MAPPING THE PRODUCT MANAGEMENT MINEFIELD Survey Report, 31st January 2008

Software Association

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The Irish Software Association: The Voice of the Irish Software Sector

The Irish Software Association (ISA) is a business association within IBEC for the Irish software, services & technology industry. Their core mission is to promote the common interests of the software sector as a whole as well as serving as a key resource for member companies. The broad focus of the association is to promote and support an environment that encourages the sustainable development and growth of our software & technology companies to create international companies of scale from Ireland that can compete successfully in the global market.

Select Strategies ... Accelerating the growth of high potential companies

Select Strategies helps high potential companies who are striving to grow revenue,
providing 'experience-based' strategic consulting and education services. Unlike
traditional consulting companies, all executives are seasoned entrepreneurs,
marketing strategists and sales professionals.

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Report Findings

- The scale ambitions of the participant companies are strong; most report that they have introduced formal Product Management into their companies and a number are seeing the benefits.
 - Too many companies are customer focused rather than market focused. A company who describes themselves as "customer led" will always be a services company – the one to many relationship is what scale is all about.
 - Companies are not building a high degree of repeatability into each customer engagement resulting in a barrier to scale.
 - Selling through Channel partners is key to scale the absence of effective Product Management inhibits this route.
- 2. Best practice tells us that scale in product companies only takes place when world class Product Management is in place.
 - Companies can succeed to a certain revenue threshold without effective Product Management discipline – however, a glass ceiling is reached limiting scale.
 - Lack of repeatability is the biggest inhibitor to scale.
- 3. Product Management capability in Ireland is limited, resulting in missed opportunities, barriers to scale and wasted R&D.
 - Irish companies are not executing to world class standards.
 - There is a lack of understanding of the role Product Management should play.
 - There is a dire lack of talented product managers in Ireland, therefore companies are recruiting overseas.

- 4. There needs to be a radical improvement in the Product Management capability of Irish software companies if their scale ambitions are to be realised.
 - Product Management strategy is a CEO issue. Until it becomes part of our CEOs DNA, many companies will flounder.

Recommendation

A 2 day Product Management Bootcamp with world class US based contributors, practitioners and experts should be held for the CEOs of Irish software companies. The objective of this session is to dramatically raise awareness, amongst CEOs, of the role of Product Management in creating companies of scale.

Background

This is the first report on the Product Management capability of Irish Software companies. Its objective is to:

- Understand the role played by Product Management in software companies;
- Test the hypothesis that lack of Product Management represents a scaling issue for Irish software companies;
- Make recommendations as to what should be done (if anything)
 to help companies improve their Product Management
 capability to accelerate their growth.

This report summarises information gathered during a number of recent initiatives. The first was a survey conducted by Select Strategies on behalf of the Irish Software Association in December 2007. The survey was completed by 27 participants, most of whom were Chief Executives, Chief Technology Officers or Product Managers of Irish software companies. We are satisfied that the data from the completed surveys is a representative sample upon which to base our findings. However, respondents may have self selected due to their degree of awareness of Product Management and its potential impact on their growth plans.

Subsequently an invitation only CEO Forum took place at which representatives from Irish software companies discussed some of the issues raised by the survey.

Finally, the ISA Scale Working Group on Scale gathered the outputs from both the Survey and the Forum, reviewed and made a recommendation, which are included in this report.

Does Product Management matter?

Building software companies of scale is hard. At the core of many successful companies are great products. Securing unique customer insight and delivering the product roadmap to win market share has never been harder. The software industry is maturing, yet the options proliferate – open source, on demand, competing platforms, off shoring and vendor consolidation. Competition is tougher, buyers appear to have all the cards, yet opportunities abound.

Building "me too" products won't drive scale. There are armies of companies in low cost countries that will beat Irish software companies at this game. To grow software companies of scale − say over €50 million in revenue, we must have software companies that create game changing products and get them successfully and repeatedly to market. Otherwise many of our best product companies will continue to be acquired by multinationals when they hit their first product home run.

Product Manager as superhero

Great Product Managers understand customers more profoundly than they understand themselves. They uncover unmet market needs and understand what customers need to solve their problems, rather than what they say they want. They secure unique customer insights. They orchestrate their engineering, sales and marketing colleagues to drive their companies to deliver better solutions to customer problems faster. They understand the competition, figure out their next moves and make sure that they get to the unclaimed ground first.

In a sense Product Managers are superheros – they have product responsibility without authority. A great Product Manager gives you the iPod; a poor one the Apple Newton. Product Managers walk a fine line in the minefield between customers, sales, marketing and engineering – each pulling in a different direction. One day they are hailed as the font of all knowledge – the next day they are just a 'demo monkey'.

In the Irish software sector, there are very few examples of companies who can repeatedly create new product winners. Often the founders, whose original insight led to the first successful product, move into new 'more senior' management roles. They don't instill Product Management DNA into their companies. Subsequent products don't deliver the anticipated growth. The founder special magic is missing.

If Ireland is to create a critical mass of software companies of scale - say revenue of over €50 million - we need to find a supply of Product Management superheroes fast. In the same way as sales capability was initially improved by hiring professionals from international markets, we need simple routes to help high potential companies recruit world class Product Management expertise.

In simple terms we could say that Product Management is responsible for deciding what the product should be, Product Development is responsible for building the product, and Product Marketing has the responsibility for telling the world about it. Each of these functions does not necessarily need to be represented by a different team in the company. What is critical however is that the company realises that each of these functions is an important part of preparing the product for market. (see Appendix C for more detail)

Building Product Management DNA

The entrepreneurial spirit that fuels the early years of many software companies is often dampened as innovative and energetic CEOs strive to get their products to market. Building the process and chain of events to harness the core value of a company and bring it to the maximum number of paying customers is the hardest challenge a software entrepreneur faces. Product Management is an important link in the chain, and when effectively implemented, can ease some of the pain.

What the survey data tells us

Most respondents have recently implemented Product Management processes. Their Product Management functions are basic and the role is often staffed by just one person.

In participant companies where Product Management is more established, the scope of activities extends to deeper market research, writing business cases, writing of requirements/detailed specification documents, change management, working with analysts, performing win/loss analysis, presentations/demos and customer meetings. The staffing levels in Product Management also increase to reflect product range, markets and number of development teams. These participant companies are finding growth easier to achieve and manage.

85% of respondents with stated ambitions to grow their revenue over €10 million per annum say they have a formal Product Management function in place. However their product managers seem to be struggling to get Product Management disciplines to work in their companies. They are less optimistic about how product focussed their companies are.

Smaller companies show limited evidence of implementing a Product Management function. This is hardly surprising as many are bootstrapping on services. However, with changing business models, such as software on demand, Product Management disciplines should arguably be implemented earlier in the company's development.

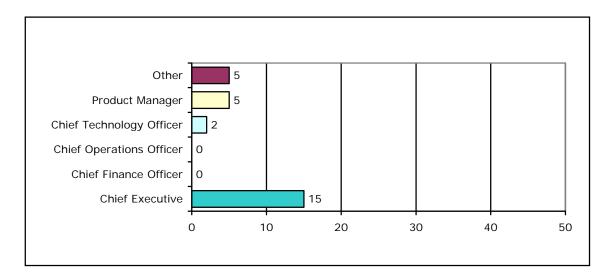
Encouragingly the more mature companies indicated that the focus of Product Management was on seeking out new products and opportunities. Amongst the less mature companies there is evidence to indicate that the focus for Product Management remains on helping sales and translating customer need into code.

If, as the quantitive data suggests, the majority of respondent companies have implemented a formal Product Management function, what evidence do we see that this is performing effectively? Is the effort being put into Product Management yielding the desired results? If companies are implementing effective Product Management strategies, should we not be expecting to see a greater proportion of world leading product organisations?

So where does the challenge lie? Is it a lack of understanding of best practice in the area of Product Management? Is it a lack of focus or investment in Product Management? Is it a lack of a pool of talented product managers willing to work for Irish companies?

Survey Results 1: Landscape

Total	%	Position
15	56	Chief Executive
0	0	Chief Finance Officer
0	0	Chief Operations Officer
2	7	Chief Technology Officer
5	18	Product Manager
5	18	Other Executive



Profile of Participating Companies

There was a broad spread of company size in terms of employee numbers ranging from 6 to 5000. Most participating companies were over 5 years old, had between 12 and 200 employees and were based in Dublin. Appendix 1 provides a list of the companies that responded to the survey.

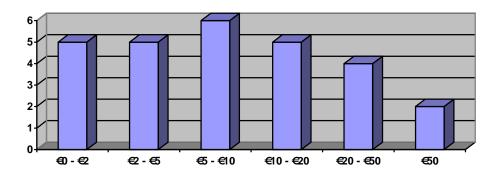
Profile of Respondents

There was also a good profile mix of respondents, with over half listing their occupations as CEOs and 18% as product managers. The findings of the survey are representative of the leadership of the Irish Software Industry.

"We are evangelising a new product in a new market, we would be lost without Product Management", James Doyle, Arantech.

Survey Results 2. Revenue

Revenue range	%	
€0 - €2 million	18.5	
€2 - €5 million	18.5	
€5 - €10 million	22.2	
€10 - €20 million	18.5	
€20 - €50 million	14.8	
€+50 million	7.4	



Revenue Profile of Respondents

The existing revenue profile of participants is described in the tables above. It is representative of the sector.

The growth ambitions of companies participating in the survey are strong - 99% envisaged their company making a step change in growth over the next 3 years – some even indicated that they expected growth in excess of 10x current revenue.

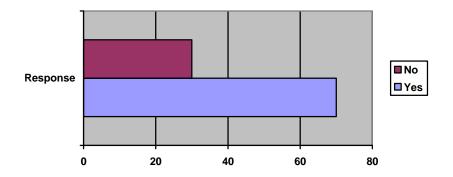
Revenue Mix

The revenue mix of respondent companies varies widely. At one end of the spectrum, 20% of companies are obtaining more than 60% of their revenue from licenses – indicating a strong product focus. However, at the other end of the scale, almost 20% of companies are getting less than 25% of revenue from license fees – indicating much less of a product focus.

Over half of respondent companies generated 40% of their revenue from license fees.

Survey Results 3: Product Management Function

	Does your company have a formal Product Management function?	
%	Response	
70	Have a formal Product Management function	
30	No formal Product Management function	



The majority of participant companies with a formal Product Management function indicated that it had been created in the past three years. Product Management reports to the CEO in 52% of respondent companies, to engineering in 24% (often a company founder) and to marketing in 24% of the respondents.

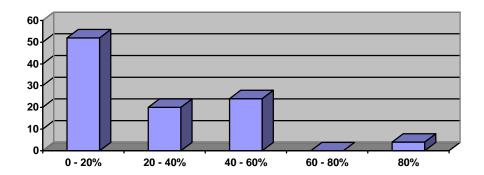
In responding companies, the numbers working in Product Management ranged from 1 to 7 people. Companies with higher revenue, more products & where the scope of role was bigger employed more in the Product Management function.

Of those who responded that they did not have a Product Management function, over 70% stated that it existed within another role. Only 22% of respondents stated that it was not appropriate for their business. In smaller companies, the role is carried out part-time by the CEO, CTO or by marketing, often with the intention of making it a full time role. Services focused companies did not see any need for a Product Management function.

"Our Product Management processes give us an outside-in focus. It helps us get products to market faster and ensure our customers buy products they want' Alan Robinson, CEO Shenick

Survey Results 4: Product Roadmap

	What percentage of your product roadmap is customer specific development work?
%	Response
52	0 - 20%
20	20 – 40%
24	40 - 60%
0	60 - 80%
4	+80%



90% of respondents said they had a formal product roadmap in place. Over half of these respondents said that the roadmap extended to two years and that it was mainly company, rather than customer specific funded.

Marketing or the CEO owned the roadmap in the more product focussed companies whilst engineering owned the roadmap in less product focussed ones. The roadmaps are driven by marketing, sales and specific customer demand with some engineering influence.

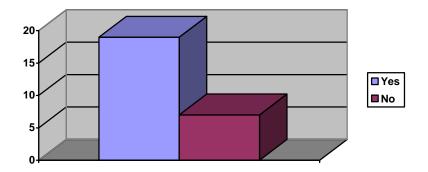
The CEO, or a combination of senior executives, authorised major changes to the roadmap in product focussed companies whereas engineering or sales have this authority in less product focussed ones.

Most companies are costing product development based on the number of days to complete a project, with a limited number of forward thinking ones looking at estimated margin impact on the business.

"Our Product Management is haphazard and I am not sure we are pursuing the right opportunities" **Survey Respondent**

Survey Results 5: Product Management Focus

	Do you think your company has a strong Product Management focus?	
%	Response	
73.1	Yes	
26.9	No	



Those who have implemented a Product Management function within their company, are already beginning to see the benefits. These include a clear focus for management teams, better execution of product strategies and faster time to market.

Having a Product Management function also allowed companies to address customer requirements in a more effective manner. Of the participating companies several stated increased revenue and ability to scale as major benefits.

Companies who have not implemented a formal Product Management function find they are sales opportunity led, making planning difficult. Other companies without strong Product Management expressed the view that their Product Management was haphazard and they were not sure they were pursuing the right opportunities.

"Not having a strong Product Management focus has led to poor road mapping, prioritisation, poor interdepartmental communication, marketing limitations and ultimately lower sales than would otherwise be the case", **Survey Respondent**

Appendices

Appendix A: Survey Questionnaire

The objective of this survey is to understand the role of Product Management in Irish Software companies and to test the hypothesis that lack of Product Management represents a scaling issue for these companies.

Background Questions:

- 1. Name
- 2. Title
- 3. Name of Organisation
- 4. Year founded
- 5. Annual revenue
 - a. 0-5 million
 - b. 5-10 million
 - c. 10-15 million
 - d. 15-20 million
 - e. 20-50 million
 - f. +50 million
- 6. Percentage of revenue which is license
 - a. 0-20%
 - b. 20-40%
 - c. 40-60%
 - d. 60-80%
 - e. +80%
- 7. Number of employees

Product Management Questions:

- 1. Does your organisation have a formal Product Management function?
- 2. If yes, go to Question 3, if not please indicate why not?
 - 1. We do but it is is within another role if so, which role?
 - 2. We do not see any value in this function.
 - 3. It is not appropriate for our business.
- 3. Where does it report in to?
 - 1. CEO
 - 2. Engineering
 - 3. Marketing
 - 4. Other
- 4. How many people work within it?
- 5. When was it set up?
- 6. What is its primary function?
 - 1. Help sales in the selling.
 - 2. Identify new products and opportunities.
 - 3. Work with engineering to translate customer needs into code.

- 7. Do you have a formal product roadmap?
- 8. If no how does your business set the product development priorities?
 - 1. Open response question
- 9. If yes what time scale does it span?
 - 1. 0-12 months
 - 2. 12-24 months
 - 3. +24 months
- 10. Who "owns" the product roadmap?
 - 1. Engineering
 - 2. Marketing
 - 3. Sales
 - 4. Customer
 - 5. CEO
- 11. Who can authorise changes to the product roadmap?
 - 1. Engineering
 - 2. Marketing
 - 3. Sales
 - 4. Customer
 - 5. CEO
 - 6. A team please state the roles on the team
- 12. What percentage of your product roadmap is specific customer development work?
 - 1. 0-20%
 - 2. 20-40%
 - 3. 40-60%
 - 4. 60-80%
 - 5. +80%
- 13. Does your organisation follow any formal product development methodologies?
- 14. If yes, please name it.
- 15. How does your organisation decided on what product development focuses on?
 - 1. Driven by sales and specific customer demand
 - 2. Driven by engineering and technology issues
 - 3. Driven by marketing
 - 4. Varies depending on the project
- 16. How does your business cost product development?
 - 1. Number of days required to complete a project
 - 2. Estimated margin impact for business
 - 3. We don't
- 17. Do you think your business has a strong functional Product Management focus?
- 18. If yes, what benefit does it bring?
- 19. If no, what impact does that have on your business?

Appendix B: Participating Companies

The following is a partial list of the companies who contributed to this report. Some companies have asked not to be listed. We are extremely grateful to all for the time and effort expended in their participation.

Arantech

Allfinanz

Bayberry

CampusIT

Changing Worlds

Cherry Consulting

Ci3

Cibenix

Codec Systems

Clarigen

Duolog Technologies

Enterprise Ireland

Ergo Solutions

Fineos

Globoforce

Ice Computer Services

Iona Technologies

Informatica

IVT

Intuition Publishing

Macalla Software

Mapflow

Misys

Moneymate

Netsure

Newbay Software

Norkom

Ocuco

Openet

Openmind Networks

OutTrak

Prime Carrier Ltd

Quest Computing

Rococco

Select Strategies

Shenick

Storm Technology

Supplierforce

The TAS Group

Thirdforce

Zarion

Appendix C: A Definition of Product Management

One of the challenges facing fast growing companies is to define what exactly Product Management means and to clarify roles and responsibilities within the organization. We can address this by defining 3 distinct roles that are (or at least should be) involved in preparing a complete product for the market. These are **Product Management**, **Product Development** and **Product Marketing**. Each of these roles is equally vital and it is the product manager's responsibility to coordinate the efforts.

Product Management considers all input from internal as well as external sources. The primary responsibility of the product manager is to define the product roadmap for the company, articulate the high-level messaging for product position, and set priorities for the development organisation.

Product Management		
Inputs	Outputs	
 Product Vision / Strategy Business Plan Market Research Competitive Analysis Customer Feedback Feature Cost Analysis 	 Prioritized Requirements Hi-Level Positioning Product Plan / Roadmap Analyst presentations 	

The **Product Development** function (in its purest form) receives input only as a set of prioritised requirements. Remember we are talking about the function – not the people. Engineers will very frequently come up with some of the best product ideas and must not be considered purely as a production vehicle.

The following table lists some of the main deliverables that go to make a complete product.

Product Development		
Components	Description	
Development Schedule	Detailed milestone-driven schedule.	
Product	Market ready, developed and tested.	
Feature Technical Description	What it does, how it works, constraints and guidelines?	
Release Notes	Feature List, managed by version, changes in this release over last.	
FAQ	Frequently Asked Questions.	
New Features Description	What's different in this version of the product from the last one?	
Technical Overview	Technical specifications readable by the buyer.	
Manual / Online Help	The job's not complete until the paperwork is done.	
Training Material	If users need to be trained to use the product, training material is required to complete the product offering.	
Upgrade Plan	Data or other compatibility issues need to be considered.	

Once the product development plan is complete, it is time for the **Product**Marketing function to craft the materials to tell the world about the product. The following table lists some of the deliverables that must be produced.

Product Marketing		
Inputs	Outputs	
 Product Plan Feature Technical Description Proritised Requirements 	 Product Overview Detailed Brochure Case Studies Industry Usage Scenarios Web Material Press Releases Product Whitepapers Sales Proposals Partner Agreements Contracts Seminar Content Sales Promotions 	

Appendix D: CEO Forum on Product Management

What exactly is world class Product Management? Should you be looking to Silicon Valley or the great consumer companies for insight? How do you embed Product Management DNA into your company as it grows? How much should you invest in it? How high should Product Management be on the CEOs agenda? Does Ireland need to build world class competency in Product Management or are we there already?

It was against this backdrop that this CEO Forum on the Product Management Minefield was held. Based on the feedback from the initial survey, attendees at the forum were asked to consider the following questions:

- 1. What is the impact of Product Management on software product companies striving to grow fast?
- 2. How capable are Irish software companies of executing to world class Product Management standards?
- 3. Should the Irish Software Association create an initiative to help Irish companies radically improve their Product Management capability?

 What might such an initiative look like?

What is the impact of Product Management on software product companies striving to grow fast?

As might have been anticipated by the results from the initial survey, there was a lack of agreement amongst the group as to the precise definition of the role of Product Management within an organisation. As we shall see later, this is one of the factors contributing to difficulties in implementing Product Management within Irish companies.

Despite lack of agreement or understanding of the role of Product Management, it was agreed that organisation scale in product companies only comes from repeatability. Lack of repeatability was seen as the biggest inhibitor to scale. There is a significant opportunity cost in not undertaking correct market identification and product strategy development.

Part of the problem amongst Irish companies is their tendency to be customer rather than market focused. When is a software product a product? Many software products are still highly customised for each customer deployment. Are Irish companies focusing more on achieving customer success at the expense of creating a high degree of repeatability into multiple customers and varied customer types? A company who describe themselves as "customer led" will always be a services company – the one to many relationship is what scale is all about.

All were agreed that it was possible to function initially without Product Management, but that at some point in the company's growth they would hit a glass ceiling. The price tag of the product also plays a part here. If your price tag is $\in 1$ m then you can get away without Product Management for longer than someone with a product price tag of $\in 5$ k - $\in 50$ k.

Execution through Channel is seen as key to the scaling of an organisation. Yet, in order to execute effectively through channel it is imperative that an effective Product Management function is in place.

How capable are Irish companies of executing to world class Product Management standards?

The overall consensus was the Irish companies were currently not executing to world class standards in the area of Product Management. Part of the difficulty in sourcing the capabilities was a lack of understanding of the role Product Management should play in a best practice situation.

There were differing views on the profile of a good product manager – is it someone with domain expertise? Should the route to Product Management be through Engineering, Professional Services, or Marketing. Some questioned if the requisite skills existed outside the software industry. Whilst all were suggested there was no consensus agreed upon. This lack of clarity makes it extremely difficult for Irish companies to begin recruiting such capabilities.

It was generally felt that the Irish software industry lacked a pool of talented Product Management experts. One of the forum attendees had advertised in Ireland and received no responses, whilst the same ad in the US led to 20 excellent applicants.

One product manager in attendance stated that the problem stemmed from the lack of understanding of the function of Product Management – many of the ads he saw stating Product Management were in fact looking for a project manager. Add to which the recruitment agencies seem to have a poor understanding of the function of Product Management.

Business is war, yet it was generally agreed that it was difficult to find people up for the fight – with most looking outside Ireland when it came to sourcing Product Management capabilities.

Should the Irish Software Association create an initiative to help Irish companies radically improve their Product Management capability? What might that initiative look like?

It was agreed that there was a need to raise awareness amongst Irish software companies, at CEO level, of the strategic importance of Product Management. Before beginning on a wider initiative it was suggested that a form of "bootcamp" be put together to stimulate awareness of the issue.