

## **O-d-o: negotiating, contracting and transacting for online deal-making**

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### **Abstract**

We outline an online market place with a visual interface facilitating any kind of deal-making in the internet. Through the interface users can negotiate, conclude contracts and execute transactions online. Internet users can specify goals to be achieved or post specific bids and offers. O-d-o will propose matching counterparties via a user-based tagging system. Through the visual negotiation platform the two parties can then start to negotiate. If an agreement is reached, it is captured as a visual contract and a transaction may follow.

This system is meant to facilitate transactions in the niche markets of the current Internet economy. Besides its economic potential O-d-o may also serve as a generic platform for so-called transactional arts - art works where some sort of value is exchanged and which often involve a kind of deal-making. We also outline various applications addressing domains like finance, outsourcing and new forms of online collaboration in a globalized economy.

A special interest lies on the detection of win-win situations and what we call 'creative-deal making'. According to findings in the field of interest based negotiation agents may increase the quality of agreements by exchanging information about their underlying goals, enabling for example alternative ways to attain those goals being discovered. The enforceability of the contracts follows current cyber-law practices. In the context of social networking sites and b-to-b market-platforms the counterparty risk can also be reduced through the visibility of deal-making histories for each party.

The innovative combination of functionalities and the visual interface support all steps from interaction to transaction within one system. The commercial potential lies in supporting the various communities emerging around the subjects they negotiate.

### **Visual marketplace**

O-d-o is a generic online platform with a visual interface facilitating negotiations, contracting and transactions. As a visual market place O-d-o allows users to negotiate on any subject and design contracts according to their needs. Hereby the platform enables the matchmaking of niche demand and niche supply, which - according to Chris Anderson's 'long tail' assumption (Anderson, 2006) about the current internet economy - represents the majority of internet business opportunities. On the O-d-o platform any business community can establish its own market, create standardized contracts and develop specific measures for their enforcement.

Media-visionaries like Vannevar Bush, Douglas Engelbart and Ted Nelson conceptualized intuitive systems and interfaces in order to support various cognitive activities without disrupting the flow of ideas. With O-d-o we aim to provide an intuitive medium for negotiations and contracting. We consider negotiations as a kind of collaborative problem solving and want to facilitate what we call 'creative' deal making, i.e. the detection of new opportunities for either one or both of the involved parties.

Therefore all parameters of a negotiation can freely be edited and extended at any time. The interfaces are customizable to the negotiation styles. Since all interactions can be related to a representation of long term goals the system not only supports detailed and analytical decision making processes, but also spontaneous ones.

### **Representation of goal hierarchies**

Users may represent themselves via a hierarchy of personal values and preferences. If wanted, they may break down higher level goals into lower level tasks and to-do lists via a simple tool allowing specifying hierarchical dependencies. Similar to the Balanced Scorecard (Kaplan and Norton: 1996) approach in the field of strategic management, this form of representation (Kaplan and Norton: 2005) enables the alignment of any activity towards higher level goals. However, this form of

representation is not prerequisite for the use of the system, but facilitates the feature of interest based negotiation as discussed below.

### **Representation of the own party**

#### Matchmaking

In order to propose counterparty for a potential deal, the system relies on a user-based tagging system indexing the goals/tasks and non-negotiable conditions of the participating parties. Market-participants with similar goals may learn about each other and explore opportunities for collaboration and synergies. Participants with complimentary goods/services may also be connected via the system and can initiate their deal-making activities. The negotiation interface is scalable to the complexity of needs for individuals and organizations alike.

### **Negotiating, Contracting and Transactions**

Any kind of negotiation between two users can be started through the interface. The leading metaphor is a marketplace with the two parties positions on lower (own party) and upper end (counterparty) of the screen.

#### Negotiations

Users can enter all the relevant parameters for a negotiation such as negotiable, un-negotiable, hidden and visible conditions, target prices, 'best alternatives to negotiated agreement' (BATNA) and other concepts from negotiation theory. These entries are directly entered into the graphical user interface. We follow the Harvard approach to negotiation as introduced by Roger Fisher, William Ury and Bruce Patten (Fisher, Patten, Ury: 1991) and integrate concepts from the Wharton School led by Richard Shell (Shell: 1999). To cater to the Asian style of negotiation we will make adjustments following Peter Nixon's (Nixon: 2005) writings on 'Business in Asia'.

Drag and drop interface for the asynchron negotiation between two parties.

#### Visual Contracts

After the negotiation phase with its offer and counteroffers the parties may reach an agreement which they finalize in a visual contract. Every visual element of a contract refers to a section of a conventional contract, such as a paragraph. Since in various contexts contracts tend to be standardized the visualization of contracts as patterns can easily help to highlight the differing variables. If an agreement is reached it is captured as a visual contract.

## Transactions

Finally users may execute transactions through the platform. Here we will rely on existing transactional Internet services such as PayPal. The freelancer portal Elance relies on a system called Escrow which guarantees the timely clearing of transactions and reduces counterparty risk since funds have to be deposited in advance and are released according to the milestones reached. This kind of clearing functionality is desirable for O-d-o as well.

The legal enforcement of the contracts relies on the complex current practices of cyber law, which requires basically defining all preliminaries of an international contract upfront. In relation to social networking sites and other online market-places, such as Facebook, LinkedIn, Ebay, Search-a-Coder etc. social pressure and visibility reduce the risk of defaulting. For a commercial application in the field of finance the services of a clearing house could be integrated.

## **Visualization of transactions between various parties**

### Interest based negotiation and win-win situations

Research in the field of interest based negotiation has shown that the display of goals can optimize the results of negotiations in certain situations. For example the bargaining and reframing protocol introduced by Philippe Pasquier et al. (Pasquier et al.: 2007) recommends the communication about underlying interests, if the first round of negotiation has not lead to an agreement. This is the case when an agent cannot make 'any more concessions (whether because he reached his last preferred acceptable proposal or because he does not have enough money), he repeats his last proposal', which – may not be accepted by the counter-party.

O-d-o allows parties to represent and communicate (if wanted only partially) their goal hierarchies during a negotiation. This option is completely customizable according to the strategic preferences of the user: the spectrum of transparency may range from zero visibility to negation-specific disclosure of tasks to total visibility of a cluster of goals.

By communicating higher level goals various opportunities for win-win situations may be discovered: for example if parties realize that they actually do not exactly compete for the same resources or that they may have complementary interests in other contexts than the currently negotiated one. O-d-o may serve as a research platform to empirically investigate these kinds of win-win situations and the related strategies of agents. For the pre-negotiation phase we also follow the Harvard negotiation approach and offer templates to hypothesize about the counterparty's dispositions, in order to facilitate creative solutions. Over the course of the interactions these hypotheses can be confirmed or revised.

## **Applications**

The possibility to post relatively abstract goals on the internet positions O-d-o in vicinity to so-called 'ideagoras' (Tapscott: 2006), such as innocentine.com. On these 'market places for ideas' corporations or individuals can (anonymously or openly) post Research & Development goals. In case of a successful problem-solution the intellectual property rights and compensation have to be negotiated and transacted. On O-d-o rather abstract goal specifications can be broken down into sub-goals and tasks by any external online collaborator who may also propose alternative methods for achieving them.

Through the O-d-o platform complete 'value chains' (Porter: 1985) consisting of a team of independent contractors can assemble themselves along task hierarchies (Kaufman and Woodhead: 2006). New forms of online funding, investment and risk management for these collaborations could be explored to facilitate the necessary flexibility. This kind of feature is useful for many outsourcing and online customization contexts in service related industries and could also be applied to social networking sites.

Another field of application is the development of financial instruments, such as derivatives. Derivatives like options, futures and forwards are actually contracts

defining the conditions to buy or sell another 'underlying' entity (usually stocks, currencies or commodities) and are traded on mostly electronic markets in order to mitigate risks and/or speculate. So called over-the-counter (OTC) derivatives can be standardized or negotiated between individual parties. Through the O-d-o platforms even new financial products could be developed, offered and modified.

From an artistic point of view this application could be viewed as medium for the expression of 'strategic creativity', since it allows articulating and posting any visions to be broken down into operable tasks. O-d-o is at the same time a platform for conceptual art and a general off-shoring platform within the global economy. We assume that the creativity of artists and business leaders share common features. Both envision and strategize about new goals which may involve big risks. At the early stage these visions may appear abstract and vague and then become, over time, more specific. Before a new idea finally materializes, it has to be broken down in sub-goals, so that various collaborators can contribute and realize the project. In this sense, O-d-o becomes a global 'dream-machine', where any idea can become a subject of a collaboration.

A niche application could be the art-market: art-collectors commission artworks through the platform. They may post a creative brief to be executed globally by artists bidding online. This service may be combined with a more exclusive auction mechanism allowing collectors to bid for the right to commission high profiled artists and trade these 'options'. In this application O-d-o allows an interesting interaction between strategic, conceptual creativity and the artistic execution, a differentiation which was the working premise of conceptual artists, such as Sole Le Witt and Joseph Kosuth.

Another experimental application of O-d-o lies in the context of transactional arts. In previous research (Plewe: 2008) we defined transactional arts as art where some sort of value is exchanged and this feature is essential to the work. For example, Marcel Duchamp issued in 1929 the so called 'Monte Carlo Bonds', a financial instrument in order to raise capital from his friends for a gambling trip to Monte Carlo. As we have shown, many media artworks actually have transactional features and rely on some sort of implicit or explicit deal-making, often a deal between audience and artists or between artists and subcontractors.

Examples of transactional art include Marcel Duchamp issuing Monte Carlo Bonds, Yves Klein selling void space in Paris, Santiago Sierra tattoos a line of six drug addicts and pays them in their preferred drug, Etoy mimicking organizational structures and issuing shares, RTMark offering investment opportunities in activism, Carey Peppermint facilitates online art commissioning, Mediamatic creating a match-making market place for Russian brides, Uebermorgen creating an online value chain as Gwei and offering a marketplace to buy votes via VoteAuction, Philippe Pareno acquiring IP rights of the Anne Lee character and encouraging further use by other artists, Michael Goldberg playing the stock market in a gallery, Derivat's Bar Bolsa with beer prices fluctuating in real time according to demand and supply in the pub, Open Clothes Project supporting interactions and transactions around the design community.

Often these artworks take the form of online businesses. O-d-o captures the generic feature across all these examples of artworks, even though in many cases of transactional art the deal-making component remains implicit. The author is currently developing an artistic application providing instruments around financial topics, such as the 'beauty of risk-management', 'happy hedging' and 'fulfilment through options'.

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### **Acknowledgements**

*The project is developed in collaboration with Andreas Schlegel who is responsible for the programming of the prototype and the development of the front end. We are very grateful to Horacio Falcao (Insead Business School) and Nuno Delicado (Pluris Pte Ltd) for their input on the Harvard negotiation approach and thank Philippe Pasquier from Simon Frazer University, Vancouver for sharing his views on interest based negotiation. We also want to cordially thank the Harvard Law Lab at the Berkman Centre for Internet and Society for providing legal advice and the Centre for Future Banking at the MIT Media Lab.*