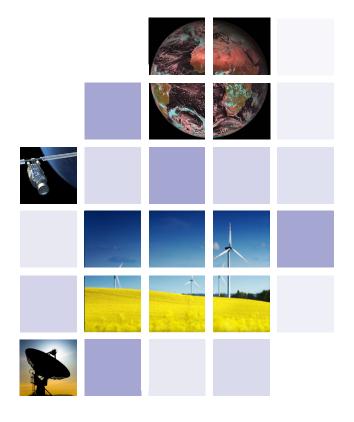


Qi3 Benchmarking Survey

Marketing Needs for Technology Companies

Report June 2010



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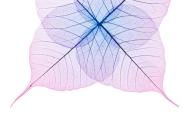
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Report Authors: Robin Higgons

Mark Littlewood

Qi3 Ltd St John's Innovation Centre, Cowley Road, Cambridge, CB4 OWS, **United Kingdom**

Tel: +44 (0)1223 422404 Email: robin.higgons@qi3.co.uk mark.littlewood@qi3.co.uk



1. Executive Summary

Qi3 has undertaken this survey in order to understand how companies view marketing in these turbulent times and to clarify their key requirements. The survey has taken a 'practitioners' view' to identify companies' marketing requirements, rather than an academic or consultants' viewpoint of the issues. It researches how practitioners rank in importance a range of marketing activities. These have been widely defined, including sales and customer service, in order to capture all activities involved in satisfying market needs at a profit.

Over 100 companies participated in the survey, from a wide range of size, employee numbers, age, and stages of development. Analysis of the inputs showed that the most meaningful information was gained by looking at the 'stages of development'.

There were 26 statistically significant findings from the analysis. These range from general issues covering all companies, to specific ones appropriate to different stages of company development. These findings are discussed in the body of the report. The findings can be summarised as follows:

Key Factors for Success

For all companies, the Key Factors for Success were rated in order of importance as:

- 1. Team
- 2. Business model
- 3= IP

Ability to disrupt the market Large and growing market

A key and somewhat surprising finding was the disparity between ratings for levels of importance of the different areas, versus ratings for how companies viewed their levels of expertise in executing these functions. Companies gave lower ratings on their abilities for all factors accept Market Disruption. However, there were significant variations between different stages of company development.

Marketing Mix

Companies rank elements of the Marketing Mix differently depending on their stage of development. The key findings are summarised as:

Company Stage	Most Important Marketing Elements
Start-up	 (Product) Discovering and characterising user needs (Distribution channels) Finding partners and building long-term partnerships (Product) Testing product specifications in the market (Markets) Identifying early prospects (Markets) Understanding different application needs in each market
Adolescent	 (Product) Discovering and characterising user needs (Markets) Understanding different application needs in each market (Distribution channels) Finding partners and building long-term partnerships (Markets) Identifying early prospects (Pricing) Identification of market pricing and pricing models
High Growth	 (Markets) Growing market share through competitive differentiation (Product) Specifying product variants to meet user needs in different applications (Product) Understanding customer needs in new markets (Sales) Controlling and measuring the sales process (Pricing) Identification of market prices and pricing models
Mature	 (Sales) Controlling and measuring the sales process (Markets) Growing share of existing markets – competitive differentiation (Product) Developing product strategies and roadmaps for long-term market success (Promotion) Using digital media (Product) Adapting product strategies and roadmaps for long term market success

Table 1. Important Marketing Elements by Company Stage of Development

Four major conclusions can be drawn from the survey:

- Of the key Factors for Success, Team was ranked most highly, indicating that people are still seen as the most important asset of a business.
- Business Models are seen as the second most important factor, with all stages except mature companies rating their abilities below the level of importance. Finding the best way to extract value from the marketplace is seen as major challenge for growing companies.
- Companies tended to give themselves lower scores when asked to rate their abilities (levels of expertise) across all elements of the marketing mix. This would indicate the need for companies to spend more resource on expertise and training across these areas.
- Marketing is seen as a key function, and all elements of the marketing mix are rated highly, by all types of company. This indicates that the different elements of the marketing mix are all relevant in practice, whatever the stage of development of the company.

The objective of the survey has been to understand how companies view marketing. The survey shows that companies do not necessarily follow academic theory or recommended best practice. This raises a number of interesting areas for discussion which will addressed separately.



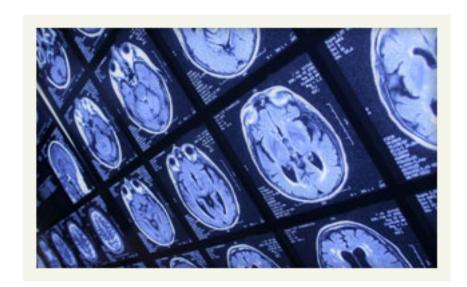
2. Introduction

Extensive research has shown that companies who invest in marketing grow significantly faster, especially during recession^{1,2,3,4}. For established companies, implementing marketing initiatives during a recession should gain market share and accelerate growth during the subsequent recovery. Similarly, start-up companies who invest early in marketing increase their chances of survival, their ability to attract further investment and the value of the company.

The marketing literature ⁵ and marketing consultancies recommend a wide range of marketing activities to address the challenge of growth. While the theory is well established, the challenge of transferring theory into practice and selecting the right combination of practical marketing activities to meet an individual company's needs can be confusing. The current economic conditions are unprecedented, making selection of the best marketing mix even more challenging.

In order to understand how companies view marketing in these turbulent times and to clarify their key requirements, Qi3 has undertaken this survey. The survey has taken a 'practitioners' view' (needs pull) to identify companies' marketing requirements, rather than an academic or consultants' viewpoint of the issues (knowledge push). It analyses how practitioners rank in importance a wide range of marketing activities. These have been widely defined, including sales and customer service, in order to capture all activities involved in satisfying market needs at a profit⁶.

It also measures how well companies rate their performance and analyses the relationships between importance and performance for the overall marketing mix and for 'Key Factors for Success'. This enables companies to benchmark themselves against their peers and to identify gaps in their marketing knowledge and expertise.



Avraham Shama: Journal of Small Business Management, Vol. 31, 1993

Pearce & Michael; Journal of Business Venturing, Vol 12, 1997

Keith Roberts; Strategy & Leadership, Vol 31, 2003

Srinivasana, Rangaswamyb and Lilien; International Journal of Research in Marketing, Vol 22, 2005

Kotler; Marketing Management, 13th Edition

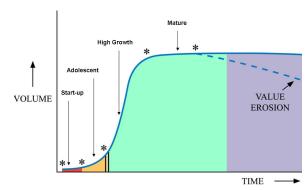
⁶ http://www.kotlermarketing.com/phil_questions.shtml

3. Survey design

The survey was divided into three sections. Section 1 gathered information on the types of company by turnover, number of employees, age of company, and industry classification. It also asked companies to identify their stage of development, as there is evidence that this determines the importance of different marketing activities. Based on Moore's work, the stages of company development were identified as:

- Start-up Pre-revenue or initial sales
- Adolescent Modest sales
- High Growth Rapid sales growth
- Mature Stable size and modest sales growth

Section 2, Marketing Overview, focused on 'Key Factors for Commercial Success' and the 'Marketing Mix'. The questions evaluated how companies rank the importance of these factors and how they rank their abilities. This will enable participants to benchmark their performance both against the perceived importance and against average performance by the contributors.



The question on Key Factors for Success assesses the importance of marketing among the 5 key factors that can determine the long-term success of companies. These 5 factors, identified from previous research projects8, were:

- Management team
- Potential to disrupt the market
- Access to a large, growing market
- Strong IP position
- **Clear Business Model**

The Marketing Mix uses the standard definitions for marketing activities 9 and is supplemented with questions on markets, sales, and customer support to provide a complete picture of the marketing mix for technology companies. Markets are self evident, while thought leaders such as Kotler define sales as an element of marketing¹⁰. The interesting inclusion is Customer Support, which can have a crucial role both in securing new customers (as part of the total product concept), and in supporting long term, one-to-one customer relationships¹¹. Based on these sources, the activities included in the Marketing Mix are:

- Markets
- **Product**
- **Pricing**
- **Distribution Channels**
- Promotion
- Sales
- **Customer Support**

Section 3, Marketing Activities focused on the constituent elements of the Marketing Mix, and assessed importance only. The number and detail of the questions meant that the survey would be unwieldy if questions on company ability were included. These may be the subject of future surveys.

The survey methodology, statistical analysis methods, and distribution analysis of the participating companies are discussed in the Appendix on Methodology.

Moore; Inside the Tornado

Qi3: Technology Based Venture Capital Demand Study for One North East June 2004

Kotler: Marketing Management, 13th Edition

http://www.kotlermarketing.com/phil_questions.shtml

¹⁰ 11 Mckenna: Relationship Marketing

4. Findings

Analysis of the responses has highlighted 26 issues with statistic significance. These are wide ranging, with some cutting across all companies and some specific to different categories of company. These are discussed below in the order of the questionnaire rather than importance.

Marketing Overview - by All Companies

Factors for Commercial Success

- 1. Management team was identified as the most important issue at all stages of company development, with Business Models as second and Market Disruption, Market Size and IP equal third.
- 2. Overall, companies rated their abilities lower than the importance for all factors except Market Disruption. However, there were significant variations between different stages of company development, which can be summarised as follows:

Company Stage	Factors where Ability Rated Lower than Importance					
Start-up	TeamBusiness Models					
Adolescent	TeamLarge Growing MarketsIPBusiness Models					
High Growth	Large Growing Markets					
Mature	TeamMarket DisruptionBusiness Models					

Table 2. Factors where Ability Rated Lower than Importance



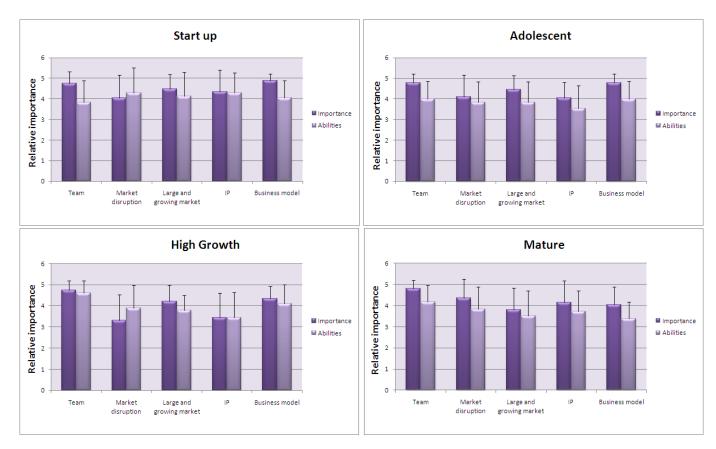


Figure 1. Factors for commercial success by company stage (Mean + Standard Deviation)

Marketing mix

- All marketing activities are rated highly, by all stages of company development. Variation in the importance of different marketing activities might have been expected, but this was not the case.
- 4. Start ups and mature companies rate their abilities lower than importance for all elements of the marketing mix. While this result is expected for start-up companies, it is surprising for mature companies. This may reflect competitive pressures, structural changes in markets, and the strategic nature of their marketing challenges.
- 5. Market identification and promotion are the two areas most strongly identified as weaknesses (ability lower than importance) by all types of company. Although very different in nature and their position in the market mix, this probably reflects the importance of growing sales, both through new markets and market share.
- 6. There was a reduction in the importance of product definition as companies move from start up, through adolescence and high growth, to mature. However, mature companies also had lower confidence than others in their abilities for product definition, possibly reflecting competitive pressures.
- 7. Start ups and mature businesses focus more on improving distribution. Again, this reflects the imperative to grow sales, especially for mature companies where markets have matured and competitive pressures increased.

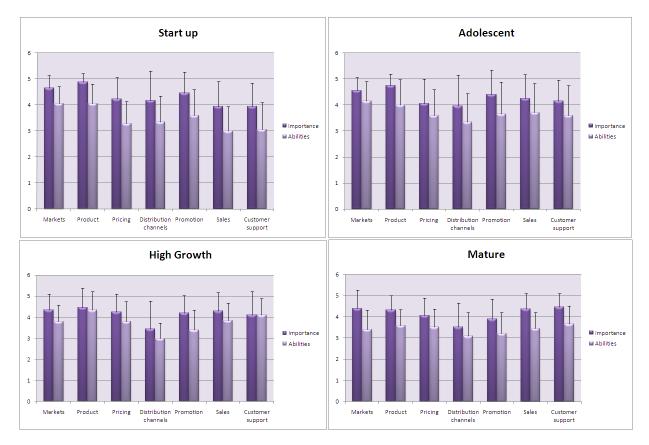


Figure 2. Marketing Mix by company stage (Mean + Standard Deviation)

Marketing Overview - by Company Stage of Development

Start ups

- 8. Building a Team and creating effective business models are identified as the two most important Success Factors to be improved.
- Start-up companies rate their abilities in the various activities lower than the importance they place on them for all aspects of the Marketing Mix, meaning that improvements are needed across the whole field of marketing activities.
- 10. Start-up companies viewed themselves as weaker than other types of company in sales strategies and using customer support as a means to generate new sales opportunities.

Adolescent

- 11. Adolescent companies rate their levels of ability below the level of importance for all Success Factors apart from market disruption. This is consistent as these companies have proven that their products have a real competitive edge, but now need to exploit that edge and grow rapidly.
- 12. Adolescent companies need support in the identification and protection of Intellectual Property. Providers of Venture Capital focus strongly on this, thus making it important for fund raising.

- 13. The factors in the Marketing Mix where Adolescent companies rate their ability lower than importance are markets, product, promotion and customer support. This indicates three marketing challenges for this type of company:
 - » Having proven that their technology and product concepts are commercially attractive, these companies now need to exploit additional market segments, with the consequential product development necessary to adapt their products for these new markets.
 - » Building brand awareness and sales leads is now a key issue for growth
 - Customer support and service is an important element of the product required by many customers, and thus a critical element of the marketing mix.

High Growth

- 14. The only factor where High Growth companies rate their ability in an activity below importance is in identifying new growing markets. This reflects the confidence that comes from success, but also the challenges such companies face in maintaining their high growth rates.
- 15. High growth companies see themselves as being market disruptive, but, interestingly, claim they need more help in finding new markets. This may reflect the pressure or the ambition to maintain their growth rates. If they are not in very large, global markets, then development of new markets will be essential.
- 16. For Success Factors, High Growth companies view their ability to disrupt the market ahead of the importance, indicating confidence in the competitive strength of their technology and products.
- 17. High growth companies look to sales and promotion as drivers. For these companies, gaining market share and growing the customer base is essential¹².
- 18. These companies also view the quality of their team and business models as being equal to their importance, indicating confidence in the foundations of their businesses.
- 19. The dual dynamics of confidence and maintaining high growth are reflected in their assessment of the Marketing mix. The main needs for improvement are in markets, promotion and sales.

Mature

- 20. It is interesting that Mature companies rate their abilities for team, market disruption and business models lower than the importance for these factors, indicating that they see a need to improve their performance in these areas. The need for market disruption is to be expected as product differentiation in competitive markets is essential for long-term survival and health. However, it could be expected that mature companies already had effective teams and business models, so these findings are surprising. It is most likely that these factors reflect the intensely competitive markets for mature companies, resulting in the need for excellence and creativity in these crucial areas.
- 21. Mature companies indicated reduced confidence in their ability to identify and select markets, in comparison to other types of company. This reflects the challenges mature companies have in addressing new markets where they have no domain or applications expertise (i.e. stepping outside of their organisational comfort zones).

Activities in the Marketing Mix

Markets:

- 22. Developing business models is less important to high growth and mature companies, reflecting the established nature of their businesses and markets.
- 23. Identifying early prospects becomes less important as companies move stage from start-up to the mature.

Product:

24. Developing and characterising user needs reduces in importance from start-up to mature companies reflecting the increasing market understanding and penetration.

Distribution channels:

25. Understanding routes to market is less important to high growth companies than the others, as is finding and managing distribution partners.

Promotion:

26. Promotion is significantly more important to start up companies than to mature companies, as creating brand awareness is more challenging than maintaining it.

Summary of the Marketing Mix

Table 3 summarises the elements of the Marketing Mix respondents felt to be most important, by company stage of development (based on mean scores).

Company Stage	Most Important Marketing Elements							
Start-up	 (Product) Discovering and characterising user needs (Distribution channels) Finding partners and building long-term partnerships (Product) Testing product specifications in the market (Markets) Identifying early prospects (Markets) Understanding different application needs in each market 							
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Mature	 (Sales) Controlling and measuring the sales process (Markets) Growing share of existing markets – competitive differentiation (Product) Developing product strategies and roadmaps for long-term market success (Promotion) Using digital media (Product) Adapting product strategies and roadmaps for long term market success 							

Table 3. Important Marketing Elements by Company Stage of Development

5. Conclusions

A key and somewhat surprising finding was the disparity between ratings for levels of importance of the different areas, versus ratings for how companies viewed their levels of expertise in executing these functions. Companies gave lower ratings on their abilities for all factors accept Market Disruption. However, there were significant variations between different stages of company development. The overall indication is that companies should spend more resource on expertise and training across the marketing mix.

Other major conclusions that can be drawn from the survey are:

- Of the key Factors for Success, Team was ranked most highly, indicating that people are still seen as the most important asset of a business.
- Business Models are seen as the second most important factor, with all stages except mature companies rating their abilities below the level of importance. Finding the best way to extract value from the marketplace is seen as major challenge for growing companies.
- Marketing is seen as a key function, and all elements of the marketing mix are rated highly, by all types of company. This indicates that the different elements of the marketing mix are all relevant in practice, whatever the stage of development of the company.



6. Appendix - Methodology

6.1 Survey Methodology

The survey was implemented as a web based questionnaire using Snap Online Surveys software¹³. 1,500 individuals were invited by e-mail to participate in the survey. It was also promoted through the Cambridge Network website¹⁴, St John's Innovation Centre newsletter¹⁵, the UKSPA (UK Science Park Association) website¹⁶, Manchester Science Park's¹⁷ weekly bulletin, and the Qi3 website. In addition, a number of technology based companies were randomly contacted by phone to participate.

6.2 Statistical analysis

Participants were asked to rate a series of statements with 5 options ranging from "very important" to "not very important at all", for those questions relating to the importance, and from "very good" to "poor" for those questions relating to abilities. Numerical values were allocated to each option to facilitate statistical analysis; ranging from 5 (for a "very important" response), down to 1.

The design of the questionnaire necessitated the use of two types of statistical analysis. Section 2 compares the importance of various factors against a company's ability. For these questions, the Student's T-test approach was used. Calculations were performed online using Graphpad software18. Differences were classed as being statistically significant for p < 0.05.

Section 3 examined the relative importance of a series of factors in the marketing mix. To differentiate the relative attitudes to these factors, according to the stage of the company, the Kruskal-Wallis one-way analysis of variance by ranks was used. The Kruskal-Wallis method was selected as it is a non-parametric test that can be applied to ordinal data. Calculations were performed using an extension to MS Excel, written by Analyse-it Software Ltd19. Differences were classed as being statistically significant for p < 0.05.

Analysis by company stage of development (Start-up, Adolescent, High Growth and Mature) produced the most statistically relevant findings, supporting the work of Moore²⁰. Analysis of the data by age, number of employees, turnover and industrial sector produced few statistically relevant findings.

6.3 Demographic profile of companies

Over 100 responses were received. Of these, 17% indicated that they were Start ups (little or no sales), 20% Adolescent (modest initial sales), 20% High Growth and 43% Mature (stable size and modest sales growth). Companies were asked to select the industrial sectors they operate in, with the option of making multiple selections. Figure 1 illustrates the breakdown of participating companies by sector, with a good representation from a broad variety of industries.

¹³ Snap Online Surveys

¹⁴ 15 http://www.cambridgenetwork.co.uk/

http://www.stiohns.co.uk/ 16 http://www.ukspa.org.uk/

¹⁷ 18 http://www.mspl.co.uk/

http://www.graphpad.com/quickcalcs/ttest1.cfm

Moore: Inside the Tornado

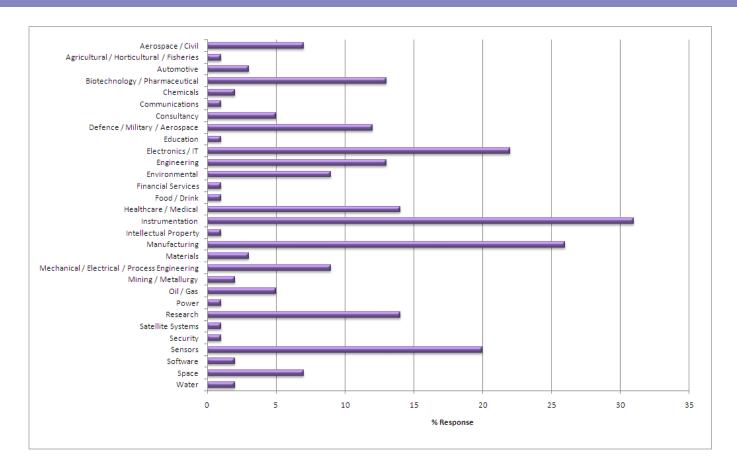


Figure 3. Market sectors targeted by companies participating in the survey

Details of the stage of the companies contributing to this survey, against age and number of employees are given in Table 1.

	Age				Number of Employees						
	<1	1-5	5-10	10-25	25+	0-10	10-25	25-50	50-100	100-250	250+
Start ups	2	12	3	0	0	14	1	1	1	0	0
Adolescent	0	11	8	1	0	12	4	4	0	0	0
High Growth	1	6	6	4	3	5	8	4	2	1	0
Mature	0	2	4	22	15	12	13	9	4	2	3

Table 4. Demographic information of participating companies

Companies participating exhibited the demographic characteristics expected – with the spread of age and number of employees increasing from start up through adolescent and high growth to mature.

