



**Equanex**

Web projects On-Time & On-Budget!

## Integrating Content for Effective Customer Facing Applications



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## Outline

- **Customer Expectations for a Self-service Product Support Module**
- **Self-Support and Service Vision**
- **Infrastructure Requirements**
- **Content Categories**
- **Implementation Issues**
- **Implementation Strategies**



## End User Requirements

- **Ease of use (fast, to the point, clear)**
- **Ease of finding relevant information**
- **Ease of identifying relevant components of the product (e.g. spare parts)**
- **Ease of moving from one type of information to the other**



## Product Components Identification

Now : Keyword Search vs. Future : Graphical Drilldown

- **Keyword search does not solve the problem of part identification**
- **> 40% of customer calls into service center relate to spare parts identification**
- **Studies show that users prefer visual identification to any other method**
- **Visual identification should be presented within a graphical context of the whole product**



## Finding Relevant Information

Now : Keyword Search vs. Future : Context Related



- Searching manuals and troubleshooting guides by keywords
- Long process of selecting the right information from the search results
- Frustrating process for the user
- Product and its structure can be used as context
- Relating information to serviceable subassemblies and components provides the user a better chance to find information quickly



## Ease of Switching From Content to Content

Now

Future

- **Scenario:**
  - User identified the component
  - User has a choice of ordering different types of material
  - User would like to research the best one for his application
- **Process:**
  - Read papers associated with each material, application, component
- **Associate different types of information at the level of component**
- **Inter-link information types**
- **New process:**
  - User will have access to white papers related to this component and specific material in an application context



## Satisfying End-User Requirements

### Customer Perspective

- **Ease of use**
- **Ease of finding relevant information**
- **Ease of identifying product components (e.g. spare parts)**
- **Ease of moving from one type of information to the other**

### Self-service Requirements

- **Focused on the user's potential action**
- **Context sensitive information**
- **Graphical navigation**
- **Inter-linking of content**



## Creating a Great User Experience

- **Ease of Use!!**
- **The more relevant and refined is the response, the more satisfied is the customer**
- **Personal information as much as possible**
  - **Show only products that the user bought**
  - **Show only information accessible to the service level that the user purchased**
  - **Utilize information known about the user, e.g. shipping, etc.**
- **Integrating online and offline**



## Service Vision Required

**A successful self-service capability requires a service vision**



## The New Profit Imperative

- **Only one in eight of the 1000 largest manufacturers have outperformed the S&P 500 since 1998**
- **All thriving companies have gone “downstream”**
- **Weaker product demand**
  - **Annual sales growth declined from 5.2% to 2% over the past 30 years**
- **Growing installed base**
  - **Longer product span**
  - **Accumulation of past purchases**
  - **Installed base is an order of magnitude greater than the number of units sold annually**



## Rethinking Manufacturing Strategy

- **Old foundations:**
  - Vertical integration for cost control
  - Disciplined research to create superior products
  - Dominant market position to provide economies of scale
- **Going downstream requires new foundations:**
  - Redefining the value chain
  - Building customer allegiance
  - Rethinking vertical integration

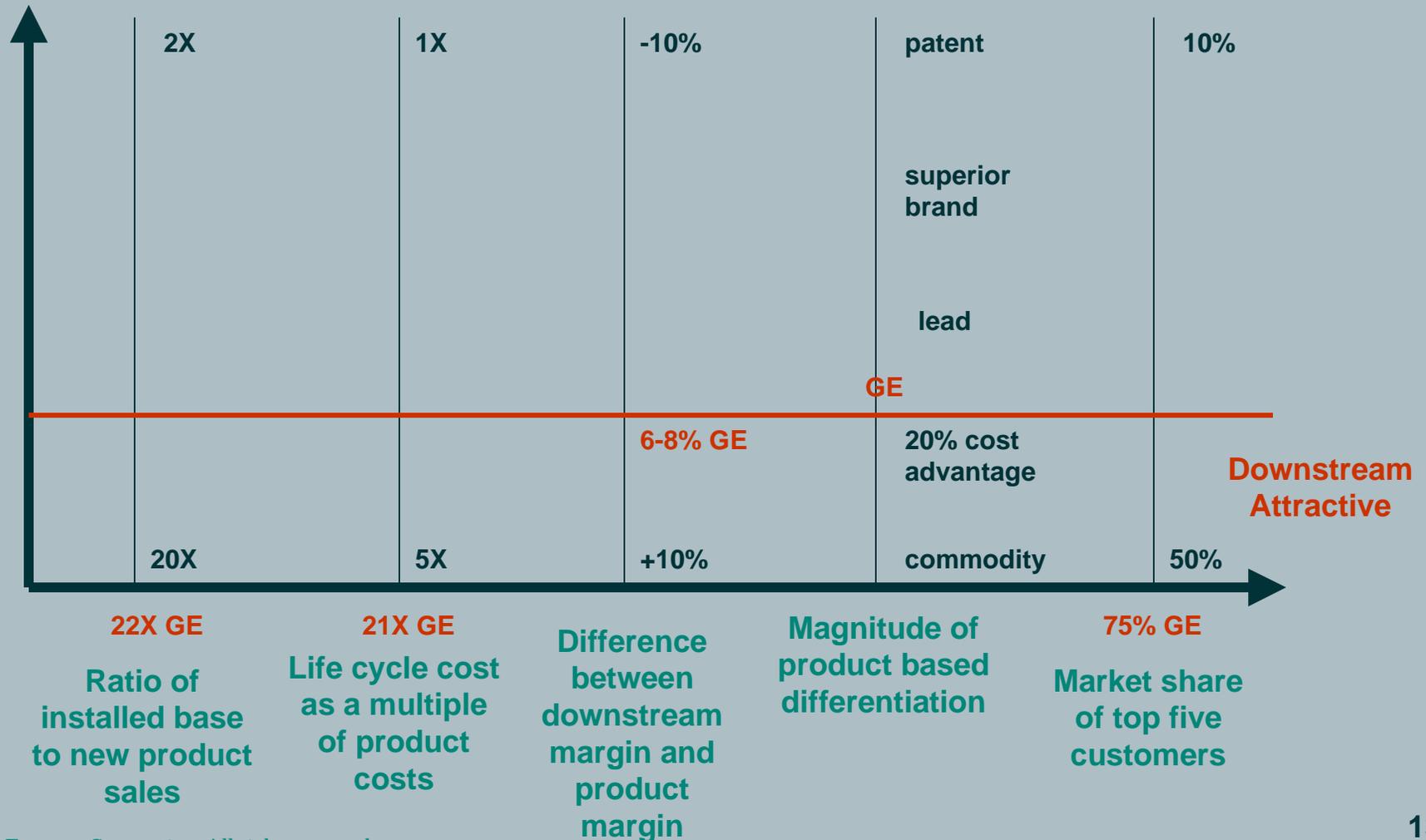


## Three Downstream Business Models

- **Embedded Services**
  - Smart product can save labor costs for customers
- **Comprehensive Services**
  - Handling many aspects of product's ownership and operation creates a bond with customers
- **Integrated Solutions**
  - A range of products and services to satisfy customer needs



# Which Downstream Strategy Makes Sense for You?





## Online Service Vision

### **A specific “downstream” business model**

- **Creates a vision for the online service offering**
- **Defines current and future capabilities that can be offered online**
  - **Current content**
  - **Future content**
  - **Infrastructure requirements**



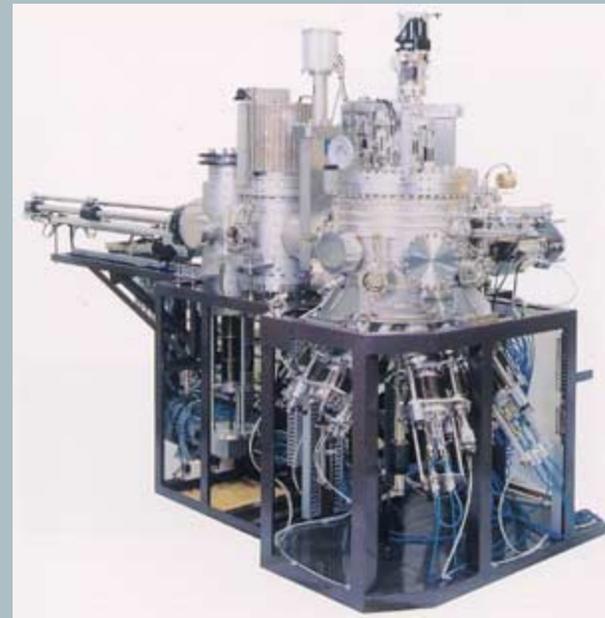
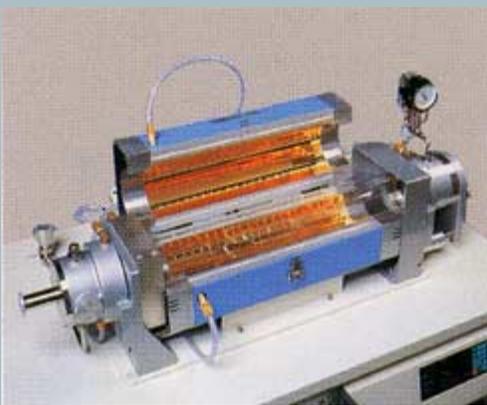
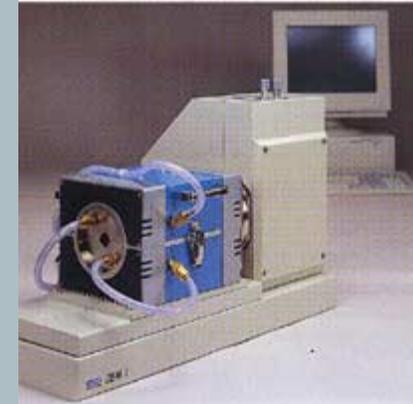
## Service Vision Implications

- **Embedded services**
  - **Data utilization and analysis, feedback loop to customers**
- **Comprehensive services**
  - **Continuous addition of services, information management**
- **Integrated services**
  - **Continuous addition of products and mix/match of services**



## Case Study - CLV Manufacturing Company

- \$1.2 Billion in Revenue
- Headquartered in Japan; Locations in Europe and US
- A broad vacuum processing product line from complex equipment (\$5M) to components (\$500)





## Case Study - CLV Manufacturing Company

- Grown through acquisitions
- Direct sales model for equipment
- Direct sales model for components
- Large installed base, measured on the uptime of equipment in the field
- Competencies
  - Advanced Technology (out of Japan)
  - Sales approach - solving customer problems



## Service Revenue Creation

Case Study

### Why is service revenue “left on the table”?

- Viewed as a necessary evil
- Continued focus on new sales
- High support cost in low price market segments
- Customers that are not willing to pay for a standard service plan but would buy a service plan at a certain level
- Multiple service plans are difficult to maintain and deliver



## Service Vision

Case Study

- **Vision - Comprehensive with some Embedded Services in the future**
- **Five target markets with different needs**
- **New products include a software component that require high support costs**
- **Created 5 service plan levels**
  - **Light - given away**
  - **Preferred**
  - **Gold advanced**
  - **Platinum - applies to customers who purchase new products with software included**
  - **Internal**



## Service Plan Example

Case Study

- **Service Level - Gold Advanced**
  - Spare Parts Identification
  - Ordering
  - Advanced Troubleshooting
  - Advanced Repair Procedures



## Infrastructure Requirement

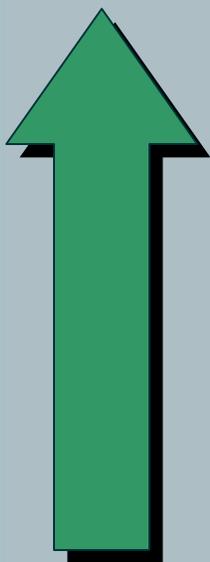
Case Study

### **Flexible infrastructure is required with ability to**

- **Provide current product support content**
  - Maintenance
  - Troubleshooting
  - Spare parts identification
  - Ordering/Reserving
- **Structure and deliver flexible service plans**
- **Expand the offering in order to support the service vision**

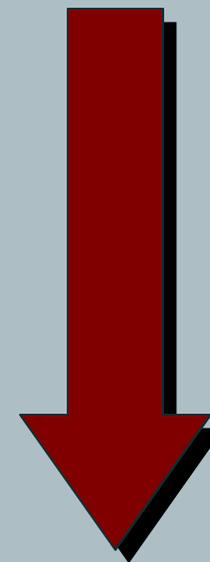


## Increase Revenues



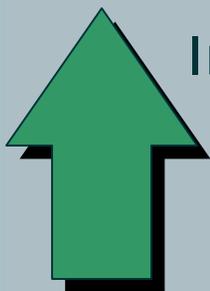
- ✓ Increase revenue from spare parts sales
- ✓ Generate additional service revenues by offering tailored customer service online
- ✓ Cross-sell and up-sell capability resulting in additional sales
- ✓ Increase sales closure rate
- ✓ Increase qualified sales leads

## Decrease Costs



- ✓ Reduce sales costs for equipment and spare parts
- ✓ Reduce customer support costs
- ✓ Decrease ramp up time for customer service and field service personnel
- ✓ Reduce warranty costs

## Increase Customer Loyalty



- ✓ Customers save time and get the high level of service they desire

## Improve Cash Flow



- ✓ Reduce sales cycle time on equipment and spare parts

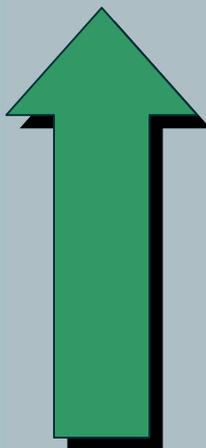


# Benefits

## Case Study

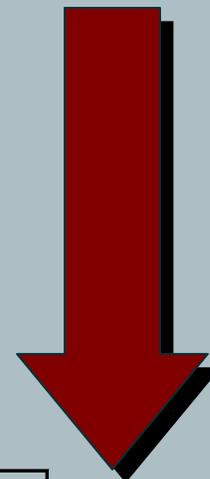
### Increase Revenues

### Decrease Costs



- ✓ Spare parts sales - 3%
- ✓ Service revenues - 100%
- ✓ Cross-sell/up-sell - 15%
- ✓ Sales closure rate - 1pt

- ✓ Support costs - 10%
- ✓ Ramp up time for field service personnel - 6 m
- ✓ Warranty costs - 20%



	(in 000)	Revenue Increase	Margin Increase	Cost Reduction
1	Spare parts	\$ 900	\$ 540	
2	Service revenue	\$ 20,000	\$ 10,000	
3	Cross-sell & up-sell capability	\$ 2,250	\$ 1,350	
4	Increase sales closure rate	\$ 9,000	\$ 5,400	
5	Technical support			\$ 720
6	Decrease ramp up time for service personnel	\$ 1,200	\$ 600	
7	Warranty cost			\$ 800
	<b>Total</b>	<b>\$ 33,350</b>	<b>\$ 17,890</b>	<b>\$ 1,520</b>



## Return on Investment Summary

### **Investment into Self-service capability can**

- **Pay-off in the first quarter of operations**
- **Increase customer switching costs**
- **Provide differentiation**
- **Provide a platform for service vision**



## Current Content

Case Study

- **ERP data**
  - **Customer records**
  - **Spare parts information**
  - **Bill of Material**
- **CAD/CAM system**
  - **Product images**
- **e-Commerce**
  - **Ordering and transactional activity**
- **Technical Documentation**
  - **Service Procedures**
  - **Installation Instructions**
  - **Replacements Guides**
  - **Troubleshooting Guides**
  - **Spare Parts Tables**



## Service Plan

- **Components**
  - **Information**
  - **Labor**
  - **Product(s)**
- **Information will become a more critical component going forward**
- **Ability to add, select and include informational content depending on the access level of the customer will become even more critical in the future**



## Required Flexibility

Case Study

- **Add informational content categories quickly, e.g.**
  - **Technical notes**
  - **FAQs**
  - **Related articles and white papers**
  - **Software downloads**
  - **Software demonstration(s) and installation instructions**
- **Create additional service levels to realize revenue opportunities**



## Implementation Requirements

Case Study

### Ability to

- Implement products incrementally
- Add capability in modules, e.g. troubleshooting
- Add content internally
- Maintain content internally
- Have feedback loop from the field



## Implementation Issues

Now : 'M anual' O riented vs. Required : C ontext O riented

**Paper based information delivery, e.g. service manuals, documentation**

**Different organizations are responsible for preparation and maintenance of different information**

**Customized information delivery is resource consuming**

**Information is created and maintained in logical units - "chunks"**

**Fast, easy and direct access to "chunks" of relevant information**

**Easy and fast maintenance of "chunks"**

**Ability to combine "chunks" into manuals and/or service plans**



## Self-service Product Support Vision

- **Authoring platform for self-service capability**
- **Provides a flexible contextual structure (product image, schematic, etc)**
- **Imports or utilizes existing content**
- **Provides an easy way to inter-link content**
- **Provides a way to define service plans from existing “chunks”**



## Example

Case Study

**Demonstrate ease of content population and  
service plan creation**

**CLV Manufacturing / VisiSolve**



## Implementation Strategies

- **Implement products that generate most calls first**
- **Implement only new products, correlate with new product introduction**
- **Implement products that require spare parts, utilize drill-down to lead to these parts**



## Future Technologies

- **Wireless**
- **Natural language interface**
- **Intelligent agents knowledgeable in the product**



## Summary

- **Ease of use is critically important for end users**
  - Speed of finding information
  - Relevance
  - Clarity
- **Successful self-service capability requires a service vision**
- **A different information delivery paradigm is required for successful content delivery**
  - Graphical product navigation
  - “Chunks” of information versus manuals
  - Inter-linked