

# ARTIFICIAL INTELLIGENCE SERIES – PART II

## How Will AI Transform the M&A Process?

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Rapid advancements in AI are encouraging executives in the Financial Services industry to undertake major changes related to computerization and adapt to new standards of conducting business. The motivation behind implementing AI is straightforward – to outperform human productivity. For instance, AI has already reshaped the traditional action-packed trading floors of major investment banks. Trading departments are becoming smaller and more cost effective while traders are collaborating with IT professionals to train computers to assist in their jobs.

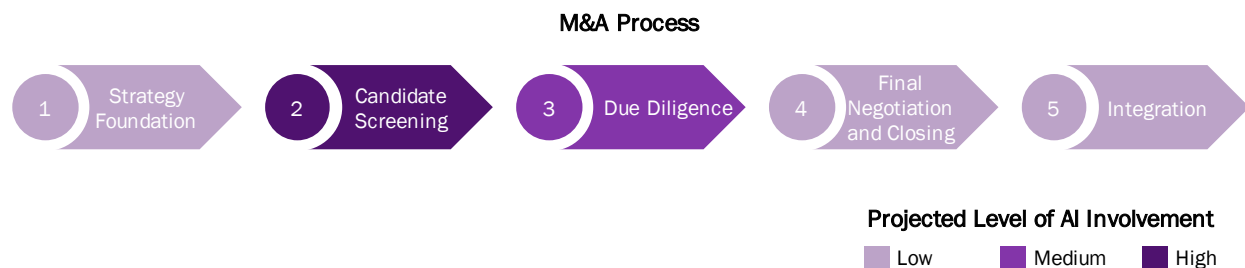
However, the corporate finance function, and specifically the M&A process, has not witnessed much change to date. The effect of AI on the M&A process will vary – AI will likely have a bigger impact on the more programmable and analytical activities within the process.

### UNDERSTANDING THE M&A PROCESS

The M&A process can be broken down into the following activities:

- Strategy Foundation
- Candidate Screening
- Due Diligence
- Final Negotiation and Closing
- Integration

Each stage involves different activities with varying potential for AI involvement.



### STRATEGY FOUNDATION

Effective enterprise M&A strategy needs to fit into a company's overarching corporate strategy and build on the foundations of vision, mission and values.

Ultimately it comes down to the stakeholders' objectives and vision for running a business. The potential for automation is low at this stage - determining the vision and the purpose for M&A strategy to support the aspirations of an executive team is, at the core, a very human activity.

### CANDIDATE SCREENING

Overall, candidate screening is one of the more data-intensive exercises within the M&A process, and is therefore subject to a high level of AI interference.

Based on the M&A objectives, a list of potential target candidates can be prepared by using currently available tools and solutions. These tools can scan databases for relevant information and screen targets using the specified criteria.

More advanced machine learning techniques such as Natural Language Processing (NLP)<sup>1</sup> can potentially be applied to this process in the future. In the future, we may be able to teach computers to interpret the most essential information about the target through its website, MD&A reports, financial statements, social media profiles and other resources to significantly reduce the need for human involvement. For example, NLP could be able to extract core values of the target and see how well they match with the values of the acquiring company.

## DUE DILIGENCE

The Due Diligence stage involves a closer examination of the target for a potential fit. The due diligence process can be split into distinct categories: financial, operational and legal.

- *Financial diligence.* Financial analysis and company valuation are both numerical and largely standardized exercises that can be digitized. Human element may be beneficial when valuation inputs and assumptions related to growth are required which in turn entail an opinion of the future performance of the markets and the company. However, hedge funds and mutual funds have started implementing fully quantitative valuation strategies and we expect it is only a matter of time when M&A professionals will go the same road.<sup>2</sup>
- *Operational and legal examination.* Operational and legal assessments deal with many qualitative factors that ultimately determine the fit between two parties. This stage of examination can be quite challenging to adapt to AI because of the qualitative judgements involved. In certain cases, managers may even need to conduct site visits to evaluate the state of affairs. This stage can be very time consuming and expensive, yet it is vital as it helps identify red flags that can get in the way of completing a deal.

Overall, the potential for AI implementation is high for numerical and standardized assessments, however there are essential human tasks involved in the process.

## FINAL NEGOTIATION AND CLOSING

The process of negotiations is often continuous throughout the transaction and therefore can occur before and during the due diligence stage. However, it is upon the outcome of confirmatory due diligence when the final negotiation and closing begins. This is where humans, and specifically M&A advisors play a big role. The greatest value advisors provide is in managing people's relationships and expectations: bringing firms together, building trust and finding common ground through negotiations. A lot of psychology and mediation is involved in this process, which is largely irreplaceable by machines. To illustrate the significance of managing human behavior, a study titled "Will Robots Take My Job?" estimates the probability of a profession of psychologist being replaced by AI at 0.43%.<sup>3</sup> Psychology plays a big part in a negotiation process which is why the potential for AI implementation for now is low.

## INTEGRATION

Post-merger integration is largely a complex process involving many operational, legal and procedural aspects. Most importantly this process requires change. While AI may be able to assist in creating merger plans, human intervention is required to manage change, especially in areas involving bridging corporate cultures and designing a new organization.

## FINAL THOUGHTS

While there are lots of opportunities for AI implementation in the M&A process, humans are still pertinent to the various activities. AI may increase the speed and efficiency of the M&A process, whereas an input from a professional advisor will continue to add value during strategy formulation,

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<sup>1</sup> <http://searchbusinessanalytics.techtarget.com/definition/natural-language-processing-NLP>

<sup>2</sup> <https://www.ravenpack.com/blog/jpmorgan-valuation-strategies-machine-learning-sentiment/>

<sup>3</sup> <https://willrobotstakemyjob.com/19-3039-psychologists-all-other>

negotiation and closing, and merger integration. After all, the M&A process involves bringing two organizations together – humans are essential in managing other humans and we do not see AI displacing this essential role in the near future.

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