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A CROSS INDUSTRY PERCEPTION ON AVENUES OF DIGITALIZATION OF MERGER & ACQUISITION EXECUTION

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ABSTRACT

Mergers and Acquisitions (M&A) decisions are one of the key strategic initiatives of a firm that decides the growth trajectory of the firm and puts financial leverage borne through the years. The execution of M&A process, however, is still largely non-digitized because the decisions concerning this have high impact and have to eventually be wetted by executives manually anyway. M&A Execution Process has been unanimously agreed to have bottlenecks revolving around its low level of digitization that contribute to the M&A process being slow and relatively inefficient. This paper focuses on finding possible avenues of innovation in the entire M&A process that have either been executed in certain industries/parts, are under review for implementation or are mere ideas that seem feasible in terms of adjacent implementations or industry perception. This is an attempt to evaluate the role of digitization in different aspects of a M&A Deal process to achieve increase in speed or increase in the level of detail and efficiency achievable through involvement of digital tools and extended to how this can contribute to enhanced success rate of M&A deals. The research conducted is a mix of primary and secondary research design to frame a continuous and reliable opinion on innovative digitization methods in M&A Mixed methodology has been followed where stakeholders involved in M&A processes like buyer company, seller company and enablers like M&A Consultants, Investment Bankers, Financing Bankers have been interviewed and secondary data has been referred to arrive at various facets of digitalization possible in M&A process. It was found out as the industry perception that Digitalization of various phases of M&A deal lifecycle has been proven to significantly improve lengthy M&A life cycles and authenticity. Major areas of M&A that were found to have the highest scope of digitalization are Target Screening, Stakeholder Management & Communication enhancement, Organizational design, Purchase Accounting, Divestiture financials processing, TSAs, Data & Contract Management, Administration and Project Management. Different processes of M&A Execution have been found to have different ways of digitization / Automation, while all contributing to one single aim of higher speed or efficiency which has been discussed in detail in the paper. This will eventually help explore ways in which digitization can be used to result in better decisions and outcomes for a typical M&A process and how adequate digitization of the M&A planning and execution process can transform the M&A outcomes and efficiency.

INTRODUCTION

The era of COVID has attempted to digitize every aspect of human existence, let alone business processes and corporate development/M&A is no exception. M&A like other business activities was negatively impacted in the COVID era but whatever deals happened, contributed significantly to innovating the digitalization of M&A. Owing to the importance of M&A, the entire M&A process is built in with many steps and complicated processes and milestones, such as investor/target identification, risk assessment, due diligence, and collaboration across relevant stakeholders. Over and above unanimously agreed upon cultural integration and loss of key personnel loss issues, Lack of proper coordination among stakeholders and large turnaround time are the two key failure triggers or M&A, with a typical M&A cycle being of 15-20 months.

This significantly hampers financial and strategic goals resulting in loss of workforce, customers, and reduced negotiation power. This is particularly important as M&A is both a high impact and complicated process involving multiple stakeholders and massive data. Involvement of such large no of stakeholders and massive data gives rise to many facets of M&A deal process that can be modified using different digital tools and techniques. As the entire process is offline in current context, the whole lifecycle of M&A i.e., from deal origination to value creation, can be made more efficient using digitalization. Analytics & AI can transform the target identification process bringing with the capability of increased intelligence. Geographical scope of target evaluation can be significantly increased by involving AI/ML. targets. Also, the parameters that a laundry list of targets need to be assessed on for attractiveness and strategic sync, can be significantly extended owing to the processing power that a digital machine brings with it. Massive data requirement in due diligence of targets can be fulfilled by using AI/ML to screen publicly

available data. Data scanning and analyzing speed in due diligences can be potentially increased to reduce the time required in the due diligence phase. Data analytics can aid towards the accuracy and authenticity of synergy assessment, getting deeper insights through the M&A process. Insights on competitors, industry trends and external factors that can have influence on the deal can also be derived in minutes using technology versus months of manual brainstorming. Deal execution is another phase where digital is paving its way not just in M&A but beyond. Data sharing, monitoring, security, contract creation, negotiation and enforcement are just few pillars of execution that see massive transformation when digitized. Automation of the entire process of M&A is, however, not viable and may instead turn counter effective, as intangible metrics such as culture, impact of key personnel, timing and force majeure issues have a large impact on the key decisions and would hence require consistent human touch and validation. But this does not underemphasize the fact that digitalization of areas that are less to do with human wisdom and more to do with logical deduction can be easily automated not only to yield significantly quicker Turnaround times but also exponentially higher authenticity and accuracy.

Problem Description

The research problem can be seen as the inefficiency arising out of not digitizing the M&A process:

- High TOT of the M&A conversion process,
- Large resources (human) involved in M&A due to limited digitalization and automation,
- Limit to the authenticity/depth of analysis due to manual and undigitized process

The above 3 might not be directly visible as problems as M&A domain is functional well without digitalization. However, the ample number of resources that can be saved by digitalization indicates the value wasted by not opting for digital tools and hence indicates a grave latent problem that needs to be solved.

LITERATURE REVIEW

(Zhang M. *et al*, 2023) [1] in their research examine how corporate digital transformation improves the success rate of corporate cross-border M&A and explores the mediating role of internal management quality based on the data of cross-border transaction M&A. The study shows that digital transformation can significantly improve the success rate of cross-border M&A, enhance the information advantage of firms, improve information asymmetry, and improve internal management quality. (Guan J. *et al*, 2024) [2] in their research examine the impact of digital M&A on stock price crash risk using a sample of M&A transactions. The results show that digital M&A can reduce stock price crash risk after M&A. Fand that compared to non-digital M&A, digital M&A has a better market effect, and the target firms of digital M&A generally are in different industries from the acquirers, have relatively low registered capital, have a shorter registration time, and have better financial performance. (Weiss P. V. *et al*, 2021) [3] in their research agreed on the impact digitization of M&A can cause in enhancing processes but also indicated data privacy issues that need to be taken care of while performing the same. (Grab B. *et al*, 2019) [4] in their extensive study argued that conventional strategic management theories and models are essential for evaluation of external firms' competencies and capabilities. These theories can be used with new digital tools and systems for effectively analyzing the firm's current and potential state with respect to the changing external scenario. However, understanding of processes, consistent monitoring is key to the success of digitization in M&A to prevent any shortfalls. (Hanelt, A *et al,* 2021) [5] conducted an empirical investigation to analyze the employee panel data of some of the largest automobile manufacturers and showed that digital M&A builds the digital knowledge base of the firms and facilitates digital innovation which in turn has shown huge performance improvement of firms. (Hollett D. W. & Phasey C. N.,

2019) [6] discuss the significance of digital twin (DT) in cost savings, and add-on value in safety, operational integrity and predictive maintenance. Role of DTs in effective portfolio management is being discussed and determination of asset or field value, upside, and long-term potential are concluded to be main advantages. It is explained that during merger and acquisition (M&A) analysis, technical, operational and financial leverage can be estimated using digital solutions. While most companies utilize traditional and tested approaches to asset valuation, new digital solutions offer the opportunity for break-out higher valuations which can drive an entirely new approach to M&A growth. (Feix, T., 2020) [7] discussed relevance of digital implementation in core M&A processes such as Embedded M&A Strategy, the Transaction Management, and the Integration Management and secondary processes such as the Synergy Management and the M&A Process Management & Governance. A sample of related literature on specific thread on digitalization in M&A processes or their variants can be seen in the above work. However, the present problem is distinct and different from the existing research and aims at addressing gaps over and above presently executed ways of digitalization and exploring the possibility of innovative ways to make it exhaustive under the limits of feasibility in the current scenario.

RESEARCH METHODOLOGY

This paper focuses on finding possible avenues of innovation in the entire M&A process that have either been executed in certain industries/parts, are under review for implementation or are mere ideas that seem feasible in terms of adjacent implementations or industry perception. The research conducted is a mix of secondary and primary data collection to frame a continuous and reliable opinion on innovative digitization methods in M&A.

Primary Research: The primary research consisted of semi-structured interviews with key stakeholders involved in the M&A process. These stakeholders include representatives from the buyer and seller companies, as well as intermediaries such as M&A consultants, investment bankers, and financing bankers:

- Corporates (buy side and sell side) involved in M&A who are tech savvy and have implemented digitalization
- Enabling institutions like investment banks and Management Consultancy that are primary executors of M&A deals across industries and sizes
- Banking Institutions financing M&A deals that conduct due diligences for financing and are closely involved in the M&A Process
- Investment bankers that conduct in negotiations between buy side and sell side parties and are closely involved in M&A process

The interviews were designed to explore the stakeholders' experiences, challenges, and perceptions of digitalization in the M&A process. The semi-structured format allows for a degree of flexibility in the discussion, enabling the interviewer to delve deeper into themes and topics that emerge during the conversation. However, a general guide was followed to ensure that all relevant topics are covered. The interviews were conducted either in person or via video conferencing platforms, depending on the interviewee's preference and availability. Each interview lasted between 30 to 60 minutes.

Secondary Research: The secondary research involved an extensive review of existing literature on the topic of digitalization in M&A. This includes scholarly articles, industry reports, case studies, and news articles. Publicly available data was studied on digitalization of M&A processes with special emphasis and distinction on "executed" vs "planned" initiatives through sources including but not limited to:

- News items on digitalization of M&A Processes in India and Worldwide
- Cases of Innovation in digitalization in M&A
- Use of AI/ML in M&A

- Cases of speed enhancement focused digitalization (especially automating recurring robotic activities)
- Cases of detail/depth enhancement focused digitalization in M&A (especially due diligences)

The aim of this secondary research was to understand the existing landscape of digitalization in the M&A process, to identify trends and patterns, and to understand the challenges and opportunities that have been noted in previous studies and reports.

Ethical Considerations: Throughout the research process, ethical guidelines were strictly adhered to. All participants in the study were informed about the purpose of the research, the voluntary nature of their participation, and their right to withdraw at any time. Confidentiality and anonymity were maintained at all times, with all data being securely stored and only used for the purposes of this study.

Data Analysis: The data collected from both the primary and secondary research was analyzed using a mixed-methods approach. The research consisted of mostly qualitative data for which a thematic analysis was performed to identify common themes, patterns, and insights. The findings from both the primary and secondary research were then integrated to provide a comprehensive understanding of the potential for digital innovation in the M&A process. The analysis yielded nine main themes that capture the participants' perspectives and secondary research - industry sentiment on digitalization in M&A.

Theme 1: Adoption and Use of Digital Tools Most participants reported using digital tools in their M&A processes, particularly data analytics tools and cloud-based collaboration platforms. These tools were lauded for their ability to increase efficiency, enhance data management, and foster better communication. However, participants also expressed a need for more comprehensive, integrated tools that can handle the entire M&A process.

Theme 2: Innovation Opportunities Participants identified a number of opportunities for digital innovation within the M&A process. These primarily included due diligence, data management, and post-merger integration. Emerging technologies such as AI, machine learning, and blockchain were viewed as having the potential to revolutionize these areas.

Theme 3: Future of Digitalization Participants generally agreed that digitalization will play an increasingly important role in M&A. Key drivers of this trend include advancements in technology, increasing data volumes, and the need for speed and efficiency. However, potential barriers, including data security issues, regulatory complexities, and resistance to change were also identified.

Theme 4: Perception and Acceptance The overall industry perception towards digitalization in M&A was reported as positive, with recognition of its benefits. However, participants also noted variable adoption rates across sectors, suggesting that more efforts may be needed to promote digitalization in less receptive sectors.

Theme 5: Training and Skill Development Participants underscored the importance of certain skills for navigating the digital M&A landscape, including data analysis, project management, and proficiency with specific digital tools. However, they also highlighted gaps in current training opportunities.

Theme 6: Data Security and Compliance Data security emerged as a significant concern among participants. They stressed the importance of stringent security protocols and compliance with data protection regulations when using digital technologies in M&A.

Theme 7: Change Management Participants acknowledged that implementing digital technologies often requires significant change management efforts. Strategies such as clear and frequent communication, adequate training, and securing buy-in from leadership were suggested to manage these changes.

Theme 8: Cost Implications and ROI While acknowledging that digitalization involves substantial costs, participants generally viewed these as worthwhile investments. However, they also pointed out the challenges in quantifying the ROI of digital technologies in M&A.

Theme 9: Impact of COVID-19 The COVID-19 pandemic was seen as a catalyst for digitalization in M&A. Most participants believed that the changes brought about by the pandemic, particularly the shift to remote work and use of digital communication and collaboration tools, would persist post-pandemic.

These themes provide a comprehensive understanding of the current state and future potential of digitalization in M&A, based on the perspectives of key stakeholders. The insights gained from this analysis can inform the development of strategies for digital innovation in M&A, addressing the current challenges and leveraging opportunities for improvement.

RESULTS & DISCUSSION

The results of the thematic analysis from the questionnaire responses offered an intricate understanding of the significant role digitalization plays in Mergers and Acquisitions (M&A) processes. There was a prominent indication of widespread adoption and utilization of digital tools in M&A processes. Respondents particularly highlighted the use of data analytics tools and cloud-based collaboration platforms as instrumental in enhancing efficiency, improving data management, and fostering effective communication within teams. These tools were praised for their ability to streamline operations and facilitate seamless information sharing, underscoring their importance in the modern M&A landscape. However, despite the perceived benefits and widespread adoption of these digital tools, participants also expressed a need for more comprehensive solutions. They called for integrated tools that can manage all stages of the M&A process, from due diligence to post-merger integration, pointing to a gap in the current digital offerings and highlighting a potential avenue for further digital innovation. The potential of emerging technologies was not lost on the participants. They expressed optimism about the transformative power of technologies like Artificial Intelligence (AI), machine learning, and blockchain in revolutionizing M&A processes. This anticipation for the integration of these advanced technologies into M&A processes signals an exciting trajectory for digital innovation in the industry. At the same time, the analysis also brought to light the perceived challenges and barriers to the digitalization of M&A. Key among these were data security concerns, regulatory complexities, and resistance to change within organizations. Participants underlined the importance of robust security protocols and strict compliance with data protection regulations, indicating the crucial role of trust and confidence in the successful digitalization of M&A. Change management was another area of concern, with participants suggesting the need for clear and frequent communication, adequate training, and securing buy-in from leadership to effectively manage the transition to digital processes. The COVID-19 pandemic was seen as a catalyst for digitalization in M&A. Participants noted that the shift to remote work and the subsequent reliance on digital communication and collaboration tools, necessitated by the pandemic, have accelerated the digital transformation of M&A processes. In their view, these changes are here to stay, pointing to a lasting impact of the pandemic on the M&A landscape. Overall, these findings provide invaluable insights for the development of future strategies for digital innovation in M&A. They highlight the need to address current challenges while leveraging the tremendous opportunities for improvement that digitalization presents. There were certain specific areas where Digitization was agreed to be applicable in M&A process. The following list major categories of possible avenues of digitalization potential.

Across M&A Processes

Target screening: Utilizing digital tools to yield a married down list of target eligible for potential acquisition (target). While this is

manually done by M&A Consultants or inhouse consultants of the firm which puts a limit on the depth of research done (parameters chosen or no of targets evaluated) and hence the task is completed with limited efficiency and authenticity. Digitalization, on the other hand poses no limit to the depth of research possible to evaluate targets giving us a better and more reliable list to consider in terms of target. It incorporates pulling data from various external sources and analyzing industry trends, headwinds, tailwinds compare past growth and initiatives, financials and vendor connects based on publicly available data. An option of changing parameters or weights of parameters is also available to the firm to include the possibility of human bias in the screening process as target screening as a process is highly dependent on the acquirer biases, especially in terms of geography, business line etc. Sentiment analysis is another technique that can help in target screening, this fetches real world conversations on blogs, social media and other community platforms to understand the customer and investor sentiment on the area and target specifically. Simulation of M&A by combining parameters of acquirer and the target for being able to foresee the possible outcomes of M&A can also be used to priorities the targets achievable through AI/ML.

Stakeholder Management and Communication enhancement: M&A comprises of a large no of stakeholders and interdependencies, data sharing, follow ups, alignment strategies, workplans all to ensure that the process is aligned with all relevant stakeholders sin the process (Acquirer entity, acquired entity, vendors, customers etc.). Workplans involve hundreds of tasks, milestones that need to be completed on time and need to be kept a track of. Prioritization of these tasks and incorporating inter dependencies if any is another effort taking process that involves multiple iteration of building and reviewing and is self-evolving process. Data Visualization and workplan tracking tools help create a common workplan accessible to all stakeholders alleviating the need of multiple iterations of review and providing a better clarity on interdependencies of the identified tasks/milestones.

Organizational design: Organizational design is another area that can transform the M&A process. Future state and blue printing on human capital to yield to final organization structures with adequate synergy realization and workforce rationalization is highly internal process but also a time consuming one. Also, the experimentation done while deciding on a final structure is limited owing to manual org design creation. Digital tools and techniques can be used to simulate all possible org designs, costing models possible to align with objectives and goals to compare and then lead to a final and most effective structure that can later be modified incorporating leadership feedback and priorities. Dynamically designing the future-state organization and supporting structures by addressing the key talent challenges significantly increases the efficiency of Org design creation.

Purchase accounting: Purchase Accounting tools can be used to automate the accounting function involved in a typical M&A by data aggregation and assigning right accounting buckets to items in journal entities, calculate and call for adjustments required and monitoring daily with just in time updates.

Divestiture financials processing: Financial processing is another aspect where digitalization can help considerably by enabling detailed historical financials view and insights on financials discrepancies or synergies. The tools available are advanced and help skip the manual process of going through each balance sheet and P&L item by generating a by default report of insights. Industry specific insights are added on the top from the industry specific trends identified while analyzing a similar situation for a similar industry. Such tools and systems can considerably save time as analyzing financials is a generally recurring activity in M&A and added feasibility to view and pre prepared insights can help save time.

TSAs: TSAs are another bottleneck in terms of the lengthy time taken to plan draft and execute. Business continuity being a priority in M&A, TSAs are generally given whatever time they take. However, the lengthy life cycles and delayed synergies due to TSA

agreements can be significantly reduced using "as a service" platforms that specialize in TSA management and deploy a completely new system instead of modifying existing systems of the combining entities. Building certain capabilities from the scratch requires business inputs but standardizes and expedites the process considerably.

Data & Contract Management: Most usual pain points of a M&A deal is handling massive data and documentation that spans through the entire M&A deal. Such tools enable firms to conveniently source, collect, analyze and supply massive data and also enable cloud-based storage of this data with adequate cyber security protocols and confidentiality. Such systems also enable term sheet discussions, negotiation and cumulative agreement building exercises.

Administration and Project Management: Among the key benefits are executive dashboards, transparency around activity coordination, automated reporting, and insights from best practice playbooks. Another area gaining traction has been virtual collaboration tools enabling the completion of deals with remote teams, partially driven by COVID-19 pandemic. Here we have seen a significant expansion of virtual workshop formats capable of hosting more than 60 participants globally to negotiate deal terms. Drones are also gaining traction to be used with geospatial solutions to enable audit, inspection and monitoring for asset heavy entities or targets. Drones can also be deployed for creating maps with more accurate dimensions and to get a better picture of the asset to decide on the decision of acquisition and other subsequent decisions better.

Limitations: The research faced certain limitations. The availability and willingness of stakeholders to participate in the interviews potentially limited the scope of the primary research. In addition, the rapidly evolving nature of digital technologies meant that the findings of the research may have to be updated with any latest trends observed.

CONCLUSION

Digitalization is a source of massive improvement and resource saving for most industries and business processes now. Even industries slow to adopt change like pharmaceuticals and manufacturing have started to digitize across processes and functions. When it comes to functions like M&A where the impact is much wider and the duration is wider, M&A adoption is the only way to go, especially because it does not pose risk of reluctance like the other digital-averse industries do. It is ultimately about who does it first and not who does it and who doesn't as far as M&A is concerned. Because even if digital adoption is seen more with a lens of efficiency enhancement and less with the sense of resource utilization, the results will be similar.

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APPENDIX A: QUESTIONNAIRE

The **Primary survey schedule (Questionnaire)** has been included in the below table:

Questionnaire:

Background Information

- Can you please provide your name and your role in the M&A process?
- How many years of experience do you have in M&A? 1.3 What industry sector do you primarily work in?

Experience with Digitalization in M&A

- Have you been involved in any M&A processes that have used digital technologies? If yes, can you please describe these experiences?
- What types of digital technologies were used in these processes?
- What were the perceived benefits of using these digital technologies in the M&A process?
- Were there any challenges or drawbacks associated with using these digital technologies?

Potential for Innovation in M&A

- In your opinion, what are the areas in the M&A process that could benefit most from digital innovation?
- Are there any specific digital technologies that you believe have the potential to transform the M&A process?
- Are there any innovative ideas or approaches related to digitalization in M&A that you have come across recently?

Future of Digitalization in M&A

- How do you see the role of digitalization in M&A evolving in the future?
- What do you think are the key factors that will drive this evolution?
- What do you think are the potential barriers or challenges to further digitalization in M&A?

General Perception

- How would you describe the industry's overall perception towards digitalization in M&A?
- Are there any specific industries or sectors that you believe are leading the way in digitalization in M&A?

Digital Tools and Platforms

- Are there any specific digital tools or platforms that you or your organization have found particularly useful in the M&A process? Can you explain why?
- Do you believe there are gaps in the current market offerings of digital tools for M&A?

Impact of Digitalization

- Can you share any specific instances where digitalization significantly impacted the outcome of an M&A deal?
- How do you think digitalization affects the due diligence process in M&A?

Training and Skills

- What types of skills do you believe are necessary for effectively leveraging digital technologies in M&A?
- Can you comment on the availability and quality of training for these digital tools and platforms in your organization?

Data Security: How do you handle data security concerns when using digital technologies in M&A? 9.2 Can you share your thoughts on the role of regulations and compliance in the digitalization of M&A?.

Change Management

- What challenges, if any, have you faced in terms of change management when implementing digital technologies in M&A processes?
- Can you share any strategies or best practices for managing these changes?

Cost and ROI

- Can you speak to the cost implications of digitization in M&A?
- How do you assess the return on investment (ROI) of digital technologies in M&A?

COVID-19 Impact

- How has the COVID-19 pandemic influenced the use of digital technologies in M&A in your experience?
- Do you believe these changes will persist post-pandemic?

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