

# Engineering Visual Contracts: Using If-Then Thinking to Develop Behavioral Drivers for Imaging

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**Abstract.** The UWA Comic Contracting project has had a number of successful implementations of their visual comic book contracts, and this paper will focus on one of the key interdisciplinary approaches, namely the engineering thinking that is developed to group behavioral drivers, and create legal images for contracts. The paper will draw from a number of examples, but will primarily focus on the Aurecon employment contract, which is now in its second year, and rolled out across a number of jurisdictions. The paper will touch on some of the key impact data from the Aurecon contract

**Keywords:** visual contracts, comic contracting, if-then programming, relational contracting, contract design

## Introduction

If lawyers are asked to describe a profession with which we see ourselves having little in common, we may nominate engineers as our first choice, simply because they are trained to think in pragmatic terms and pathways that we are not. However, in the grand scheme of innovation and rethinking approaches to our profession, alternative thinking and multi-disciplinary approaches can be just the ticket. To put it bluntly, law must innovate. With the imminent - and arguably current - arrival of legal tech to analyse law and even make decisions,<sup>3</sup> many will agree that this is an opportunity for the legal industry to reinvent its interface and user friendliness to provide the services which tech cannot. A human interface with values and understanding.

In 2016, at a Group of Eight University collaboration meeting on research supervision in Brisbane, an Engineer and a Lawyer met and started discussing new ways to form legal contracts. With the lawyer's background in proactive thinking<sup>4</sup> and legal design,<sup>5</sup> and the engineer's need for a simple yet effective contract that could reach engineering

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<sup>3</sup> For a recent article on the potential of legal tech in decision making, see Scherer, Maxi. 'Artificial Intelligence and Legal Decision-Making: The Wide Open?' *Journal of International Arbitration* 36.5 (2019): 539–574.

<sup>4</sup> For more on the Scandinavian pro-active movement and the Pro-Active Think Tank see <https://www.iaccm.com/gp/proactive>.

<sup>5</sup> Legal Design has been one of the cornerstones of the reinvention of contract law. For a broader seminal introduction, see Passera, Stefania. *Beyond the Wall of Contract Text*. Aalto University, 2017.

students and change their behaviour regarding non-disclosure, something very different was inadvertently started. By focusing on changing behaviour, rather than prioritising the need for the creation of a binding document that could serve as a potential punitive instrument, we started doing things very differently to the standard approach to contract design. The first result of our unusual collaboration was a simple non-disclosure comic strip, shown in Figure 1.



Figure 1: The University of Western Australia (UWA) Makers “NDA”. A very simple comic strip, explaining the need to stay silent about a confidential project, while encouraging collaboration to solve the problems and illustrating some crude potential benefits to incentivise the behaviour.

This strip was created for UWA Makers,<sup>6</sup> a teaching initiative at the UWA School of Engineering where student work with industry to solve real problems. The UWA Makers is a collaborative space with students, academic and industry users who share knowledge and expertise openly to rapidly innovate and solve problem. However, many of the members did not understand the obligations of an NDA, and the restrictions imposed by the NDA inevitably slowed progress and stifled innovation. Previous writing has elaborated on how this UWA Makers NDA initiative started based on a real need.<sup>7</sup> And subsequent projects have clearly demonstrated the real need in industry to reimagine contracts as manuals for a functioning relationship in business, rather than tools drafted for lawyers. Since this simple strip was drawn up, we have attracted major industry funding, created a number of contracts in comic form, and been nominated for awards, and gained media coverage we never imagined.<sup>8</sup> And why the fuss? Simply this: the comic contracts become enabling tools rather than roadblocks, changing the focus of the contracts to drive behaviour and avoid conflict. The comic contract becomes a useful and user-friendly manual, expressing the ethos of the organisation through illustration, simplification and plain language. All well-known tools of the emerging trend of designing legal output more palatably. But we also innovated our approach by focusing on behavioural drivers using simple “If-Then” thinking, an algorithmic decision-making approach borrowed from most programming languages. We will explain this below, but first we provide some context for the Aurecon project.

<sup>6</sup> UWA Makers Wiki. *UWA Makers Wiki*, <https://wiki.uwamakers.com/> (accessed 9 December 2019).

<sup>7</sup> Keating, Adrian and Andersen, Camilla B. “A Graphic Contract: Taking Visualisation in Contracting a Step Further.” *Journal of Strategic Contracting and Negotiation* 2.1-2 (2016): 10-18.

<sup>8</sup> For more on the awards and media attracted by the project, see <https://www.comicbookcontracts.com/media-home-page>.

## 1. The Aurecon Project

Our first sponsored research in the field of comic contracting came shortly after the media got wind of our work for the UWA Makers in the nationwide ABC Law Report broadcast from Oct 2016. After implementation across Australia, and now South Africa and New Zealand, it has proven to be a very useful new platform for employment contracting, and it can now be found in full at the Comic Contracting Website at <https://www.comicbookcontracts.com/aurecon-contract> - we do encourage you to have a look at the contract itself as a companion to parts of this article.

In hindsight, we were incredibly fortunate to attract the right kind of sponsor. John McGuire from Aurecon - then the Chief Innovation Officer - wanted us to create contracts for all new employees of this large organisation which not only made onboarding and contractual obligations for employees simpler, but which *communicated the right spirit* of the organization. In early meetings, we determined the need to rethink the layout of the contract and base the contract on behavioural drivers.

In this project, as well as in subsequent ones, we identified four main goals:

- 1) Identifying/mapping problem areas or “pain points” in the relationship the contract governs
- 2) Identifying/mapping behavioural drivers to ensure better engagement
- 3) Ensuring clear communication of duties etc for better comprehension, and
- 4) Enhancing the perception of the parties through an innovative collaborative experience, like expressing values as set out above, fuelling behaviour, which is more collaborative.

We arrived at this process through a number of conversations attempting to abandon previous legal method, and simply focusing on a pragmatic simplification and approach. Arguably somewhat naively – but entirely divorced of any conscious process, with the exception of building on concept of proactive law and valued based contracting (as explained below).

The three areas of engagement, comprehension and perception form the basis of our longitudinal study of the impact of our project here at UWA, and we have been testing focus groups as well as users of both text based and comic contract based contracts on these parameters using psychometric surveys for almost 2 years now. Our initial research results (as touched on later in this paper) indicate that the contracts we have developed have improved the scores in all three areas. And perhaps, more importantly, research into our projects as well as those of others (notably Robert de Rooy in South Africa, whose company Creative Contracts caters

for mostly illiterate workers with comic contracts)<sup>9</sup> have shown a complete elimination of disputes, something we are currently analysing as part of a bigger impact project. As the project continues to grow in size and scope, this impressive statistic may not last - but we are confident the project will ensure a significant reduction in disputes across industries engaging in this process compared to current practice.

While one of our key goals above, namely comprehension is largely ensured with plain language and clear images which also maintain audience attention, the focus of this paper is the increased engagement in the contracting process and the improved perception which our contracts are documented to have. We credit both of these largely to our focus on developing behavioural drivers with If-Then thinking, mapped across the pain points which have been found to need addressing.

## 2. Values – a Quick Example

On the Aurecon project, one of the most important decisions was the inclusion of values in the contracting process. The values of the company, labelled the Aurecon Principles, are set out very clearly, at the start of the (short) comic contract in the spirit of clearly communicating relational contracting values. Part of the Aurecon story-telling narrative is shown in Figure 2.

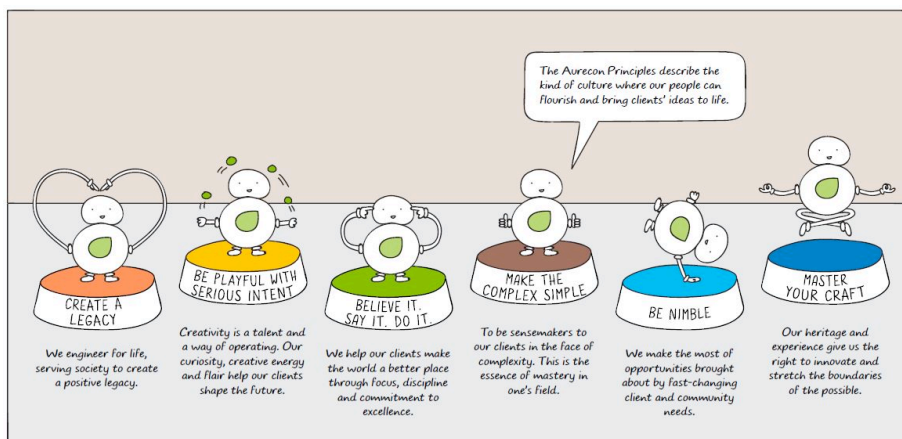


Figure 2: Extract from the Aurecon contract identifying 6 core principles which define the culture at Aurecon

Amongst these, the astute reader may note, was two important ones which formed the basis of our brief: “Playful with Serious Intent” and “Make the Complex Simple”. But all values of the company form the spirit of an introduction to who they are, and what kind of employer they will be, in the context of the reimagining of the employment contract. This deliberate - or conscious - focus on values in the relation can attract many labels in legal innovation. One of our favourites is J Kim Wrights label of “Conscious Contracts” which ensures focus on the values, the relationship and the things which are not always communicated.<sup>10</sup> We strained to

<sup>9</sup> For a sample of Robert de Rooy's work please see [www.creative-contracts.com](http://www.creative-contracts.com).

<sup>10</sup> See <https://jkimwright.com/conscious-contracts/> for more information about Conscious Contracts, which works with both relational contracting and values based contracting.

ensure a very conscious approach to the values of both employer and employee. In doing our deliberate inclusion of the values, we realised that we were - once again - employing a simple if-then approach. IF we want prospective employees to understand the nature of the employer and the spirit of the relationship (which was important to the sponsor) THEN we needed to include the employer's values clearly, to drive an understanding of the employers' priorities. From there it was as simple second step to also include the characteristics of the employee. The characteristics which future employees are tested against are set out on page 2 of the contract and include characteristics like resourcefulness and commercial sense and many others. The quiz is short, and easy, and is taken before the contract can be completed.<sup>11</sup> This drives two important things:

- 1) The quiz allows the employer to identify important characteristics, which they use in team building, and
- 2) Perhaps more importantly for the contract design, the quiz imparts very clearly to the employee that A) specific characteristics are encouraged and welcomed, and B) the employer cares about the employee's values as well, it is not a one way street.

One way to think about the inclusion of values in this way is to consider a values-based approach as a behavioural driver to engage with a more rounded view, or perception of the employee/employer relationship. And if the statistics are to be believed, testing indicates that it is working as a tool to allow employees to perceive the employer better and engage in the process more honestly.

The decision to do this was very driven by the challenge of communicating the spirit of a relationship. We asked ourselves "If" we want a better mutual understanding, "Then" what will drive that? We will develop more examples later in this paper, but for now we need to stop and examine the simplification process and the behavioral drivers/If-Then process. "If" we don't explain this clearly before we continue analysing the contract, "Then" much meaning may be lost.

### **3. Simplification, risk and If-Then**

In the Aurecon project - as in others - a great deal of simplification took place. Much of this was based on the pragmatic need to reduce the text to the bare essentials to keep it manageable in comic form. But the decision on what to cut was driven by the utility of the words, and the degree to which they actually meant something in relation to the defined "pain points" identified as explained above. Is this a real problem in the history of these relations? Does it cater to the 99% of contract relationships? Or is it too unusual (rare) to need inclusion? Is there a real risk? If so - is it worth catering too or very distinct? Conversations were had with the personnel at Aurecon around statistic of problems arising in the past, and which every-day issues would come up. From the history of the company and its self-identified history of actual issue, we were able to identify a number of clauses which could safely be eliminated.

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<sup>11</sup> The quiz was originally developed as a game Aurecon used when employing graduates.

Another question which came up, and has done in other contracts, is “would you ever actually enforce this”? Once a contract is storyboarded and laid out, often in the context of drawing a more friendly relationship which may also include evocative images of collaboration, it has been interesting to see how even a cut-throat transactional lawyer may balk at a particularly nasty clause which may have seemed unobtrusive in the text based document. A values-based analysis of the relationship, with collaboration at the forefront, will identify the clauses that “are not nice” and can easily find the proverbial cutting room floor. Of course, this does represent a potential risk, but since these clauses are typically not upheld anyway, there is not much loss (And an innovative legal designing lawyer must be able to think in a less risk averse manner!).

But are we losing too much by eliminating so many words? What is the function of words anyway? Proto-writing based on ideographic writing was used centuries before the more complex hieroglyphic forms. Without a formal language, these symbolic representations allowed concepts to be conveyed and recorded, with an exceptional longevity in their ability to convey a message. While we pride ourselves on the progress we have made through the development of the written word, we are less keen to see the barriers arising from the development of a multitude of world languages with their embedded, implied cultural meaning and the minutia with which any one of them can be used to obscure a simple concept. Contract law has used the tools we have developed over the last few thousand years to write but not to communicate ideas clearly. From the perspective of the non-lawyer in our team, the dependence on the written word here is not advancing contractual understanding but crippling it. Our position to return to a symbolic representation then should not be seen as losing information but recasting it into a more fundamental form. We need to accept that words do not always make communication easier, and generally not when talking about written contracts. Yes, a symbolic form has reduced complexity, but perhaps the mistake has been equating words with a sense of protection and understanding. Do you really understand the terms and conditions of your smart-phone?

In 1973, Ernst Friedrich Schumacher stated in an essay *Small is Beautiful*: “Any intelligent fool can make things bigger, more complex, and more violent. It takes a touch of genius—and a lot of courage to move in the opposite direction”.<sup>12</sup> We know that a re-examination of contractual law to achieve a +90% reduction of wordy terms and conditions is largely considered heresy by the mainstream legal profession. However, simplifying contracts with a process that instead identifies core risks to better engage all parties and facilitate a behavioral change to achieve the ultimate goal of the contract is considered by the authors as far more conducive to achieving success in these formalised relationships. Figure 3 provides a graphical illustration of how we believe the ability to make decisions strongly depends on the quantity of information (this is a re-interpretation of information theory<sup>13</sup> which attempts to measure the information that could be potential conveyed in a message).

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<sup>12</sup> Schumacher, Ernst F. “Small is Beautiful.” *The Radical Humanist* 37.5 (1973): 22.

<sup>13</sup> Shannon, Claude E. “A Mathematical Theory of Communication.” *Bell System Technical Journal* 27.3 (1948): 379-423.

Having too little or too much information available we are unable to make appropriate decisions. There is a sweet-spot, an optimum that allows the best decisions to be made based on the best (most important) information available. Miller<sup>14</sup> in his famous paper suggested the optimum number of items which could be held in short term memory was  $7 \pm 2$ , providing at least an initial range for the number of items to focus on in conveying important information. Contracts are written with the mistaken belief that including all information and all possibilities (that is providing all the data) allows the best, informed decisions. Anyone who has read the standard terms and conditions for a bank account knows this is not true. We are drowning in “big-data”, with more than 5 exabytes ( $10^{18}$  bytes) of data created in the world every 2 days in 2013, with this amount doubling every 2 years.<sup>15</sup> This large volume of data is debilitating without the use of advanced analytics, high speed processing and machine learning to help make decisions on the collected data. That’s fine for a large computer platform but not for individuals. While contracts don’t physically require an exabyte, on the scale of human capacity for interpretation and analysis, the volume of text, the growing number of contracts we are faced with and our limited ability to search for the personally relevant details, makes many *feel like* contracts contain this volume data. Rather than requiring we all turn to supercomputers for help, an alternative approach to constructing contracts is required that helps fulfil their ultimate purpose.

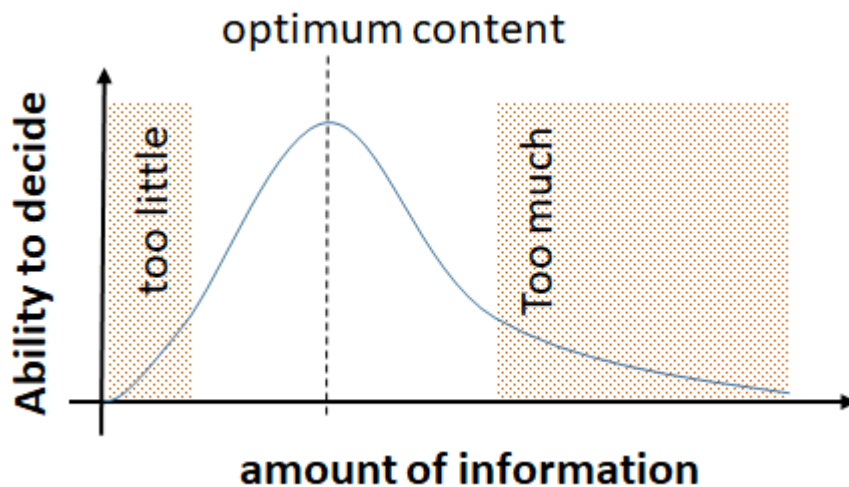


Figure 3: Illustration of how the ability to decide is affected by the amount of information available, reinterpreted from information theory. Too little or too much restricts the ability to make appropriate decisions - achieving the optimum content in a document or contract requires a detailed, methodical and traceable approach.

A typical engineering risk assessment consists of identifying an activity and the associated consequences (C), likelihood (L) and exposure (E) to a hazard associated with that activity, where we define:

<sup>14</sup> Miller, George A. "The magical number seven, plus or minus two: Some limits on our capacity for processing information." *Psychological Review* 63.2 (1956): 81-97.

<sup>15</sup> Sagiroglu, S and Sinanc, D. "Big data: A review." in *2013 International Conference on Collaboration Technologies and Systems (CTS)*. Ed. Geoffrey Fox and Waleed W. Smari. Institute of Electrical and Electronics Engineers, 2013. 42-47, see also [https://research-information.bris.ac.uk/en/publications/sensomax\(747e6268-38d1-4f81-9fa8-c8fad785be2e\)/export.html](https://research-information.bris.ac.uk/en/publications/sensomax(747e6268-38d1-4f81-9fa8-c8fad785be2e)/export.html)

- Consequences as: the most probable outcome of exposure to the hazard through an activity (range 1-100)
- Likelihood as: the chance (probability or rate of occurrence) that exposure to the hazard will result in the identified consequence (range 0-10)
- Exposure as: The regularity of the activity (range 0-10)

We can then create a risk (R) assessment metric given by the simple relationship  $R=C*L*E$ . Risk ratings may be categorised as:

Risk ( $R=C*L*E$ )	Rating
>600	Very High
300-600	High
90-300	Medium
<90	Low

F  
or  
ex  
a  
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if the activity is working of a roof and the hazard is falling off, then for a builder who cuts corners the consequence may be 80, the likelihood may be 1 and the exposure 5 giving a risk  $R=400$ , so that the risk here is considered High. However, with proper safety equipment and training the likelihood may drop to 0.1, so that the risk  $R=40$ , considered a low risk activity. Quantification of risk<sup>16</sup> requires more details than given here, but the essential elements involve using experts to identify, assess and assign quantitative values to the consequence, likelihood and exposure components. It is this process we believe would allow considerable reduction in contract length. By incorporating this process during the formation of the contracts, we believe the most important “high” and “very high” risks should be identified and incorporated into the communication, education and protection that should be provided by the contract. Clearly leaving out other risks exposes both parties to some degree of unidentified risk, however where an overly-lengthy document is used to protect all risks but not read and understood by both parties, the risk still exists - worse still, the “high” and “very high” risks have been obscured.

Our approach can work directly for new contracts, but many contracts are in need of an overhaul and we need a methodical approach to re-render such contracts. For this we turn to the concept of conditional statements and a brief tour of computer languages. Most computer languages (C, Pascal, Fortran, Basic, Python, just to name a few) include some statement that allows different paths of code to be executed, and follow the general form:

<sup>16</sup> Fine, William T. “Mathematical Evaluation for Controlling Hazards.” *Journal of Safety Research* 3.4 (1971): 157-166; Kinney, Gilbert F and Wiruth, AD. *Practical Risk analysis for Safety Management*. China Lake ; California : Naval Weapons Center, 1976. from <https://trid.trb.org/view/116178>



**If {Conditional Statement}  
Then {Action1 to be taken if True}  
Else {Action to be taken if False}**

Importantly the Conditional statements above can only be True or False, rather than allowing a set or continuum of possible conditions. It is possible to have nested if-then or similar statements (sometimes called Switch statements) which allow a finite set of conditions to be valid for the Conditional Statements (allowing it to evaluate a set of values), but importantly a continuum of conditions is not permitted. As such this form is useful to consider when analysing legal documents as it allows us to reduce the statements into binary conditional statements which are either True or False. Subsequently, we can then understand the action required in each case. By creating a set of conditional statements which start at a high level we can often see connections with clauses in a contract that are covered by an earlier clause but include some finer nuances. In reviewing several contracts using this approach, we found that in most cases these finer clauses arose from either:

- 1) Specific instances that results in one party wanting to protect itself from similar (but rare) events in the future;
- 2) Perceived hazards that one party wants to avoid.

In most cases, such clauses represent low risk activities as would be defined through a risk assessment process. For example, some events would have such a low likelihood of occurrence that their inclusion represents a distraction from the more likely, and potentially more risky activities. Obscuring important high-risk activities by the inclusion of numerous, potentially frivolous low risk activities could raise the possibility that the contract is considered misleading. Chaikin<sup>17</sup> considered misleading or deceptive conduct of banks if it leads a customer into error, inserts irrelevant details or fails to reveal relevant facts. Where one party wants to regulate the consequences of low risk activities which may have not been originally included, the risk assessment would need to be revisited, increasing the metric associated with those consequences. Given the need to limit the total number of risks in the contract so as to be within the sweat spot indicated by Figure 3 (nominally  $7 \pm 2$  for the key risks as suggested by Miller),<sup>14</sup> this may result in higher risk activities not being included. We believe a rigorous, traceable risk-assessment conducted by an organisation (like a bank) provides it with processes which can not only be repeated but which can be justified through any external auditing process.

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<sup>17</sup> Chaikin, David. "A Critical Examination of How Contract Law Is Used by Financial Institutions Operating in Multiple Jurisdictions." *Melbourne University Law Review* 34.1 (2010): 34-68.

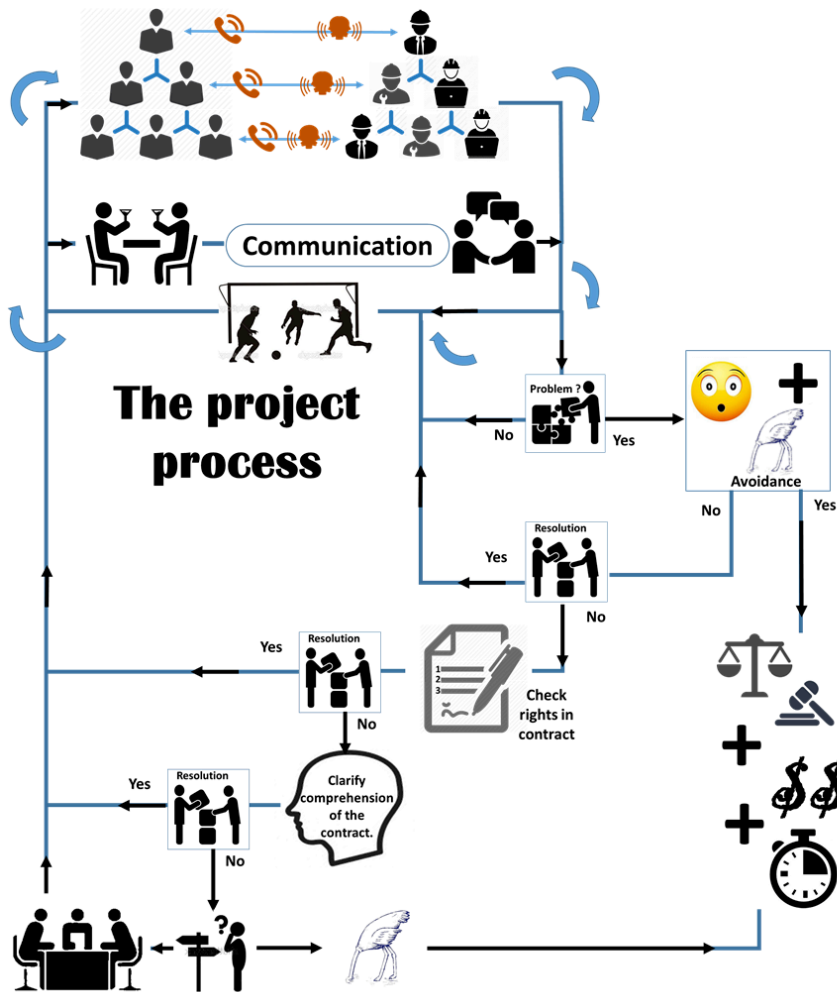


Figure 4: Illustration of the application of the if-then flow process to how a project should work. The ultimate goal is to stay in the topmost area where communication drives the project. It is where problems occur that we need to decide how we navigate the resolution process.

Once this form of risk assessment and contract simplification has been performed, we still need a method to adequately identify the risks to both parties and drive change to reduce risks. In effect the contract becomes a document that informs and educates to best achieve the protections that it purports to provide. Figure 4 illustrates a simple If-Then approach to achieving success in a project. If we identify clear lines of communication as key to success and acknowledge this communication can arise during transitional business and well as informal discussion, then we strive to drive behaviour toward the top of Figure 4. The litmus test of any process or organisation is how it deals with problems as indicated in the flow chart. Where problems arise, the desired path is identification, investigation (checking rights), seeking clarification and discussion as the road to success. All other paths eventually lead to legal intervention resulting in time and cost blow out to a project. We believe a dissection of a contract or a process via an If-Then that undergoes a risk assessment process as previously described is fundamental to achieving a strong contract that drives behavioural success for all stakeholders.

#### 4. Other Aurecon Examples

We will examine our process through other examples in the development of a comic contract in order to explore this If-Then thinking and the design processes.

##### 4.1. Timesheets and inclusions

The comic contract does not only simplify, it also adds details where the analysis of “pain points” (as explained above) revealed more information was needed. One such example is the reminder in the contract to fill out timesheets, and their importance for billing and salaries. Initially when we were auditing for disputes, problems and possible issues in the employment relationship, Aurecon reported a practical issue with fresh graduates not completing timesheets with regularity. The existing contracts did not mention this specifically, but the HR managers were experiencing issues over late timesheets and delayed billing as a direct result.

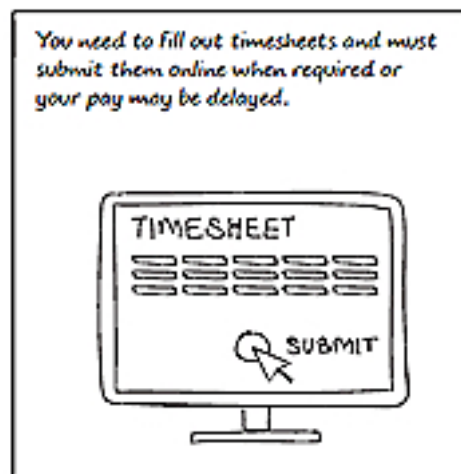


Figure 5: Illustration of the need for timesheets and the implications where they are not completed in order to drive behavioral change through understanding

We asked ourselves, in collaboration with the sponsors (i.e. the prospective employers): What information is needed? What behavior is desired? And how is this behaviour best incentivised? It seemed that the graduates were failing to fill in timesheets on time, largely as the importance was not clear to them. So, we decided to include this, with a clear explanation of why it is important, and a clear incentivisation that overtime cannot be paid as a matter of procedure until the timesheet detailing it are filed. Not a threat - but an explanation of process. The importance and incentive, and clear communication of it, is now included in the comic contract as shown in Figure 5. Feedback from the HR department, 2 years after rolling out, has indicated the problem has greatly diminished. This could have been addressed in training outside the contract itself, but by having the driver strongly and clearly placed in the minimal contract itself, the significance is flagged, and the results are palatable. This was a clear example of a behavioural driver addressing a potential issue of comprehension of a rule and accepting its significance. But the process also works for other challenges.

## 5. Basic grouping of behaviours: Communication and Collaboration

Where a “legalese” text based contract focuses on establishing clauses that can be enforced, the whole structure of the Aurecon contract is based on grouping specific behaviours which make sense in the daily context of the job, so the contract is a usable manual for the relationship. One example of this is the way we grouped all topics related to communication together on a single page of the contract as illustrated in Figure 6. Aurecon identified communication as one of the key concerns in their workplace, which became a key behavioural driver our team needed to embed into the comic contract. We reasoned that “If” we wanted employees to think carefully about communication, “Then” it needed to be addressed clearly and separately.

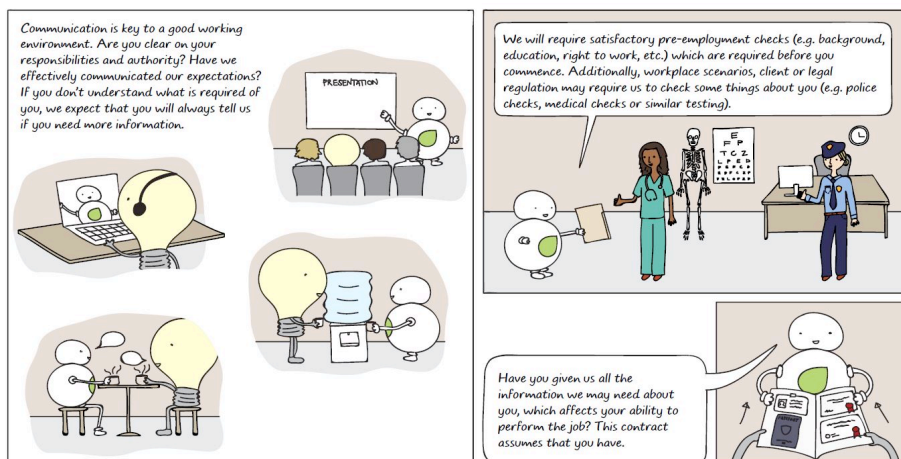


Figure 6: (left) Illustration of responsibilities and the need for clear lines of communication, (right-top) the need for pre-employment checks and (right-bottom) the need for full disclosure.

As Figure 6 indicates, the concept focuses on different forms of communication in the workplace, ensuring it is illustrated as well as textually addressed through speech bubbles. What you will note it that the words express the need to communicate but only the images show how this is done. So instead of different legal clauses in a contract which had something to do with communication, a blanket approach was taken to outline all communications. Workplace communication can be formal, it can be informal, it can be around the coffee, over the water cooler. Moreover, Aurecon has a right to expect certain information from the employee around medical history, police checks, and other relevant information required by law. In a single page a complete statement expressing the culture and expectations of clear lines of communication is presented. As a result, company communications are reported as improved, interestingly often with visual aids now being used internally to complement understanding. Aurecon are reporting that financial reports and inter-office communications are now being illustrated as a standard

part of communication.<sup>18</sup> A strong example of how culture can be formed and that the clarity of the visualization in the contract (initially only seen by new employees) is diffusing through other areas of the company.

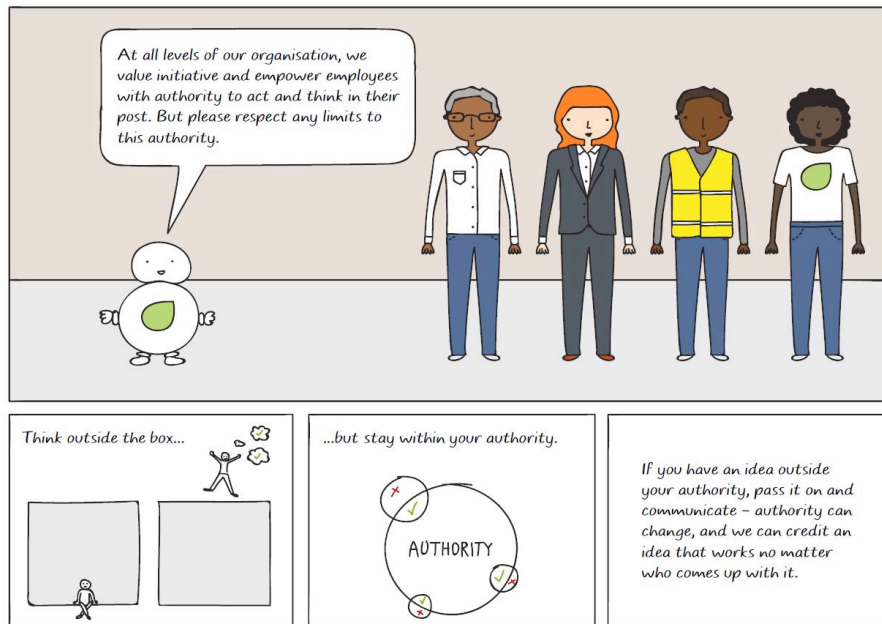


Figure 7: Illustration discussing taking onboard individual leadership while respecting the chain of command. There is a strong desire to encourage innovation and ideas but the cohesiveness of the organisation needs to be respected and maintained.

A related example was the key driver to emphasize innovation in the workplace. Unsurprisingly, as the entire project was born of the need to innovate, this quality itself was one which the sponsors asked us to place a high emphasis on. But this behavioral driver was trickier to express than communication, as it needed to be balanced against a very real need to respect the limitations of the authority of the employment position. Innovation is valued and celebrated across all levels of Aurecon, and it was central to them to empower employees to balance initiative and innovation with respect. This balancing act was difficult to signal clearly: Aurecon want employees to think outside the box because that is the type of organisation they are, in the eyes of media, clients and other organisations. Innovation is the expectation, and Aurecon want it. However, employees must also respect authority to ensure pursuit of strategic goals and management plans. To address this one, we thought “If” we want people to innovate, how do we delimit the right way to do this? Discussions around this challenge resulted in a simple diagram as shown in Figure 7.

The If-Then concept here was defining the limits of the invitation to innovate as one which concerned itself with authority. The mixed message “we want innovation, but we don’t want you exceeding your authority” essentially boiled down to one of collaboration - and not innovation, which is what the heading in Figure 7 ultimately became. So, communicate, as above, and talk to your manager(s). By identifying the “innovation” with

<sup>18</sup> See McGuire, John and Andersen, Camilla. “Improving Aurecon’s Employment Contracts through Visualisation.” University of Western Australia Law Review (forthcoming).

“Collaboration” it sends the right message about innovation in the context of a functioning working environment with others.

## 6. Probation and Problems - Images and Drivers

In creating the Aurecon contract, we endeavoured to create a very engaging contract. A significant effort went into designing the images and processes to promote the idea of friendliness and the non-adversarial nature of this relational contract. That does not mean, however, that we chose to ignore challenging discussions that could become problematic.

The first of these challenging discussions was probation. The need to explain to prospective new hires that they were being assessed on the job, without making them feel vulnerable, meant developing both language and images which accentuated that this would be in both parties’ interests. Here, the driver was changed slightly from one of comprehension to one of perception. The challenge was to make something that can be perceived as unfriendly more palatable, by contextualising it differently in order to express a more positive value. To drive the change in this perception, we aimed to explain the mutual interest in ensuring a good fit, rather than feeding the otherwise prevalent view that probation is about living up to employers’ standards, as illustrated in Figure 8. As a suitable image, the puzzle piece as a metaphor for the “good fit” came in handy, but so did the assurances that there is goodwill on both sides.

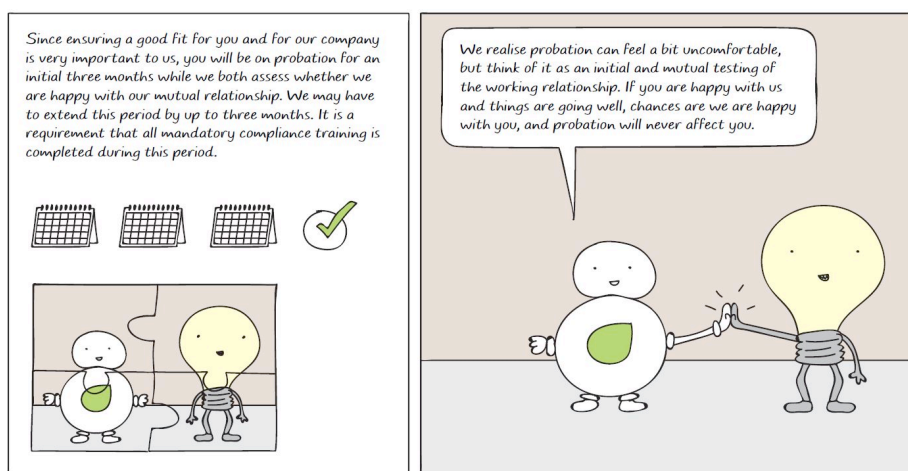


Figure 8: Illustration discussing probation which can be a difficult topic as it can make the employee feel they are not on sure footing. The aim was to show that this was in both parties’ interest.

We also believed that clearly expressing this potential discomfort would drive a better perception. Interestingly, in qualitative feedback, the decision to communicate the company’s awareness of the potential for discomfort in the arrangement upfront, as illustrated in Figure 8 (right panel), has been reported to reduce the anxiety which some new employees feel about being on probation. This reduced anxiety arises we believe from clearly acknowledging the nature of this arrangement. If the relationship is a good fit, then everything is “high-five, let’s go forward.”

We also had to face the termination aspects of a contract and initially struggled to make this a friendly illustration. Preliminary illustrations

likened it to a prenuptial agreement for wedding vows, but we soon realised that in today's environment, no one is expecting to stay with one employer for 50 years and get the proverbial gold watch. In modern corporate culture, the set of drivers around loyalty has evolved greatly. So, instead, we likened it to a joint train journey as shown in Figure 9, where one party may choose to disembark and go in a different direction at any time. The inspiration for this was the London underground; a fitting metaphor for a good relationship that gets both employee and the company to the right destination. Prior to coming together the company and the employee are on quite separate paths, but they travel together for a while on the same journey collaboratively, possibly one day parting ways with no harm done.

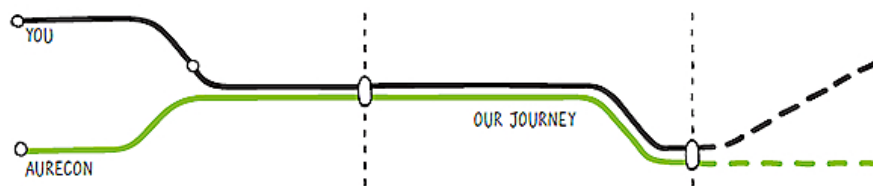


Figure 9: Illustration discussing exit strategies where the employment did not work out - this process is likened to a train track, where the path diverges so that everyone can end up at their correct destination.

A more difficult challenge was to advise on the process when things work out very badly. As an aside, in striving for a friendly Aurecon avatar, we made a number of visual decisions in the design. One such decision was the subliminal one to design a friendly avatar from Aurecon which is never – as you may have noted – larger than the employee. However, in dealing with the prospect of serious misconduct we advertised very strongly in visual terms that this would be upsetting to the employer, and so the friendly avatar turns very red in the face and grows larger than the image of the employee. Not to be threatening, but to remind the employee that the employer strives to be friendly but still has rights. This has worked well. A friendly avatar is an important design decision, but a reminder that the friendly avatar will not put up with just anything has not harmed the perception of the employer, according to the incoming statistics in the longitudinal study. “If” you transgress seriously, “Then” your employer will not keep being friendly.

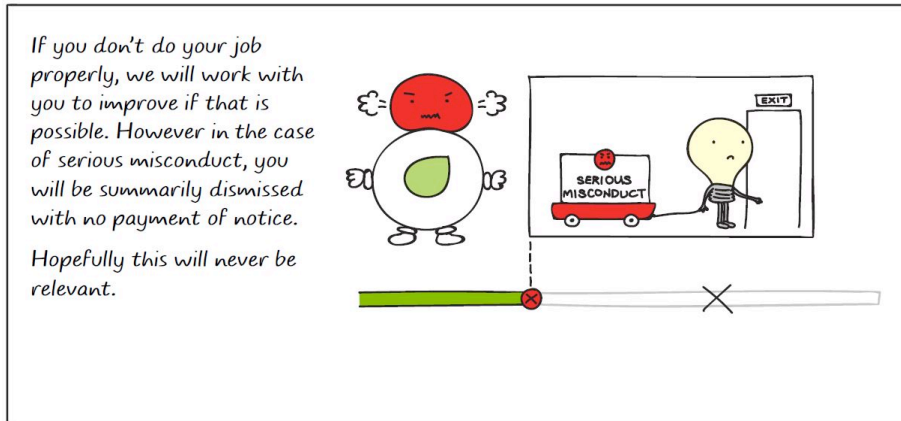


Figure 10: Illustration showing the upsetting effect of employee misconduct on our friendly avatar (employer). Building the concept of high ethical standards into the employment contract immediately established the ethos of the employment environment.

## 7. Preliminary Data

As this process has been a research project, it has been subject to rigorous testing and psychometric evaluation. The statistics and data can be found in detail in other publications currently underway, including publications by other members of the Comic Contracting team, but in essence the findings at the time of writing indicate that across all three major categories (comprehension, engagement and perception) under investigation, there has been significantly better scores on the comic based contract in comparison to traditional (text only) contracts. Both qualitative and quantitative feedback suggests that the comic contract version of the contract, when compared to a study of the text-based version, has overall better perception, understanding and engagement. All quantified feedback from comic book sampling had mean scores that were significantly higher than those of the text-based contract. A forthcoming paper will delve deeper into the data sets and the sampling, but preliminary data reveals that overall, the total score<sup>19</sup> for comic contracts was significantly higher than that of the text-based contracts. The consistent appreciation of these contracts in terms of ease of understanding, absence of legal services involvement in the employment process, and – perhaps most importantly – the lack of any negative feedback, is extremely promising. Challenges include the (slightly amusing) experience during our initial roll out where a bank asked for a letter confirming the employment relationship as they could not accept a comic contract as evidence. Since that time, as our partners begin to appreciate the value proposition of comic contracting, we have not had a similar experience.

## 8. Conclusion

This work has challenged the approach to traditional contract formation by proposing a three- fold approach to creating new or altering existing contracts, namely:

<sup>19</sup> Michael Montalto (PhD student, UWA and RA on the project) has produced these figures, as part of the psychometric testing of the Aurecon contract. Future co-authored papers with Michael will expand on the data sets and the testing.



1. An if-then approach to reviewing existing and new contracts to identify all perceived risks and areas of overlap.
2. A traceable, rigorous risk-assessment to identify the high and very-high risks to both parties.
- 3) A visual approach to presenting this limited set of high and very-high risk activities supported by internal/external review panels where required.

This approach is aimed at using the contract as a tool to drive behavior change, getting better engagement and interaction between both contractual parties and reducing confusion or misinterpretation of contractual statements and obligations. If-then thinking has been instrumental in guiding both content and design decisions.

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