HOW TO MEASURE THE ROI OF CONTRACT INTELLIGENCE?

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Contract review solutions based on natural language understanding – also called contract intelligence solutions – have been shown to cut contract review time by 30 to 80 percent depending on the use case, the current processes in place and the type of solution chosen. How do these time savings translate to Return on Investment (ROI) for a customer? Is it possible to calculate the hard ROI of a contract intelligence implementation? And how do you estimate the value of the soft benefits that intelligent contract analytics brings? This white paper is designed to help buyers evaluate the ROI of contract review solutions before making their final decision.

WHY CONTRACT INTELLIGENCE?

Contract intelligence is the process of automatically extracting and analyzing essential information from legal agreements, insurance policies, financial statements or any other type of documents. Its overall purpose is to increase the operational efficiency of a company processing a large volume of documents.

A well-chosen solution will reduce the time it takes highly skilled, expensive subject matter experts to screen contracts, while delivering more accurate results. With contracts being analyzed more quickly and accurately, the organization spends less money on the review process: this is the hard-dollar impact of contract intelligence.

But the many side benefits should not be overlooked. New customers are more likely to sign a contract they receive quickly, and customer satisfaction and re-engagement are in direct correlation with the responsiveness of a company; subject matter experts spend more time on strategic tasks rather than sifting through huge piles of documents; and the upper management gets quicker and better insights about key contractual parameters that can heavily impact the business.

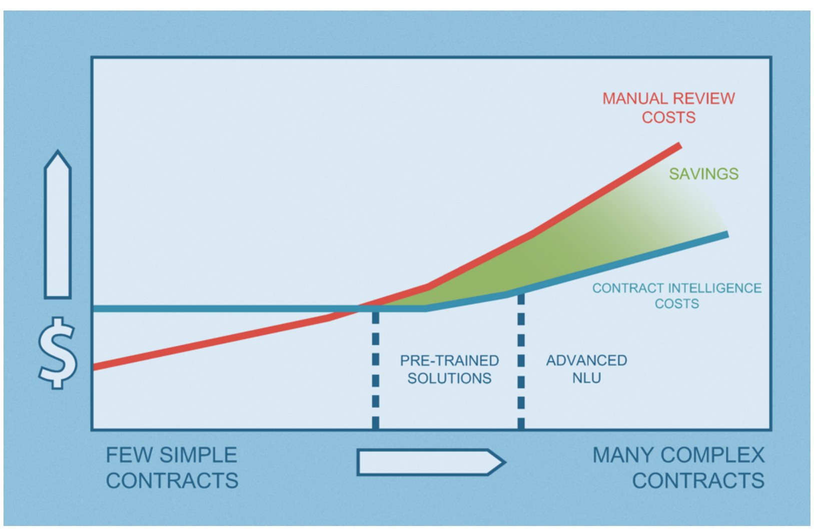
Contract analysis solutions can be bought as stand-alone product or as part of a Contract Lifecycle Management (CLM) system. Having a checklist of the top criteria to look at when selecting a solution is a good idea. Once you have identified a solution that meets your criteria, you should ask about the Return on Investment (ROI). This white paper presents an approach to evaluate it.

EVALUATING THE ROI OF CONTRACT INTELLIGENCE

Since the main goal of contract intelligence is to improve the operational efficiency of an organization, can its impact on an enterprise margins be calculated? Is there a way to estimate the money saved with more efficient processes? This is an essential question to ask your vendor, all the more as determining an appropriate ROI for the investment will help ensure key stakeholder sign-off.

Contract intelligence provides business process improvements for those organizations that need to review and analyze documents on a large scale. Because the uses cases vary so widely, there is no simple tool that can calculate the cost savings and therefore determine the ROI. Also, one needs to distinguish between the hard ROI – how much money will the organization save by implementing an automated contract review solution? – and the soft ROI – can it help indirectly improve margins? What are the qualitative benefits of contract review automation, for example better risk mitigation, better resources allocation, improved knowledge transfer, and more?

The number of documents that must be processed, their average size, as well as the number and type of extractions and inferences have a big impact on the ROI of Contract Intelligence. Ting Wang, Group Director of Marketing Sciences at OMD, notes the challenge when he says, "We have thousands of client and vendor contracts, SOWs, and master services agreements that are currently being managed between finance and legal." But as each organization has different parameters and vendors have different pricing models, there is no rule of thumb to calculate a generic ROI of contract intelligence. This has to be calculated case by case.



Some companies have simple requirements, such as having to review a small number of standard types of contracts. Other companies only deal with contracts they write. These organizations will get good results with standardized, pre-trained tools that are cheaper than more advanced solutions, on the other hand the amount of hours they can save is rather small.

Other organizations have to navigate through a wide range of different document types from third parties, with hundreds of pages each and challenging provisions to interpret. For example, an insurance company requires the system to correctly interpret the sentence "Insured employees are not required to contribute to the cost of the Long-Term Disability coverage" and classify it as "100% employer paid". This requires implementing a system with advanced natural language understanding capacities, which is more expensive than basic contract review software, but since the savings at stake are much greater, the financial benefit of contract intelligence could be higher than in the previous example.

Can this impact be quantified?

One model for evaluating the ROI of a business process improvement is to determine the cost of the current process and calculate the potential direct savings and attempt to quantify, if possible, the indirect benefits. The ROI of contract intelligence on an annual basis can then be calculated with the following formula:

$$\frac{Direct\ Savings + Indirect\ Benefits}{Cost\ of\ Contract\ Intelligence}$$

Direct Savings

To calculate the costs of your current review process, you need first to answer these 3 questions:

1. How many documents are reviewed on an annual basis?
2. On average, how much time does your subject matter expert (SME) spend reviewing a document?
3. What is the average hourly cost of an SME?

The average time for processing a document depends on the size of the document, but also on the number and difficulty of extractions. You may want to create several categories of

contracts, depending on the difficulty of reviewing them, and calculate the ROI for the different contract categories.
Take a company that processes 50K Tier 1 contracts per year – Tier 1 contracts being the easiest documents to review. Each Tier 1 contract requires on average 15 minutes of manual work by an SME whose fully loaded hourly rate is $50. That brings the yearly costs of manually processing these contracts to:

$$50{,}000\ documents\ x\ 0.25\ hours\ x\ \$50/hr\ =\ \$625{,}000\ in\ annual\ costs$$

Depending on the use case, contract intelligence customers typically save between 30% and 80% of the time required to review and analyze documents. In the above example, that means that the direct savings range between:

Lower end (30%):

$$\$625{,}000\ x\ 30\% = \$187{,}500\ in\ annual\ savings$$

Upper end (80%):

$$\$625{,}000\ x\ 80\%\ =\ \$500{,}000\ in\ annual\ savings$$

In this example, it means that the implementation of a contract intelligence solution will enable the company to pull the equivalent of two to five full-time subject matter experts out of the contract review process and reassign them to more sophisticated tasks, making better use of their skills.

Indirect Benefits

Indirect benefits are much harder to quantify but should definitely be considered when evaluating the ROI of contract intelligence. Here is a short list of the indirect benefits customers usually see:

1) **Improved Accuracy**
   Because it is more accurate than manual labor, Contract Intelligence greatly reduces the risk of missing important clauses or misinterpreting provisions. Subject matter experts may overlook two to three clauses for a given number of contracts. Each overlooked clause has a cost associated with it (higher risk for the company, reduced margin, etc.).

One can argue that the accrued accuracy of contract intelligence contributes to indirectly affecting the bottom line. Human accuracy is generally estimated at around 80%, while a good contract intelligence tool reaches about 90% accuracy. For an insurance company, for example, this translates in more accurate quotes and therefore either better margins or more competitive quotes, resulting in a higher probability to close a deal.

2) **Improved resource allocation**
By spending less time reviewing contracts, subject matter experts can dedicate more time to business-critical tasks. While labor costs in corporate accounts remain the same, the value generated by employees is higher: more contracts signed, better terms, lower risks, etc. Companies who heavily rely on outside services for their document review process can reduce their outsourcing cost significantly.

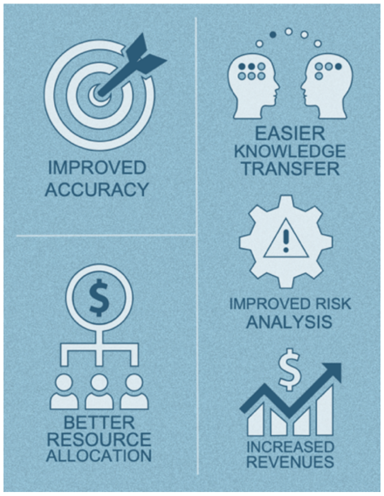
3) **Improved knowledge transfer**
When employees move up the ranks, leave or retire, a contract intelligence solution with trained models helps transfer knowledge about extractions and how to interpret them to new employees.

4) **Better risk analysis & compliance**
Capturing extractions and inferences and exporting them to a business intelligence tool provides an overview of risk and adherence to standard practices. Comparison with standardized contract templates, corporate policies and regulatory requirements ensures compliance and reduces risk.

5) **Increased revenues**
Since contract intelligence delivers faster results than manual work, subject matter experts can process the quotes quicker. For example, the insurance company mentioned above can submit quotes much faster and consequently close more deals. As a rule of thumb, one can say that the smaller the insurance deal, the more important is response time.

Note that the faster response time enabled by automation also positively impacts customer satisfaction.

How can these indirect benefits be quantified?



According to Nucleus Research, quantifying indirect returns requires a structured approach and educated assumptions, testing the validity of estimates against a sample population and projecting a best-case and a worst-case scenario. Based on the case studies the research organization has conducted, Nucleus estimates that, on average, [indirect benefits account for half of technology ROI](). To be conservative, we will assume that indirect benefits are only 1/3 of total benefits or 50% of direct benefits in our ROI calculation.

Let's return to our example company that processes 50K contracts every year. In our lower end scenario (30%), the direct savings were estimated at $187.5K, while the upper end scenario brought the estimated direct savings to $500K. Applying Nucleus' assumption to these figures gives us the following estimated indirect benefits on an annual basis:

Lower end (30%):

$$\$187{,}500 \ x\ 50\% = \$93{,}750 \ \textit{in annual savings}$$

Upper end (80%):

$$\$500{,}000 \ x\ 50\% \ = \ \$250{,}000 \ \textit{in annual savings}$$

Cost of Contract Intelligence

There are different pricing models for contract review solutions, either document- or user based. Infrastructure cost, while minimal, should also be considered. You will also need to take the model training time and cost, which may vary with each solution, into consideration. This is a one-time expense and should be amortized over the life of the project (e.g., three years).

Let's assume the annual subscription for a contract intelligence solution is $230K for 50K documents per year and requires $20 for initial training and consulting (to be amortized over 3 years).

Total annual costs of contract intelligence:

$$\$230{,}000 + \frac{\$20{,}000}{3} = \$236{,}667\ \mathit{in\ annual\ costs}$$

Evaluating the ROI of Contract Intelligence

Justifying the implementation of new solution requires an evaluation of the ROI. With the direct savings, indirect benefits and cost of contract intelligence, the ROI of contract intelligence can be estimated based on business process improvement.

Let's go back now to our original ROI formula and integrate all the variables we obtained:

$$\frac{Direct\ Savings\ +\ Indirect\ Benefits}{Cost\ of\ Contract\ Intelligence}$$

For our company processing 50k contracts per year, this means a yearly ROI ranging between:

Lower end (30%):

> $Direct\ Savings$ = \$187,500
> $Indirect\ Benefits$ = \$93,750
> $Total\ Savings$ = \$281,750

$$ROI = \frac{\$281{,}750}{\$236{,}667} = \ 119\%\ per\ year$$

Upper end (80%):

> $Direct\ Savings$ = \$500,000
> $Indirect\ Benefits$ = \$250,000
> $Total\ Savings$ = \$750,000

$$ROI = \frac{\$750{,}000}{\$236{,}667} = 317\%\ per\ year$$

CONCLUSION

When calculating the ROI of a contract intelligence solution, it is essential to consider both the direct savings induced by automation and the multiple indirect benefits such as increased efficiency. In fact, experts acknowledge that a software that improves productivity generates a higher proportion of indirect benefits than supply chain software, for example.

It is also important to be aware that the ROI of a contract review solution greatly depends on the use case and company environment. The type and number of documents that must be analyzed on an annual basis, their level of complexity, but also the labor costs associated with the manual review, the degree of experience of your subject matter experts, all that will affect the results.

If you are interested in learning more about how to calculate the ROI of contract intelligence for your specific use case, please contact us at: sales@cortical.io