More Patterns for Software Companies (VikingPLoP 2007)

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Abstract

These patterns extend the author's work on how software companies operate. Together with earlier patterns the three patterns presented here look at how combinations of products and services are marketed, how customers are managed and how services are designed and delivered.

The patterns are presented here are: ACCOUNT MANAGEMENT, SALES/TECHNICAL DOUBLE ACT and PACKAGED SERVICES.

1 Introduction

Many patterns have been written concerned with the design and architecture of software systems, e.g. (Gamma et al. 1995; Manolescu et al. 2006; Schmidt et al. 2000) to name a few. Other patterns have been written describing the organizational development of software organizations, e.g. (Bricout et al. 2004; Coplien and Harrison 2004; Marquardt 2004) among many. The patterns presented here are concerned with business strategy and operations of software companies.

Organizational structure will constrain the strategies available to an organization and conversely the strategies a company pursues often dictate organizational structure. For example staffing levels will be effected by the use of DOMAIN EXPERTISE IN ROLES (Coplien and Harrison 2004). Similarly, a strategy of utilising offshore development may bring JOIN FOR COMPLETION (Bricout et al. 2004) into use.

Through such mechanisms the patterns used at one level in the organization constrain the options available at another level. As Conway (1968) suggested, the organizational structure will influence the system structure. However, it is also true that the system structure can effect the organizational structure (Hvatum and Kelly 2005). As Figure 1 shows, we can think of each level partially constraining the others.

In contrast with strategy the tactics and implementation detail are often regarded as less important. So it is that some patterns may appear to be relatively unimportant. However, when viewed from a different perspective these details can take on significant, and even strategic important. There are no firm boundaries between what is tactical and what is strategic, details considered tactical today may be strategic in future (Mintzberg 1994). Therefore one should not apply the labels strategic, tactical or implementation too quickly.

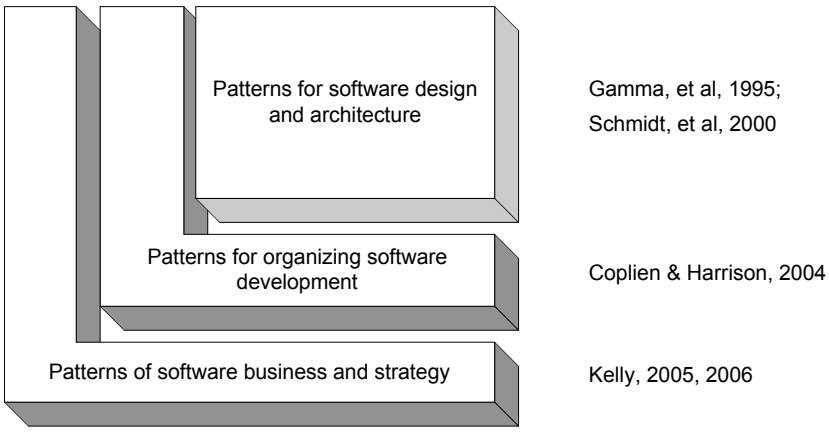


Figure 1 - Patterns at one level are partially constrained by patterns at other levels

The author's earlier work (2005a; Kelly 2005b; 2006b) set out a framework for applying pattern thinking in the business domain. The patterns in this paper add to a series of patterns concerned with the interplay of product and service offerings from an organization. Many software companies struggle to effectively deliver services alongside products. Collectively these patterns explore why companies do this and how they can do it effectively. Thumbnails of earlier patterns in this series are given below.

The term *software company* is used broadly to refer to any commercial organization that is reliant on sales of software based products to generate revenue. This includes sellers of packaged software (e.g. Adobe), sellers of custom software solutions (e.g. Accenture) and sellers of online software as a service product (e.g. SalesForce.com). The definition does not include companies that develop their own software for internal use (e.g. CitiGroup). Although such organizations may learn from these patterns, they are not the primary focus of this work.

2 Audience

These patterns are intended to codify several common business practices in a pattern language so that they may be better understood, communicated and studied. The patterns given here are intended for those interested in how corporate strategies may be applied. This group includes existing managers, future managers and entrepreneurs.

In particular it is hoped that those who are on the receiving end of such strategies and tactics will find these patterns informative and useful. Too often companies fail to explain strategies and tactics to those whose work is affected. For example, in the case of software companies it may be far from obvious that an ACCOUNT MANAGEMENT pattern is being applied. Understanding what a company is attempting, why and the implications can be beneficial to all.

The patterns in this paper, and others in the series may be read and applied outside the domain of software companies. They may be applied to technology companies in general and to non-technology companies in some instances. The author has chosen to confine the domain and context of these patterns to software companies for two reasons. Firstly this is the domain the author knows and has experience in. Secondly, limiting the domain helps maintain the brevity of the patterns. Despite these deliberate limitations the author believes many of these patterns may be applied in contexts outside the software domain.

Many of the examples are drawn from outside the software domain. These examples have been chosen primarily because they clearly illustrate the pattern in question. Such examples also demonstrate the wider applicability of these patterns.

3 Patterns and Sequences

The patterns presented in this paper form part of a growing *pattern language*. As additional patterns are added more are identified. Patterns within this language are assembled together in *sequences*. It is natural to find the application of one pattern creates the need, or opportunity, to apply another pattern. There is no mandated, or even *right*, sequence through the language; each organization needs to find the sequence(s) that works for it.

Patterns, by their nature, capture existing knowledge rather than create new knowledge. In some cases this knowledge may not have been captured before, although *known* to some individuals the knowledge may only have existed tacitly inside the heads of individuals. Alternatively the knowledge may be embedded in working practices, processes or market mechanisms.

These Patterns draw on experience and existing literature. Much of this knowledge only exists as heuristics, or tacit knowledge, known only to individuals and management groups**.** Presenting this knowledge in pattern form allows the knowledge to be communicated and combined with other knowledge. Once captured these heuristics can be examined, enhanced, refined or even deprecated.

By documenting this knowledge in literature it can be made more accessible to a wider audience. These patterns should make this knowledge accessible to the managers, engineers and others who need it and are tasked with implementing the strategies.

Most of the patterns presented here have been identified by the author from his own experience and investigation. During the pattern review process, (shepherding and conference workshop review) additional patterns have been identified by reviewers. Patterns are by their nature generative, as more are identified and documented more become apparent; and as patterns are applied the need for others is revealed.

When patterns are applied together they are said to form a pattern sequence. There may be many ways of combining the patterns in a pattern language, and each pattern may appear in multiple sequences. Pattern sequences show the order patterns are combined in order to make a whole.

It is not always obvious from a pattern description which patterns should be applied together. Even if the pattern writer could specify this information they may choose

not too, either for the benefit of brevity, or to leave the reader with options. Pattern sequences are used to describe which patterns are applied in tandem and to describe the effect on the whole when several patterns are combined.

Naturally there are many ways in which patterns may be applied. Some patterns are larger than others, they describe a large thing to build. The building of this thing requires the use of smaller patterns. These in turn may require multiple patterns to build. For example, in *A Pattern Language* Alexander starts with patterns for distributing towns and cities in a region. He moves on to describe the organization of the town and from there to the individual buildings.

It is not essential to apply every pattern in a language or a sequence. We choose which patterns to apply and which not too. Few, if any, patterns are without negative consequences along with the positive ones. In some cases we may decide that despite the positive attributes we will not apply a pattern. There is nothing automatic in the application of patterns; the decision to use, or not to use, a pattern is purely a human one. Consequently the application of a single pattern language may result in different systems being created.

(As an aside, it is worth noting that this implies that mechanical automatons cannot apply a pattern language to create a whole system without human intervention. A reoccurring themes in software engineering pattern literature are the automatic discover and application of patterns. An understanding of pattern languages and sequences so why this is not possible.)

When applying a pattern language we will be faced with choices. Not only must we choose whether to apply a pattern or not but on occasions we will have to choose between different patterns. For example, faced with limited space for a house we may be forced to choose between WORKSPACE ENCLOSURE and DRESSING ROOMS (Alexander 1977). Pattern writers cannot foresee every context, problem or force that may lead to modifications when applying a pattern. Human judgement is needed to select and adjust individual patterns and sequences.

On other occasions we may find that the application of one pattern forces us to use another. The negative consequences of applying one pattern will create forces, resolving these forces may require the use of another pattern.

So it is that patterns from a common language are applied in sequence. Such a sequence forms a path through a pattern language, the result is a single whole (Coplien and Harrison 2004).

A sequence may be a well known one or it may be one we have devised ourselves. Individual patterns may play a role in multiple sequences; indeed the outcome of applying one pattern in two different sequences may be different. Even when patterns come from the same language not all possible sequences will be useful or even make sense. Patterns taken from different languages might work together, or they might not.

The sequences contained in this paper, indeed in any pattern paper containing sequences, are merely suggestions and record what the author has seen work. All but the smallest problems are likely to differ in some element from previous

problems. We should not expect to be able to apply a previous pattern sequence exactly. Readers are encouraged to make up their own sequences.

When writing patterns it is natural to find one pattern leading to another. In writing this collection of business patterns the discovery and documentation of one pattern has more often then not led to the discovery of another pattern. Thus as patterns are describe sequences are mapped out.

The application and creation of patterns is an exercise in stepwise-refinement. The details of a large pattern are often implemented with a set of smaller patterns. These in turn may require the use of several smaller patterns, and so on.

In part the patterns one discovers depends on the granularity of patterns, one lengthy pattern may cover many scenarios. Alternatively, one short pattern may require several more patterns to cover the same scenarios. It is the writer's decision to decide which course best explains the problems and solutions to the reader.

Figure 2 shows how the patterns in this paper connect with the other patterns in this series. In this sequence we envisage a start-up company that uses SERVICES BEFORE PRODUCTS in order to bootstrap itself into business. Once in established the company uses START-UP SERVICES FOR PRODUCTS to help new customers use their products. Over time the company continues to support customers by using CONTINUING SERVICES FOR PRODUCTS.

At this point the established company faces a number of opportunities, some of which are complementary and others mutually exclusive. The company may decide to change the nature of its products business, it might decide that the supply of services are a more lucrative endeavour and adopt SERVICES TRUMP PRODUCTS and COMPLEMENTOR, NOT COMPETITOR. Whether moving to a service only model or continuing to supply products the company may also adopt a PACKAGED SERVICES model to simplify the sale and delivery of service offerings.

When services are the main offering from the company the role is constant. But when services are offered to supplement a product their role their role changes over time. Recognising this change will help organize and structure the services provided.

Whether pursing the services route or not, the company may decide to leverage its existing customer base by using SAME CUSTOMER, DIFFERENT PRODUCT. In order to implement this pattern ACCOUNT MANAGEMENT can be used. However since active customer management is a time consuming business the company may also adopt SALES/TECHNICAL DOUBLE ACT to spread the work.

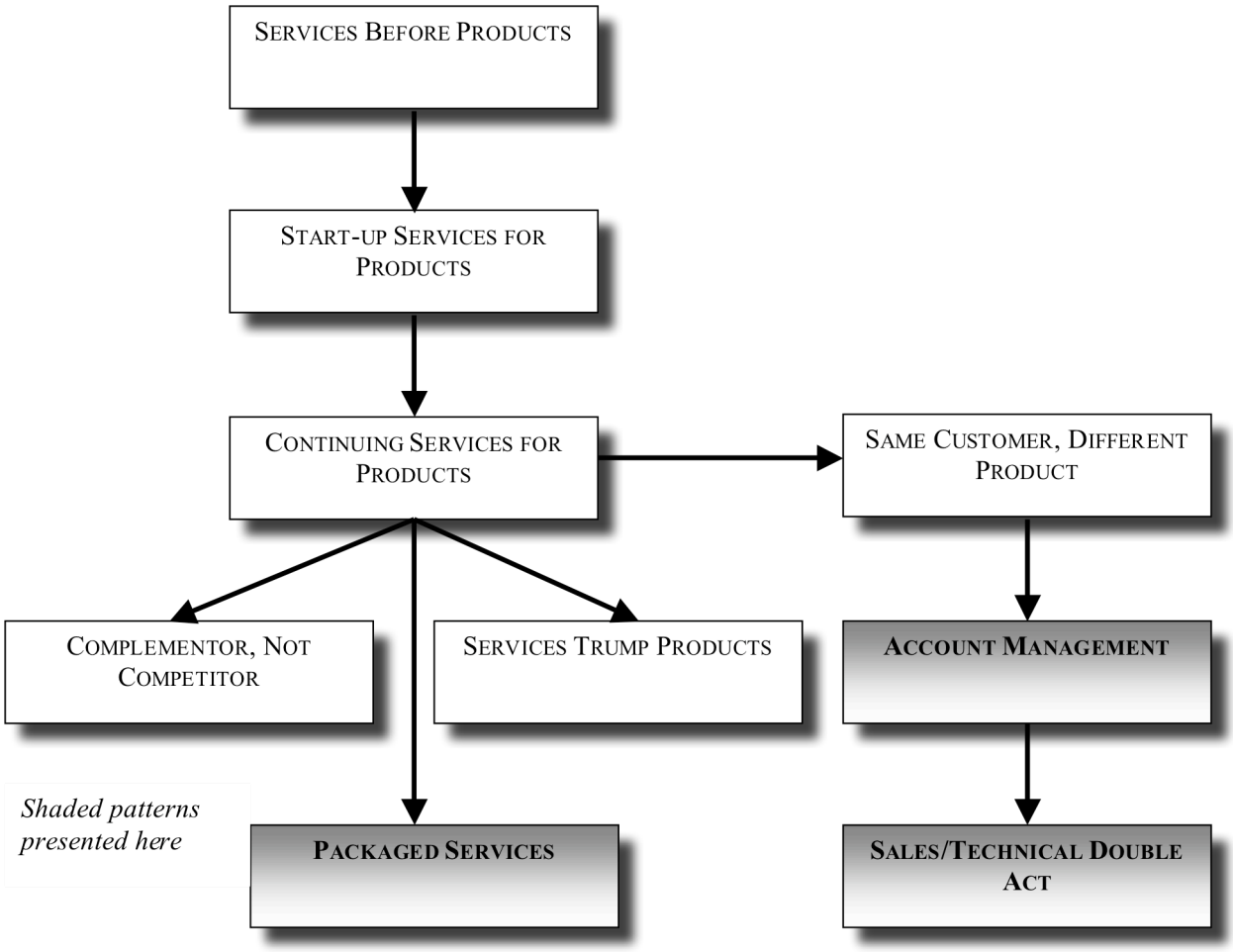


Figure 2 - Map of the Products & Services Pattern Language and possible sequences

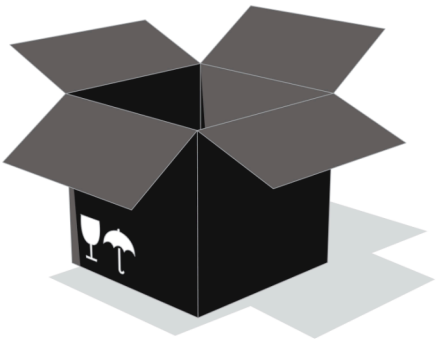
4 The Patterns

4.1 Pattern thumbnails

PACKAGED SERVICES Page 9	Services can complement a product offering and provide a good revenue stream. However, they can also be expensive to operate. Treating services more like products can make them easier to sell and help keep costs down. Therefore package them as products with defined cost and outcome.
ACCOUNT MANAGEMENT Page 13	Existing customers are an asset to your business; it is more cost effective to sell more to existing customers than find and sell to new customers. There is value in the relationship itself. Therefore, actively manage the relationship. You can improve customer retention and provide opportunities for new sales and co-operation.
SALES/TECHNICAL DOUBLE ACT Page 17	Managing the commercial and technical aspects of a customer relationship can be a big job and requires different skills. Therefore use two people, one with a technical focus and one with a commercial focus to manage the different aspects of the customer relationship.
PRODUCTS AND SERVICES (Kelly 2006a)	Technically complicated products are not commodities; they can be hard to use. Therefore, offer services to help the customers in addition to the product, e.g. a support desk and training courses.
SERVICES BEFORE PRODUCTS (Kelly 2005b)	You are creating a start-up company but you are short of money and/or need a better understanding of the market. In order to get a better understanding of the market you need to get into the market. Therefore, sell consultancy services to start with, you will generate money and increase understanding of the market before you start work on your product.
START-UP SERVICES FOR PRODUCTS (Kelly 2005b)	Your product serves a complicated market, consequently your product is complicated. Customers need help to get the most from the product. Therefore, create a professional services group within your organization and sell consultancy services to help the introduction of

	your product.
CONTINUING SERVICES FOR PRODUCTS (Kelly 2005b)	Complex products often require ongoing maintenance and support. The company that makes the product already knows a lot about the product is well positioned to do this activity too. By sharing knowledge between services and products operations both can be improved.
COMPLEMENTOR, NOT COMPETITOR (Kelly 2005b)	Choosing to compete in multiple product categories against multiple competitors' means you sometimes compete against companies who could help sell your other products. Therefore, withdraw weaker and less strategic products, you can now complement your former competitors and increase sales of your leading products.
SERVICES TRUMP PRODUCTS (Kelly 2005b)	Your company has been successful selling products but you are running out of growth, you may already be loosing money. Therefore, use your knowledge of the products to move up the value chain and sell services instead of or in addition to products.
SAME CUSTOMER, DIFFERENT PRODUCT (Kelly 2007)	Existing customers are easier to sell to than new ones. But if you only have one product you have nothing more to sell. Therefore have additional products you can sell to existing customers.

4.2 Packaged Services



Compare two descriptions taken from the internet on 27 November 2007:

"Blue Skyline offers a mixture of consultancy and mentoring to assist the team at the same time as enabling the delivery of the system." http://www.blueskyline.com

"We help companies in the chemicals industry drive their performance to new heights by capitalizing on important business and technology opportunities." http://www.accenture.com

Which gives the best description of what the consultants actually do?

Context Your business delivers technology services to corporate customers.

Problem **How do you explain to customers what your services are?**

Forces Services can infinitely flexible, but that makes it difficult to explain to customers what those services are. The more variable the service is the harder it is to explain. Using value statements and generalisations in the descriptions makes it difficult to explain what you do in a few words.

Customers expect consistency in service delivery. They may come to know and trust an individual consultant. But if they only buy this consultant's time you loose the flexibility sell her expertise anywhere else. If each consultancy assignment depends on a named individual consultant it is difficult to grow a business. To be effective consultancy businesses need to be able to swap individuals on assignments.

Many customer problems look alike on the surface; managing a data

centre for corporation X can be a lot like managing a data centre for corporation Y. But there are also unique problems; applications developed for corporation X might be very different to the ones for corporation Y.

Customers often engage consultants to reduce costs, but sometimes they are looking for strategic services to create a competitive advantage. And sometimes cost reduction is strategic.

Solution **Think of your services like products; explain what you do as a well-defined product. Demonstrate that you understand the customer problems your services are addressing.** Add product-like attributes to your services. Market your services as products with defined problems, defined actions, and defined outcomes.

Segment your customers, potential customers and their problems; identify the common problems that occur again and again. Devise common service solutions that can address these problems. (Separate the unique problems and deal with them as unique projects.)

Initially you need to work on marketing. Market your services as products. Next you need to work on your delivery to create common solutions to common problems.

Marketing:

- Identify the common problems, common causes and common 'pain points.'
- Produce case studies and datasheets for your services. Show how your services solved the problems.
- Identify organizations that you expect to have the same issues and engage with them.

Delivery:

- Break the services down into repeatable steps and where possible offer a defined price for a defined benefit or outcome. Commonality will allow economies of scale to be extracted.
- Consultants need to start assignment thinking about what they have done before and what they can reuse.
- Consultants need to be trained to find, and rewarded for finding, commonalities across services and service engagements.
- Consultants need to be motivated to share personal findings with each other.

You will need to decide the financial model behind your service products. A defined problem resulting in a defined outcome suggests a fixed price service rather than charging for services on a

time and material basis.

Consequences Treating your services like products makes it easier to describe what you actually do, and what the end result is. The more you make your services look like products the more consistency customers can expect, and will come to expect.

Customers are buying a specific product not a specific individual so it is easier to swap consultants during the assignment. This does not mean they will welcome the replacement of an experienced consultant with a new hire. Sometimes it may pay to send new hires out as "shadow consultants" (no charge to customers) until they learn the basics.

Commonality benefits customers because services are delivered more quickly, at a lower cost with fewer complications. However, offering different customers the same packaged service treats all customers the same – all solutions come from the same *cookie-cutter*. The specific needs of an individual customer may be lost. Where needs are different they must be treated differently.

When a customer is seeking to minimise cost they may be happy with a cookie-cutter approach because it delivers maximum cost reduction. But then they will not recognise any competitive advantage if you deliver them the same services as their competitors.

Over time commoditisation of these services may occur. When this happens you may either lead the transition to commoditisation or change your strategy.

Managing services like products entails cost. You will need to appoint product managers or senior consultants who are responsible for identifying and managing the service products.

Offering a customer a fixed price on a service contract can be difficult and leave little room for unexpected problems. Indeed many organizations find charging for unexpected problems to be profitable. (Consult the discussion in CONTINUING PRODUCTS FOR SERVICES (Kelly 2005b).)

Variations -

Examples "These days, IBMers talk about "productising" services, turning them into clearly defined offerings that can be marketed and delivered in much the same way that new mainframe computers are. [IBM's] small and medium-sized business unit, for example, now distributes a catalogue outlining its main services." *Financial Times* (Waters 2006)

Also known as -

Related work -

Sources Financial Times 11 July 2006 - “IBM repackages brain power” (Waters 2006). Image from iStockPhoto.com (4179993)

4.3 Account Management

Big customers who spend a lot of money with you can represent a big chunk of your income so they are not "just another sale." When your product is important to their company you are more than just a supplier and your relationship is about more than just products. There is value in the relationship itself not just the sales.

Understanding your relationship will help you better serve your customers, secure future revenue and create opportunities to increase your profits.

Context You are selling technical products and services to corporate customers. SAME CUSTOMER, DIFFERENT PRODUCT (Kelly 2007) suggests you benefit the most when you sell more products to your existing customers. You might be using

Problem **How do you avoid losing existing customers? How do you understand what customers really want?**

Forces Finding and selling to new customers is expensive but, by definition, existing customers already have at least one of your product(s) so there is no obvious sale to be made.

Corporate customers face multiple opportunities and problems in their own business and market. Some of these issues may create opportunities for your products and services but you need to know what these issues are.

Making a sale should create opportunities for further sales and support contracts. But your customers are your competitor's prospects; you still need to ensure your customers remain your customers. You want them to buy more from you but once you have made the sale you need some reason to stay in contact.

Sales staff are selected and rewarded on the basis of their ability to win sales, but managing an account over the long term requires more than just selling. Customer may be deterred from talking to people in your company if every time they do a salesman tries to make another sale.

Solution **Treat customers as valued collaborators; continue to actively work with customers after a sale has closed.** Appoint named account managers who can build a relationship with both the enterprise and the individuals who work there.

Seek to understand how the customer is using your products, the challenges facing the customer and opportunities that exist for helping customers meet these challenges. Ask lots of questions: *How they are doing with the product? Was it what they expected? Do they need any help? What else could the product do?*

Managing a customer account goes beyond selling and there is more to keeping customers happy than selling at a low price. It includes the post-sales experience: support services, training and customer follow-up. This is provided by a team not an individual.

Rather than focus on the next sale, focus on keeping your customer happy. In the process find out what else they need and who else in the organization may benefit from use of your product. Continue to learn about your customer's needs and their problems. When the time is right offer them your solutions.

Create a culture that encourages ongoing contact and dialogue with customers. Build continuity in the relationship; be responsive to the customer needs and de-emphasis contact based purely on sales. Aim to stay involved over the long time and build a trusted relationship with customers.

Sales people may not be the right people to manage an ongoing relationship. While they may be good at opening doors, making first contact and closing a deal they may lack the skills and motivation to maintain an ongoing relationship.

One option is to split the sales and account management roles. Once a sale is made, or even before, introduce an account manager who will continue the relationship and look after the customer. However some sales people may resist "handing over" an account they have won. Alternatively supplement your sales people with account managers who look after the account when there are no sales in prospect. Use SALES/TECHNICAL DOUBLE ACT in both cases to split commercial and technical issues. Product managers (and business analysis) can supplement account managers to increase the depth of customer understanding.

When recruiting account managers look for people who will be interested in building a relationship rather than just making the next sale. Account managers who are simply sales staff working on commission may not be motivated to keep a relationship going when there is not sale in prospect. Balance remuneration so staff can afford to build the relationship rather than just sell, sell, sell.

According to McKenzie (2001) a customer relationship is a conversation with exchanges. There is value in the relationship itself, not just the product/money exchanges. Customers who see value in the relationship will continue the conversation by buying more products. Active account management represents an investment to maintain and increase that value.

No one pattern or single set of actions can guarantee your customers return to buy more from you. By building a trusting relationship and continuing to learn about your customers you should at least see problems before they occur, and position yourself to find opportunities.

Consequences Selling additional products and services to existing customer can be cost effective and information rich. Technology change creates opportunities for everyone: customers, competitors and yourself.

Engaging with a customer on a regular basis will allow you to learn their future growth plans and requirements. Knowing customers' future needs can inform your own business decisions leading to better products and benefiting both customer and supplier.

Competitors – especially new entrants – lack the customer assets you have. Investing in your customers will create a deeper relationship thus making it more difficult for competitors to poach business.

Account managers will need to make visits to the customer and spend time to understand the customer. Too much customer contact may annoy the customer and make them feel they are being constantly sold too. Having other points of contact, like customer care and product managers, will help build trust and collect information without a sales motivation.

An active account management programme will cost. You will need to employ additional staff; pay salary, travel and entertainment expenses even when sales are not being made. Such expenses may be seen as easy savings when times are tough but they represent investment in your relationship with customers and keep open the prospect of future sales.

Variations -

Examples A London software company supplied applications to most of the major players in the mobile telecoms market. The remaining sales prospects were small fry. New sales had to come from selling more products to existing big customers so it was important to create a positive sales, and post-sales, experience. A hard sales approach might secure the immediate sale but damage the relationship and future prospects. Account management was handled by a SALES/TECHNICAL DOUBLE ACT, one for commercial issues (sales) and one for technical issues (everything else).

Another London software company, this time in the media sector, had salesmen make an initial sale. They then handed accounts over to dedicated account managers. However the hand-over was poorly defined, sales staff didn't like giving up customers and the account managers lacked technical skills. In some cases it worked, in others it didn't.

Also known as -

Related work This pattern can be used to help implement ITS A RELATIONSHIP NOT A SALE from Customer Interaction Patterns (Rising 2000). BUILD TRUST and other patterns from the same language are also useful.

CONTINUING SERVICES FOR PRODUCT (Kelly 2005b) describes how to continue services as additions to your product sale. Services like technical support and training can generate continuing revenue over the lifetime of a product.

Sources Image from iStockPhoto.com (4583601)

4.4 Sales/Technical Double Act

Allan was responsible for evaluating and selecting an enterprise search engine. Downloading and installing the trial software was easy but then technical problems and questions arose.

When the search engine salesman called he brought a technical consultant with him. The consultant was knowledgeable about the things the salesman wasn't and could discuss technical issues in detail. Even after the sale the technical consultant kept in touch.

Context You are using ACCOUNT MANAGEMENT to sell high margin technical products to business customers.

Problem **How do your avoid overwhelming your account managers with commercial and technical issues? - Both before the sale and the after.**

Forces Selling a technical product involves more than talking about technology; there are commercial (e.g. price) issues to discuss. But, technical people aren't usually good at commercial aspects and sales people aren't usually proficient in technical aspects.

Even when you can find someone who can cover the commercial and technical aspects of a product there is often too much for one person to take in. Technical products often require in-depth technical knowledge and commercial knowledge.

Within customer organizations the people who make the technical decisions are often different from the people who make the decisions on expenditures. These groups may expect to deal with different levels of seniority and expertise in your organizations.

Discussing commercial and technical questions for a complex product takes a lot of time and energy. But you don't want to spend all your energy on these questions. At the same time as negotiating the deal you want to gain insights into your customer's business and how they want to use the product.

Solution **Have your customer account managers work in pairs, one handles the commercial aspects of the product and the other handles the technical aspects.** This will allow you to hire the best possible sales people and technical people for your product. Individuals can focus on what they do best rather than trying to master diverse skills.

Technical managers should come from a technical domain and should be trained in-depth on the product. Some technical managers may come from internal groups like development or support. Sales people may not need to understand the product in-depth but they should know the benefits and advantages of its application. Each group needs to respect the other and refer questions when appropriate.

While technical managers may be involved in pre-sales calls their contact with customers should also extend beyond the initial sale. As technical manager win the trust and confidence of customer's staff your overall corporate relationship will deepen. You will better understand your customers and serve them better.

Technical managers may help clients with technical support issues, configuration, installation and training. Be careful to not overload the technical manager with too much work, most likely they will be working with several customers. With growth you may want to create dedicated groups to deal with specific issues and relieve pressure from technical managers, e.g. a technical support desk and a training team.

The sales oriented commercial managers can concentrate on the financial and business aspects of the deal, e.g. pricing, terms and conditions, license renewals, support agreements, etc. They can take a strategic view and look for opportunities to sell more products.

Both managers should talk regularly about the customer, their current needs and their future needs. They should meet with the customer regularly and conduct periodic account reviews that bring together everyone involved with managing the customer account. Such reviews can help identify sales prospects and future client needs.

Consequences Using more than one person to manage the customer relationship allows people to specialise in what they are good at. It is easier to find dedicated individuals than expect individuals to be proficient in very different fields.

Having more than one person involved in a customer relationship acts as a safeguard against people leaving your company. Losing a sales person can be unfortunate; if they take your customers with them it can be a disaster. With two people managing the account

you can provide continuity.

Where more than one person is involved in a sale the customers may become confused about who deals with which aspects. Even if customers wish to clarify the relationship you might prefer to leave the boundaries vague. Blurring the lines may create opportunities for extra contact and information exchange. Still be careful not to confuse your customer too much.

Customers will receive better commercial and technical service. You will gather more information because different staff talk about different things to different people. Over time you will gain a more complete view of your customer. Customer employees will come to trust and share information with your representatives. Having two views of the customer will improve your understanding of the customer and issues, particularly political ones, involved in a sale.

Having multiple account managers further increases the costs of managing a customer account. This is feasible for high margin products, for low margin products you might need to use service teams rather than individuals.

Variations When customers are very large one account manager may not be enough to cover all contacts. Multiple account managers will allow responsibilities to be divided. Different managers may deal with different customer divisions or geographical areas.

Examples Many organizations employ *pre-sales consultants* or *sales engineers* as technical contacts before the sale is made. This is a form of double act but sometimes ends once the sale is made.

Also known as -

Related work Sales/Technical Double Act can be used to help implement ACCOUNT MANAGEMENT.

Software developers sometimes use DEVELOPING IN PAIRS (Coplien and Harrison 2004) to increase productivity. One developer reviews work as it is performed and helps with the decision process. This is a form of double act but the developers have similar skills and periodically switch the roles of reviewer and coder.

Sources Image from iStockPhoto.com

5 Acknowledgements

I am indebted to my shepherd for VikingPLoP 2007, Uwe Zdun, for his time, comments and observations. I would also like to thank the participants of the VikingPLoP workshop who reviewed this paper, and in particular Cecilia Haskins, Jim Coplien, Jan Reher, Jürgen Salecker and Kristian Elof Sørensen.

6 History

Date	Event
December 2007	Post conference revision published to web prior to proceedings.
September 2007	VikingPLoP 2007 conference
Summer 2007	Shepherding for VikingPLoP
January 2007	Extracted from EuroPLoP submission
December 2006	First draft

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