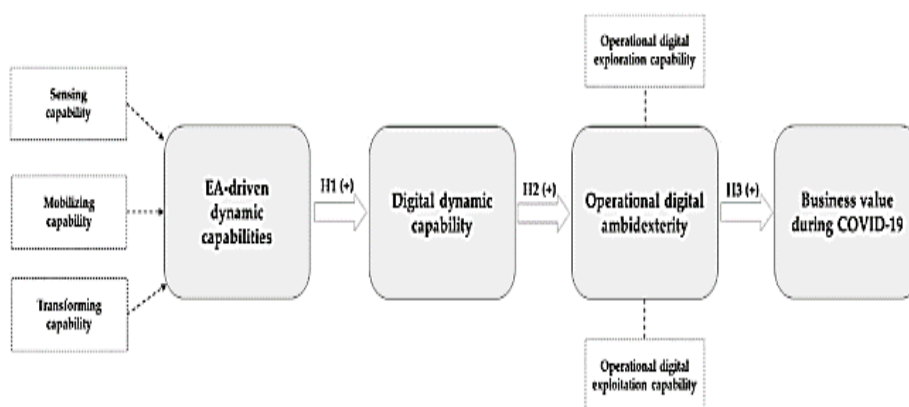


Fig .2 Research model

(Becker, J.M., & Klein, 2012) In recent years, the use of the fractional least squares method of displaying underlying conditions

(PLS-SEM) has skyrocketed. In this specific situation, specialists have been able to extend the application of PLS-SEM to

more advanced and sophisticated models thanks to the use of progressive dormant variable models. Progressive inert variable models with intelligent linkages have, nevertheless, been the primary focus of this investigation. Our focus in this article is on second-request progressive dormant variable models with developmental links. First, we have a look at a classification of (requested) models with progressively latent variables. Therefore, we provide an overview of many methods that can be used to evaluate these models' limits, including (1) the recycled pointer method, (2) the two-stage method, and (3) the crossover method. The methods of a re-enactment research and an experimental application in a scenario where humans are a crucial resource are then discussed.

(According to (Foorhuis, R., & Van Steenbergen, 2016) Academics and experts have argued both for and against the benefits that Endeavor Engineering (EA) may provide to businesses and organizations. While these benefits of EA are widely acknowledged, there is a lack of explanatory hypotheses for how EA

communicates them. Moreover, observational exploration has not extensively investigated EA practices and benefits, with quantitative examinations on the topic being particularly rare. Measured findings from a study that aimed to build hypotheses in a broad survey context (n=293) are presented here. The resulting PLS model synthesizes existing knowledge with competing hypotheses to demonstrate the synergistic effect of EA practices and middle-ground advantages on the association's ability to reap rewards for its activities.

III.METHODOLOGY

The review zeroed in on the endeavour's engineering, like its methodology, data frameworks, and mechanical foundation, May subsequently be viewed as a feature of its functional capacities. Contingent upon the sort of natural choppiness, EAM oversees the improvement of EA and consequently fills in as a reconfiguration capacity. Figure 1 shows the possibility of EA and EAM in Pavlou and El Sawy's abilities structure.

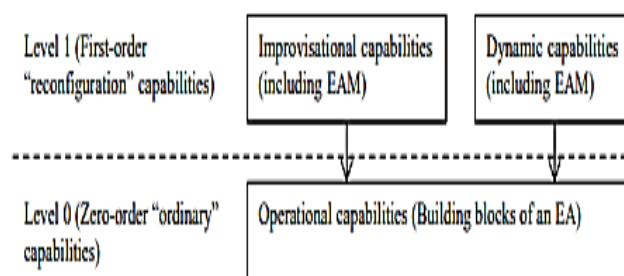


Fig.3. EA and EAM with regards to standard and reconfiguration capacities

A. EAM Capacities in Ecological Disturbance

As was previously observed, the predictability of change is crucial for reconfiguring functional capacities through unique abilities or improvisational abilities. When it comes to EAM, consistency in development is verifying not one, but two EAM goals: agility and adaptability. Flexibility is viewed as "worked in" configurability, which is also how it has been defined in the context of continuous

administration. At the outset of a planning cycle, possible outcomes are not set in stone.

The range of possible outcomes for the finished ornament fits within this estimate. The width of the parts and their setup rules (which constrain the breadth of possible outcomes) must be considered during configuration in a part-based approach to planning, for example. Configurability adds cost to products, although that expense may be spread out over time as demands shift

and new configurations are often less expensive than brand new designs. Findings from the study of specialized abilities, which are essential when responding to frequent but predictable changes, are strikingly comparable. First, the EAM's ability to change and adapt

In terms of EA's characterization, EAM as a functional capacity may encourage planning through clarity: Different to-be models can be determined and compared in light of the as-is models of a project in order to arrive at a common vision depicting the future state of the project. Different model analyses, such as dependability, inclusion, or heterogeneity studies, may also bolster the conversational cycle.

Table 1 sums up and looks at EAM as a dynamic or improvisational capacity.

<i>Reconfiguration capability</i>	EA aspect	Company A	Company B
<i>Dynamic</i>	descriptive	Decentralized models of incomplete structures existing, reconciliation into concentrated archive forthcoming; To-be models (situation investigation)	As-is models as premise of common perspective; Target engineering is caught in to be models; Guides for progress Arrangin
<i>Improvisational</i>	prescriptive	Decentralized models of incomplete structures	As-is models as premise of mutual perspective

V.DISCUSSION

The ecological turbulences that businesses must navigate vary in intensity, forcing them to either (1) actively influence their current circumstance or (2) be forced to respond to their current circumstance. Therefore, the two constraints will cause inefficient preparations and a lack of superiority over the long term, depending only on powerful capacities or improvisational abilities. Under normal

IV.RESULTS

The following example is taken from description of the engineering program at Organization A, an enormous Swiss bank. Following a consolidation, the financial arrangement of the obtained organization was being converted into Organization B's current framework. This prompted an emotional expansion in generally framework intricacy. Ultimately, the new framework was at this point not ready to meet business prerequisites and experienced weighty blackouts. This has driven the leading group of organization to send off an engineering program to characterize another IT methodology.

conditions, organizations need to reorganize by employing the configuration of capacities (whether static or improvised) that is most favored by the level of natural disruption. At the same time, efforts may need to try and portray the two sets of competencies in a variety of contexts.

VI.CONCLUSION

The future technology depicted in sci-fi novels and films should accommodate all of a person's needs and grow and adapt along

with him. "Design has always had a reputation for being rigid, heavy, and unmovable. Since change has been a steady trend over the past few decades, our current situation calls for engineering that can adapt to our evolving demands and expectations".

Our paper's fundamental contribution is to draw attention to this distinction, demonstrating that EAM is able to provide support for both proactive and reactive ET. Our approach is severely limited by the small number of context-based inquiries that have been conducted.

FUTURE WORK

How we might understand EAM trading between these two reconfiguration capacities will be improved with more precise information, focusing specifically on EAM being delivered as a dynamic or improvisational capacity.

VII. REFERENCES

- [1] Radeke, F.: *Toward Understanding Enterprise Architecture Management's Role in Strategic Change: Antecedents, Processes, Outcomes*. In: *Proceedings of the 10th International Conference on Wirtschaftsinformatik WI 2.011*, pp. 497-507 (2011)
- [2] Barreto, I.: *Dynamic Capabilities: A Review of Past Research and an Agenda for the Future*. *Journal Of Management* 36:1, 256-280 (2010)
- [3] Teece, D.J.: *Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance*. *Strategic Management Journal* 28:13, 1319-1350 (2007).
- [4] Abraham, R., Aier, S., & Winter, R. (2012). *Two Speeds of EAM—A Dynamic Capabilities Perspective*. In *Trends in Enterprise Architecture Research and Practice-Driven Research on Enterprise Transformation* (pp. 111-128): Springer.
- [5] Becker, J.-M., Klein, K., & Wetzels, M. (2012). *Hierarchical latent variable models in PLS-SEM: guidelines for using reflective-formative type models*. *Long range planning*, 45(5-6), 359-394.
- [6] Foorthuis, R., Van Steenberghe, M., Brinkkemper, S., & Bruls, W. A. (2016). *A theory building study of enterprise architecture practices and benefits*. *Information Systems Frontiers*, 18(3), 541- 564.
- [7] Radeke, F.: *Toward Understanding Enterprise Architecture Management's Role in Strategic Change: Antecedents, Processes, and Outcomes*. In: *Proceedings of the 10th International Conference on Wirtschaftsinformatik WI 2.011*, pp. 497-507 (2011).
- [8] Barreto, I.: *Dynamic Capabilities: A Review of Past Research and an Agenda for the Future*. *Journal Of Management* 36:1, 256-280 (2010).
- [9] Teece, D.J.: *Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance*. *Strategic Management Journal* 28:13, 1319-1350 (2007).
- [10] Anurag Shrivastava, Midhun Chakkaravathy, Mohd Asif Shah, *A Novel Approach Using Learning Algorithm for Parkinson's Disease Detection with Handwritten Sketches*, *Cybernetics and Systems*, Taylor & Francis
- [11] Ajay Reddy Yeruva, Esraa Saleh Alomari, S. Rashmi, Anurag Shrivastava, *A Secure Machine Learning-Based Optimal Routing in Ad Hoc Networks for Classifying and Predicting Vulnerabilities*, *Cybernetics and Systems*, Taylor & Francis
- [12] Anurag Shrivastava, SJ Suji Prasad, Ajay Reddy Yeruva, P Mani, Pooja Nagpal, Abhay Chaturvedi, *IoT Based RFID Attendance Monitoring*

- System of Students using Arduino ESP8266 & Adafruit.io on Defined Area, Cybernetics and Systems, Taylor & Francis*
- [13] Charanjeet Singh, Syed Asif Basha, A Vinay Bhushan, Mithra Venkatesan, Abhay Chaturvedi, Anurag Shrivastava, *A Secure IoT Based Wireless Sensor Network Data Aggregation and Dissemination System, Cybernetics and Systems, Taylor & Francis*
- [14] Anurag Shrivastava, Midhun Chakkaravathy, Mohd Asif Shah, *A Comprehensive Analysis of Machine Learning Techniques in Biomedical Image Processing Using Convolutional Neural Network, 2022 5th International Conference on Contemporary Computing and Informatics (IC3I)*
- [15] Keshav Kumar, Amanpreet Kaur, KR Ramkumar, Anurag Shrivastava, Vishal Moyal, Yogendra Kumar, *A Design of Power-Efficient AES Algorithm on Artix-7 FPGA for Green Communication, 2021 International Conference on Technological Advancements and Innovations (ICTAI)*