

Getting the Act Together¹

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The General Problem

The process of commercial exchange can be characterised in terms of efforts to stabilise a number of entities. Two important such entities seem to be *the buyer* and *the seller*. In addition, an agreement of some sort has to be reached between these two entities as to what constitutes *the offer*. Related to this is a stabilisation of what the seller is to receive as compensation for this offer, in short, *the price*. Moreover, there is also a need to stabilise how the offer is to be used, that is, to configure *the user* within the buying organisation. The general process is illustrated by figure 1 below.

In a previous paper we have reported on such a configuration process connected to realising the sale of a software solution for e-procurement of MRO-materials (Sarlija et al., 2002). In this paper we follow the involved actors as they engage in introducing this solution within Chester, a large transport and logistics company. The paper directs attention to two practical issues: How is the new software made part of the customer's organisation? And what happens in the organisation when the software is made part of it? These practical issues can also be said to reflect a more general problem: How does the introduction of a new technical solution affect the agency of others?

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The process of implementing the software system involves stabilising its use, the crucial move from an offer to a product-in-use. It is easy to think of the practical aspects of this process as placing a new intermediary – the application – between the purchasers and the suppliers. Some of the involved, e.g. central purchasing, view this intermediary as an instrument for exerting control. Others, e.g., some of the individual purchasers, view it simply as a new feature in their daily work. Others yet, for instance, some of the suppliers, may view it as an obstacle for their regular marketing activities. All these views will result from some form of qualification of the new application. That is, through interaction with it, others form expectations as to how it will react, and subsequently ascribe qualities to it on the basis of their experiences.

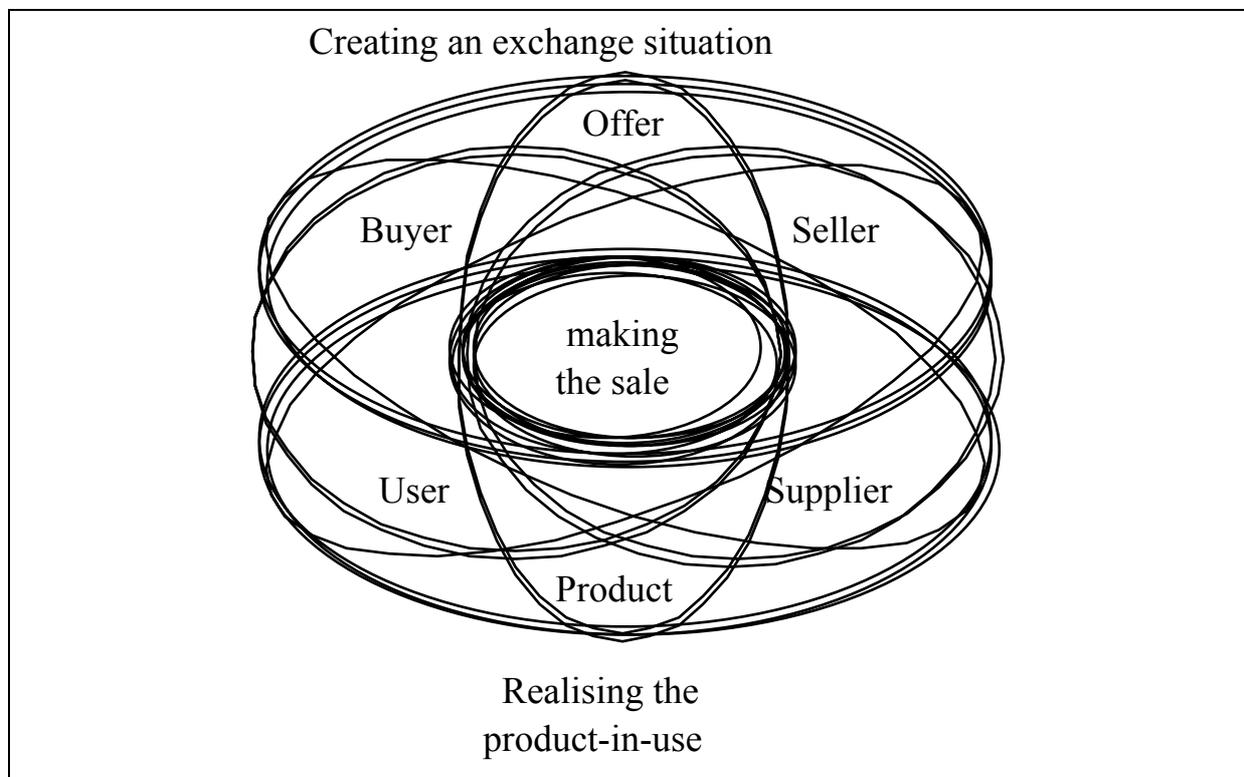


Figure 1. The two sub-processes involved in ‘making the sale’: creating an exchange situation and realising the product-in-use.

Preceding study: Realising the Company Proceedo

In a preceding study of Proceedo (Sarlija et al., 2002) we described the efforts to establish and realise *the company* Proceedo through a continuous process of organising. Three interrelated practical problems suggested to be connected to this process: the problem of becoming recognized as a (commercial) actor, the problem of influencing

the (commercial) logic underlying the actions taken by others, and thirdly, the problem of realising the product-in-use (configuring the user and re-associating the product/offer).

Realising "Proceedo" depended on the creation of a nexus of associations (founders-businessidea-capital/owners-systemplatform-employees/competence-customers, etc.) that enabled others to characterise it as an entity. Since these others were differentially connected, "Proceedo" could be seen as an unstable entity. In addition, there were different requirements on "Proceedo" as an "investment object", an "organisation", a "supplier". Multiple situations seemed to produce multiple agencies.² The case showed that the stabilising efforts can require the exertion of influence over a wide network of actors (Figure 2)

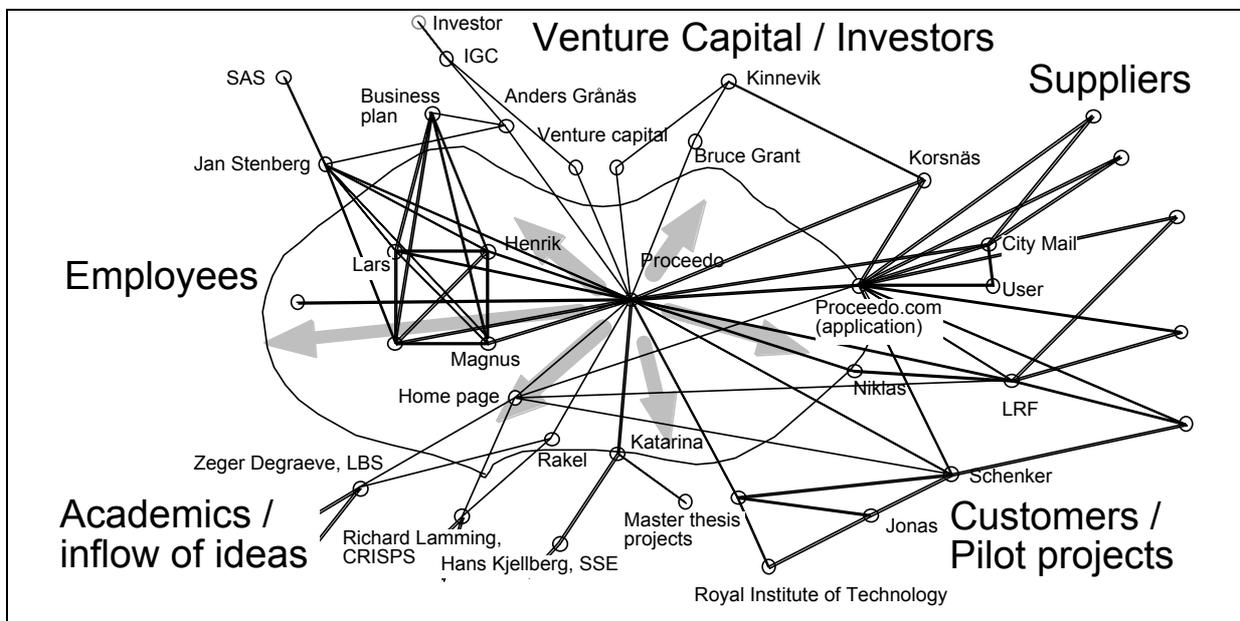


Figure 2. The actor-network performing Proceedo as a commercial actor.

In the center of this process were problems of separating the product, Proceedo.net, from the emerging commercial entity, Proceedo, which offered it. Where did "Proceedo" end? This involved problems of re-configuring Proceedo's counterpart, i.e. "the purchaser", as a new collective actor constituted by "central procurement",

² This generated a number of new questions and issues, eg.: Is there a "typical" geometry of a commercial actor? How does an emerging actor handle the different identities/agencies awarded to it, e.g. being both an "investment object" and a "supplier" at the same time? How does an emerging commercial actor handle overflowing, i.e. the paradox that precisely those elements that give it its solidity and stability also constitute potential conduits for overflowing and hence instability?

”purchasing system”, ”user” (individual purchaser). In this process, the application came to be regarded as an instrument of control by central procurement while users made their own interpretation of how it should be used.³

The New Problem

This study takes off where the preceding one ended. The study of the company Proceedo generated a number of questions concerning the software product Proceedo was providing, including issues related to the agency of this system: What will happen when the new system becomes included into existing buyer-supplier relationships? And when implemented, how will the new technology affect the buyers' and users' existing exchange relationships, especially the existing supplier relations that are to be included in the new software system for procurement?

A central question for us in this study, is the extent to which these different actors ascribe agency to this new entity. Here again, we are likely to find considerable variation: some may regard it simply as an extension of the buyer's, central purchasing management, others as an extension or representation of the supplier-market, etc. Still, in any concrete situation, for instance when placing an order, the program is an entity with which others are required to interact. Hence, it is possible to regard the software solution as an entity that is ascribed varying amounts of agency. In most cases, a rather limited amount, to be sure, but still. In short, then, the program may be regarded as a new actor.

Since this new actor will assume some of the tasks that hitherto has been performed by others, it will affect the logic of the situation. A whole chain of actors has to be aligned to make the new situation work. In other words, the introduction of the new software technology will trigger a process of agency redistribution between the actors in each specific situation that it becomes part of. This process, we suspect, will include efforts by actors to stabilize new agential roles for themselves as well as for

³ This also generated a number of questions, eg.: How are offers translated into products? What is the character of the process of intermediation, when e.g. an application is placed as an intermediate instrument of control between the user and other actors? How do users find ways around these framing efforts (efforts to redefine the purchasing situation)? In the next step, if ”the system”, ”central procurement” and ”the users” are successfully made to act as one, how does this affect the span of control, the possibilities by connected actors to assert control at a distance, and other ongoing framing processes, e.g. the marketing efforts of suppliers?

others. For example, the agency awarded to the new procurement system, will be connected to attempts to stabilise *the buyers* and the new purchasing roles and new distributions of purchasing duties between the involved actors. In addition, *the users* make their own interpretations of the new system and also find ways of working their way around attempts to exert control, for example, by altering the system in itself or influencing others to do so (Proceedo), by not using the system as instructed, by avoiding it, etc. A central problem will be how to stabilize a new situation when a new technology is introduced, where the technology itself can be seen as exerting agency.

As a consequence of the way in which the software solution was framed in the first step in the case – as a tool for managing procurement of MRO-goods – the joint efforts of the buying organisation and Proceedo to implement the system set off a process which mirrors that presented in Figure 1 above. In this second step, however, the process is more aptly labelled “making the purchase” rather than “making the sale.” The general problems involved are the same, though. That is, this study continues where the previous one left off, focusing on the processes through which an exchange situation that includes the new software system is created, and exchanges are realised. These processes involve realising “buyers” and “users” within the company implementing the system. Furthermore, they include changes affecting the company’s suppliers when enrolled to perform as “sellers” and “suppliers” in the new system. In the center of the exchange processes between the “buyers”/“users” and the “sellers”/“suppliers” are changes concerning the “offers” and “products” that should be handled by the new purchasing system (see Figure 3).

Next, we give a short background on Proceedo and its software solution. Thereafter, we follow the logic of figure 3 above, starting with a general discussion of the two processes involved: creating an exchange situation, which could be labeled a ‘supplier marketplace’; and realising exchanges in this market. Then we focus on the role of Chester, i.e. on the processes of stabilising the buyer and the user. This is followed by an account of the efforts of Chester (and Proceedo) to enrol and stabilise the sellers and suppliers (the “supplier market”) as part of the new system. Lastly, we put focus on the efforts to enrol, and to change and stabilise the offers and products handled by the new procurement system. Each of the three sections encompasses an empirical introduction followed by comments. The three sections are followed by a

concluding discussion, bringing up issues concerning general problems of stabilising the new entities described in figure 3.

Background: On Proceedo and the General Setting

Proceedo is a Swedish company offering an Internet-based procurement solution for non-production related goods/services. Since mid 1999, the company has gone through a series of alterations: from four founding owners, through venture capital and bankruptcy, to being a subsidiary of the Kinnevik group; from four founders, to 50 employees and back to the 20 people employed today; from a single office through 2 international subsidiaries and back to a single office, etc. Since the start, Proceedo's offer has been a software that handles non-production related goods and services. Still, a number of changes and additions have been made to the offer, such as the inclusion of various services and electronic invoicing.

In this report, we follow the efforts to implement Proceedo's offer within an international transport and logistics company. The implementation of a procurement system was initiated by the director of purchasing at the international distributor. When we first with the internal project leader at Chester, he was planning to educate the users at the company's offices across Sweden on Proceedo.net. A pilot had already been in use for a while at some offices. The process of developing the application was punctuated with numerous temporally and spatially restricted stabilisations. This suggests that neither Proceedo nor its potential customers regarded the offer as stable at first. Further, not only did Proceedo act to modify the application in reaction to customer requirements, the application was also modified when put to use in these organisations.

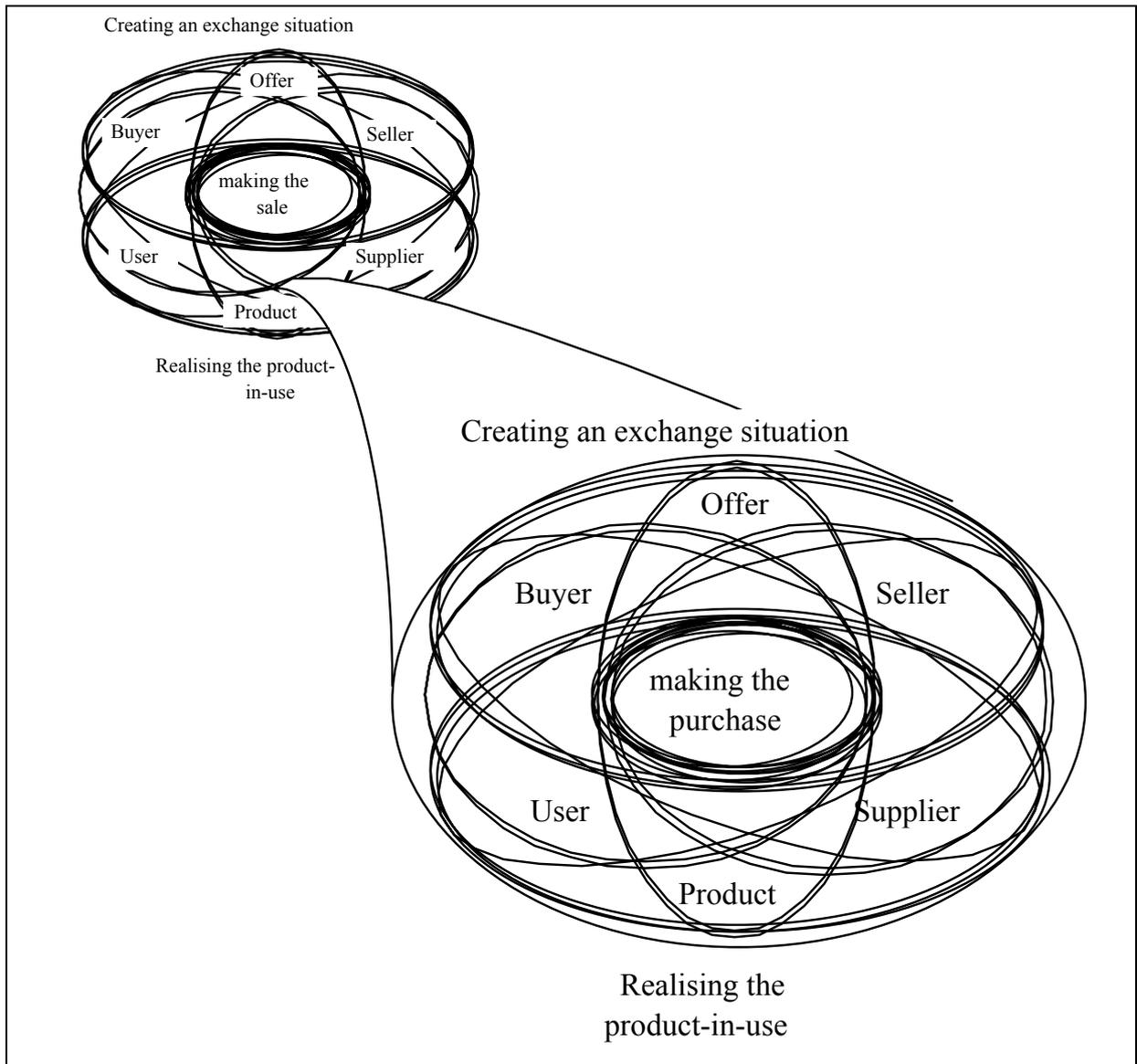


Figure 3. The process of “making the purchase” as set off by the process of realising the sale of the procurement system.

Although Proceedo’s offer seemed to have been far from stable, Proceedo was still able to reach agreements with buying organisations as to what was to be exchanged. In this sense, Proceedo’s offer had to be in some way ”emancipated” from Proceedo. This process of emancipation seemed to be related to the 'productification' of the offer.

At the outset, Proceedo made no effort to separate between various aspects of their offer, but presented a complete package. More recently, Proceedo began to structure their offer into three parts – Proceedo Process, Proceedo Market and Proceedo Services – still the effects of this move on the customers are yet not clear. The customers never talked about which parts of the Proceedo offer that they had chosen.

Despite occasional indications of the application being an independent entity (actor), it seems to us that it most often was held to be part of Proceedo. The customers saw themselves as participating in a project rather than being traditional customers. All customers were still in the pilot phase and had not yet made a full rollout. However, the rollout was just a second step in the project. This relationship would change when the customer felt it was merely paying for a service provided by Proceedo and not dependent upon Proceedo to enrol the service into the customer's organisation.

Whether Proceedo's offer should be characterised as a service or a product was itself an outcome of the process. In some situations, e.g. during the development of the application, the application and the offer were regarded more or less as one and the same. For the project manager at Chester, Proceedo and its product was clearly two separate entities. Although he regarded Proceedo as an important partner for his company in the future, he regarded Proceedo's product as an entity.

Making the purchase: creating an exchange situation and realising exchange

The efforts made jointly by Proceedo and its new customer, Chester, to introduce Proceedo.net as a tool for procurement, can be seen as efforts to (re-) organise Chester's supplier market. From this perspective, the original process of realising the product in use, sets off a process of creating an exchange situation (see Figure 3). However, this does not mean that the original processes have come to an end. In fact, the future of the exchange relation established between Proceedo and Chester is very uncertain. The foreign owner of Chester is also conducting trials with a competing software solution in its domestic operations and has announced that it will subsequently evaluate the trials and choose a single supplier for the entire Chester group.

Irrespective of the uncertainty surrounding their exchange relationship, or perhaps because of it, Proceedo and the purchasing department at Chester Sweden engage heavily in realising the new situation. For the new procurement solution to work, it must be made to re-present a supplier market (sellers) for the individual users. Consequently, some actors must be convinced to contribute to the system by supplying information concerning the assortment they offer in a suitable form. Further, the terms of exchange for purchases made through the system must be negotiated between the

buyer and these sellers-to-be. Finally, within Chester, changes must be made that allow the system to act as a communication channel through which authorised purchasing decisions reach, and are recognised, by the sellers. In short, the system must re-present the buyer.

The activities undertaken by a buyer must set off a series of activities which activates a supplier to dispatch a product that finally reaches a user. This requires linking the seller and the supplier as well as the buyer and the user. The logic of the system as characterised by Proceedo also has it that there should be some correspondence between the offer, as re-presented for the buyer, and the product, as delivered to the user. In the next three sections we will report on some of these developments, starting with the changes taking place within Chester.

Reconfiguring "Buyers" and "Users"

The process of implementing the new procurement solution gives rise to several interesting developments within Chester. Two central features of the process are the reconfiguring of the involved actors and the associated re-attribution of agency to these entities.

In the process of making the sale, we could observe the gradual stabilisation of a number of actors: Proceedo, as a seller of a purchasing system; Proceedo.net, as an offer; Chester as the purchaser of a purchasing system. As the implementation of the system starts, the boundary between Proceedo as the seller/supplier of the application, and Chester's purchasing department as the buyer, seems to disappear in certain situations. To some, Proceedo simply becomes part of Chester. What used to be a disconnected paper catalogue and a phone call is now Proceedo.net, an integrated software system that is connected to the company 's business system. To others involved in realising the product-in-use, Proceedo de facto acts as a representative of Chester, e.g. handling the contacts with suppliers concerning their participation in the electronic catalogue.

But there is also developments in the opposite direction. Chester's purchasing department is gradually regarded as part of Proceedo by some of the involved actors. During the process of implementing the system, the project leader is no longer an objective purchaser of a software system but a spokesperson for the system. When introducing Proceedo.net the users within Chester's organisation could phone the

project leader if they had any questions. This made some users view the purchasing project as part of Proceedo:

AX returns with two forms, the kind you find on packages with the delivery address on them and the delivery forms that the driver uses to find the right address. The two don't match. The address on the package is correct, she says, but not the one the driver has got. AX says that she has argued with both Proceedo (when I ask her with whom she has spoken to there, she mentions XY and ZY, ie the project leaders within Chester) and the supplier, but they blame each other.

As indicated by Figure 3, above, the user, as configured during the process of making the sale, is now being reconfigured into a buyer. That is, by changing focus from the sale of the application to the realisation of the new exchange situation, the individuals that were configured to use the new purchasing system must now assist in performing the buyer. However, in comparison with how purchasing used to be organised at Chester, the process of implementing the new system reconfigures the buyer. The central purchasing department becomes directly responsible for choosing what sellers to approach with a proposition to become part of the new system. Further, the negotiations that take place between the purchasing department and these potential sellers establish the terms of exchange that are to apply in the new situation.

The purchasing manager, ZY, describes the ideal situation as follows:

When we introduce Proceedo to our sister companies they have to change their organisation. They can't have a procurement function anymore but more order callers instead. This puts more responsibility on us to understand their needs and way of organisation and be able to answer their questions on how to change the work process. ZX adds: we have seen that there is always some resistance to new systems but that we also get quick acceptance among those who have tried to use the program. They see the advantages with the program and once they have bought something they are hooked, she says and smiles. People who usually make purchases use it. I bring up the fact that there are two different kinds of people who make purchases: people like AX who only works with purchases and people like XX who has other duties as well, but is responsible for making the purchases at her office. ZY then says that the ideal situation is to have people like XX at every office and not to have special purchasers like AX, but they cannot change the organisation overnight. I say that they cannot see the difference between AX and XX in the program but ZX says that it is noticeable in the program since they book it differently; XX books the cost on her office but AX can only book it as a cost on her position which makes it impossible to see for whom she has made purchases. Our wish is to be able to divide the costs on the different offices so we are trying to make purchasers put different orders and not book them on the same order even if it is the same product. This means a bit more work for AX but it makes it possible to follow the more cost effective process in the system.

Hence, the individual users are not attributed agency to act as buyers, but rather as order callers. The buyer, then, is a collective actor, constituted by central

purchasing and an individual order caller. This means that the envisaged situation entails agency changes.

To some extent, these changes seem to offer an explanation as to the position of individuals vis-à-vis the new situation. Those of the new order callers that used to perform as buyers, like AX, generally have been more negative to Proceedo.net. Their purchasing rights have often been restricted and they are gradually being made redundant with the new purchasing process:

I used to order for different departments when we had the pilot, says AX, but after the demonstration in March, XX took over the orders for her department.

On the other hand, the order callers that did not have the right to act as buyers in the old, more centralised purchasing process, like XX, are more positive:

XX: I find it much better now that we make our own purchases at the office. Now we can decide more for ourselves what we need.

The process of implementing the new system also involves changes for the local managers. Through an authorisation procedure included in the system, they become directly involved in purchasing as they have to attest orders that exceed a certain limit decided on when introducing the system. This means that the new situation also provides them with a tool for controlling the purchases made at their department. Although potentially a source of complaints, many order callers have not expressed any concerns about this. To some, it has not even been noted:

Order caller: What's it called, the thing that you do?
Manager: Attesting.

This lack of transparency may disappear, however, if the system should interfere with the order caller as he or she attempts to place an order. Or if the order caller becomes aware of the differences between the information she/he can get compared to the manager:

Order caller: I have told them that I want to see the whole procedure but they haven't let me.

Manager: Yes, it would be good to see the whole thing from order to final result.

Order caller: I haven't seen what you can see from the system on your computer and what you can and cannot do.

The manager sits down in front of his computer and logs on. A page appears on the screen and the manager clicks around a bit and sees an icon that says "Order information".

Order caller: I don't have that! I can't get that!

Manager: Look, here is everything we talked about. This is the whole Sweden, even those things that I don't attest. They probably don't want me to see this.

Order caller: QY has more authorisation than I have, that is strange.

In some cases, where the order caller actually has noted the way in which his or her agency has been restricted, this has led to counter strategies, further altering the purchasing process:

XX is authorised to make a purchase up to a value of 20,000 SEK. To work her way around this she divides her purchases if they are large so that she never has to await an approval.

Reconfiguring "Sellers" and "Suppliers"

As part of the initial process (see Figure 1), the "seller" and the "supplier" were personified by Proceedo respectively as making an offer and supplying a software system. As part of the process triggered by the efforts to realise the product-in-use, however, a new set of actors have to be enrolled to perform as "sellers." To this end, Chester contacts some of its suppliers, not seldom accompanied by representatives of Proceedo.

One of the companies that were successfully enrolled to participate is Writco, a supplier of office equipment.

The IT manager sees this as both a possibility and coercion. The possibility is that Writco always appears in the procurement system as an alternative to their competitors and the coercion is that if they don't integrate other procurement systems with their own they will lose that specific customer.

As a consequence, Writco is now re-presented through the electronic catalogue that Proceedo manages for Chester. This means that their major communication channel towards potential customers, a printed catalogue and price list, gradually has become obsolete at least as far as Chester is concerned. We say gradually, for there are

indications that the new order callers for some time and extent use the printed catalogue in parallel with the electronic one when placing their orders.

For Writco, this events seem to have led to some agency re-distributions as well. Foremost, the IT department at Writco now contribute considerably in performing both the company's customers and Writco as a seller. Historically, their main concern has been the MRO of their own system. Recently, however, they have become involved in the integration of external purchasing systems with their own stock order system.

E-procurement is steadily increasing. We have developed an EDI (Electronic Data Interchange) solution through which our customer-orders go directly into our own system. Proceedo.net is still not connected to the EDI system but the orders are received by e-mail and then manually typed in the EDI system and sent down to the stockroom. This means that Proceedo's orders do not go directly into Writco's order system, which is built on SAP 4.6.

Besides their efforts to integrate the external purchasing systems and the internal order system, the IT department have also become involved in performing a more externally oriented task, that of managing the electronic catalogues. For instance, they supply Proceedo with updated information to the electronic catalogue and are responsible for providing the search terms that the buying company use to find specific products in the catalogue.

The IT manager tells me that they use cXML platform for Proceedo. He sends links to pictures on new products once a month for updating Proceedo.net. During the first meeting with Proceedo a representative from Chester was also present. They told the IT manager about the new procurement system and that they wanted to use UNSPSC code system. (Universal Standard Products and Services Classification, created by the non-profit organisation ECCMA, Electronic Commerce Code Management Association)

This indicates that the IT department is being attributed agency in situations which hiterto has been outside its realm. In particular, they take on tasks that traditionally have been associated with sales and marketing, i.e. channeling orders and presenting Writco's offer. At the same time, Proceedo has become involved in Chester's evaluation of how Writco is performing.

When I ask about the different suppliers included in Proceedo.net at the moment, ZY describes them briefly. Enterprise Supply is technically good and a good catalogue supplier. Still, Writco is actually a better supplier, but not according to Proceedo.

This suggests that the creation of the new exchange situation is affecting the relation between Writco as a seller and Writco as a supplier. Primarily, these effects seem to result from novel ways of attributing agency in the new situation. Other actors

are now performing some of the tasks involved in realising the exchanges between Writco and Chester.

An issue that Writco hasn't taken into account is the "risk" of a large increase in the amount of orders received through Proceedo.net. Since Chester plans to introduce Proceedo.net at all subsidiaries in Sweden and coordinate all purchases for office material from one supplier instead of many local ones, this scenario is highly likely to materialise.

In the meantime I ask if the number of orders from Chester has changed since the implementation of Proceedo.net. A person from customer support says that they have actually increased a bit.

Given that Writco has not yet integrated the incoming orders from Proceedo.net into its own order system, a sudden increase in the number of orders received might cause considerable difficulties, as far as Writco's ability to perform as a supplier.

Efforts to Stabilise "Offers" and "Products"

This final section will discuss how offers are configured and stabilised as part of the process of creating an exchange situation and how these offers are translated into products as part of the process of realising exchanges. As mentioned above, the role of Writco's IT department changes in the process of realising Chester's e-procurement system. One of the major changes for the IT department concerns the configuring of Writco's offer.

Most importantly, Writco's offers are now being channeled through the electronic catalogue to the potential buyers. Although it is possible to include pictures and a text describing the offer, the electronic catalogue has limited Writco's ability to communicate with the order callers in one important way: the catalogue is not scrollable, but entries have to be accessed through a search procedure. This means that the definition of search terms has become central for Writco's success as a seller.

For Chester, as well, a good search function is important for the purchasing process to work efficiently. This is particularly so, as the order callers are supposed to perform their tasks as a sideline to their usual functions.

When searching for rubber band AX has to write the search word "raw rubber". If she chooses "rubber" or "band" she will get other items. I ask her how she found out that

she had to write "raw rubber" and AX tells me that she sat a whole evening trying until she succeeded. She does not find the system efficient for her work.

One problem ZY took over (after the first project leader) was to convince the local offices to give up their local suppliers and use the ones within Proceedo, something that was not very popular. ZY has a feeling that this prompted the users to put a lot of effort into finding small errors in the system.

The choice of sellers and offers that should be included in the catalogue are also strategically important for the purchasing manager at Chester in order for him to convince management about the potential efficiency gains and cost savings that the system offers.

It is important for us to include more products since the system then will have a greater effect on the gross profit. If the management is not convinced, then the district managers won't be, and in the end the users won't be positive towards the system, so it has to be managed centrally first. ... He counts on a pay-off in 1,5 years on the 2 million SEK they pay per year (which includes 25 big and 25 smaller suppliers). Today they use less than half of the number of suppliers they are entitled to, so they work on including more suppliers into the system.

Moreover, the offer Writco is making through the electronic system must also resemble that made in the catalogue since the buyers-turned-order-callers haven't forgotten its nice pictures and pedagogical organisation:

AX doesn't want to order the cheapest things if it is bad quality and now that they have removed one of her suppliers she has troubles finding good substitutes for some things. AX explains this by showing me the paper catalogues from where she finds alternative products to other prices. She often compares the paper catalogue with the electronic catalogue on Proceedo.net.

The offers made in the new system have to correspond to the products that the buyers at Chester used to purchase before the introduction of an electronic purchasing system. In general, this has not been a problem as far as standardised products are concerned. Chester has however found new ways of using the purchasing system for other products than the standardised ones. One example are the trucks that Chester wants to integrate into the system to be able to distribute them more efficiently to the production sites where they are mostly needed.

For Chester trucks are investments despite that they are paid for monthly. The total costs per year are approximately SEK 40 million. "We know that some trucks are ordered because it is good to have one standing just in case", ZY says. It is the local manager's decision to buy a truck. "...The goal is to have the same suppliers for all localities and steer the choice of supplier towards function. Only one supplier should deliver each kind of truck. ZY talks about transport and logistics company-specific trucks, that is, although Linde might supply it, the truck should be called Chester

highloader etc. The logic behind this is that an expensive truck should be at a heavy production site whereas a less good truck can be on a smaller production site. A truck that is used 1000-1500 hours per year is estimated to last for 5 years. Chester has production sites that use trucks for 3000 hours per year. Evidently, these trucks last for a shorter period of time – the supplier then counts on 3 years' use - but by sending the heavily used trucks to production sites where the performance of the truck is not of decisive importance for the productivity at that specific site, Chester can use them for a longer period of time and thereby save money.

Dynamic products are those that have interchangeable features to suite every buyer individually. To be able to integrate these products into the system, some form of standardisation has to be made. According to the purchasing manager at Chester, the products would have to be standardised to 80%. ZX and ZY at the purchasing department at Chester have discussed this possibility with Proceedo but have for the moment put the plans on ice to be able to concentrate on integrating the sister companies within the group instead. They are also in the middle of renegotiations with the truck suppliers, their main strategic dynamic product supplier.

It can cost a lot to develop the wrong thing, ZX says. It was quite complicated to realise what they wanted since the agreements with the suppliers weren't finished. Another thing, says ZY, was that they couldn't see the potential savings on developing this product. It was a good example on a dynamic product but the most important thing was to cut costs and this product would also have an impact on our business rules, like investment routines. ZX agrees and says that they have seen e-procurement as something mostly for consumption material and trucks is more of an investment and how would we control the cash flow so it would be correct, depending on if we rent them or buy them, so the whole situation was a bit awkward to try to get into a system.

The idea of integrating suppliers of dynamic products into the system has not yet been realised, but serves to show that the process of realising the system-in-use creates feedback loops affecting the configuration for the initial offer made by Proceedo.

Discussion

The paper focuses on the construction of market exchange. As seen in the case, in order to realise the new situations, a number of entities must be defined and in some way persuaded to “act their parts”, for example, the user and its suppliers, the user and the new procurement technology. Actors can thus be regarded as attempting to create a situation that is conducive to the solution they offer. This work includes populating the situation with relevant entities; fencing it off from matters held to be irrelevant or

destructive, in this case for the new envisioned purchasing situation, providing eg. scripts for interaction between entities in this new situation. However, since the relevant entities make their own interpretations of the situation, framing efforts are subject to *overflowing*; they are affected by relations that transgress the boundary of the envisaged situation. To realise a specific situation, then, measures must be taken to control potential overflows (Callon, 1998, Kjellberg, 2001). The process of realising the new procurement organisation and the redistribution of agency that is part of it can be described as a process of *framing* (see, e.g., Goffman, 1986 (1974), Callon, 1998, Kjellberg, 2001).

Processes of establishing commercial exchange and the efforts to stabilise a entities, like *buyers, users, sellers, suppliers, offers, and products*, involve both framing and overflowing. Hence, as seen in the case, agreement of some sort had to be reached between these two entities as to what constitutes *the offer*, involving framing efforts. The same applied to the efforts at stabilising how the offer was to be used, that is, to configure *the user* within the buying organisation, and translating the offers into products as part of the process of realising exchanges. As part of this process, triggered by the efforts to realise the product-in-use, a new set of actors had to be enrolled to perform as “sellers.” The user, as configured during the process of making the sale, was being reconfigured into a buyer. By changing focus from the sale of the application to the realisation of the new exchange situation, the individuals that were configured to use the new purchasing system must now assist in performing the buyer, i.e in the process of making the purchase.

References

- Biagioli, Mario. 1999. *The science studies reader*. New York, N.Y. ; London: Routledge.
- Callon, Michel. 1986. Some elements of a sociology of translation: Domestication of the scallops and the Fishermen of St-Brieuc Bay. In *Power, Action and Belief: a New Sociology of Knowledge*, edited by J. Law. London: Routledge & Kegan Paul.
- . 1992. The Dynamics of Techno-Economic Networks. In *Technical Change and Company Strategies*, edited by R. Coombs, P. Saviotti and V. Walsh. London: Academic Press.
- . 1998. An essay on framing and overflowing: economic externalities revisited by sociology. In *The Laws of the Markets*, edited by M. Callon. Oxford: Blackwell Publishers / The Sociological Review.

- Goffman, Erving. 1986 (1974). *Frame Analysis*. Boston, Mass.: Northeastern University Press.
- Kjellberg, Hans. 2001. Organising distribution : Hakonbolaget and the efforts to rationalise food distribution, 1940-1960. PhD thesis, The Economic Research Institute, Stockholm School of Economics, Stockholm.
- Latour, Bruno. 1986. The powers of association. In *Power, Action and Belief: a New Sociology of Knowledge*, edited by J. Law. London: Routledge & Kegan Paul.
- . 1987. *Science in Action: How to Follow Scientists and Engineers Through Society*. Cambridge: Harvard University Press.
- Law, John. 1994. *Organizing Modernity*. Oxford: Blackwell Publishers.
- Sarlija, Katarina, Hans Kjellberg, and Per Andersson. 2002. Any proceeds from Proceedo? A study of commercial exchange in the making. Paper read at 18th Annual IMP Conference, September 5th-7th, at Dijon, France.

- Callon, M. (1998) In *The Laws of the Markets*(Ed, Callon, M.) Blackwell Publishers / The Sociological Review, Oxford, pp. 244-269.
- Goffman, E. (1986 (1974)) *Frame Analysis*, Northeastern University Press, Boston, Mass.
- Kjellberg, H. (2001) In *The Economic Research Institute* Stockholm School of Economics, Stockholm, pp. x, 590, [5].
- Sarlija, K., Kjellberg, H. and Andersson, P. (2002) In *18th Annual IMP Conference* Dijon, France.