

Keyword Pharma

Expert Reviews

Using ROI Data for Effective Decision Making in Pharmaceutical Marketing

The pressure to measure marketing return and effectiveness has never been stronger, but traditional ROI measures alone can be misleading

by Dr Andrée K Bates



KeywordPharma publications are available to purchase individually as e-documents from www.ThePharmYard.com

Other related KeywordPharma titles available from www.ThePharmYard.com



Marketing ROI for Pharma

A KeywordPharma **Conference Insights** by **Dr Michel RM Rod** Published January 2006

ThePharmYard product code kwp001

ISBN-13: 978-1-905676-00-2

An in-depth report from the eyeforpharma
5th Annual Pharmaceutical Marketing Congress,
held in Amsterdam, 14–15 November 2005, written by Dr Michel RM Rod.

All KeywordPharma publications are available for purchase individually in e-document format at www.ThePharmYard.com – along with hundreds of other titles from independent publishers.



KeywordPharma – inspiring best industry practice

Written by pharmaceutical industry specialists, KeywordPharma publications are designed to be authoritative, relevant, succinct and helpful to pharmaceutical industry executives in their day-to-day work and in their longer-term career development. Available to purchase individually as e-documents, they build into a specialist knowledge library for everyone working in and around the global pharmaceutical industry.

For more information visit www.KeywordPharma.com



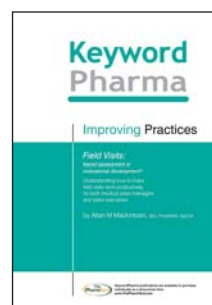
Conference Insights

Reports written by specialists about key themes and topics as presented at leading pharmaceutical industry events.



Expert Reviews

Niche topics made accessible by pharmaceutical industry specialists, with comprehensive references for further in-depth study.



Improving Practices

Valuable practical guides that support personal development and management excellence within the pharmaceutical industry.

Using ROI Data for Effective Decision Making in Pharmaceutical Marketing

First published January 2006 by NetworkPharma Ltd

89 Oxford Road, Oxford OX2 9PD, UK

Tel: +44 (0) 1865 865943

Web: www.networkpharma.com email: support@networkpharma.com

Text © 2006 Andrée K Bates

© 2006 in this format NetworkPharma Ltd

A CIP catalogue record for this title is available from the British Library.

ISBN-10: 1-905676-02-6

ISBN-13: 978-1-905676-02-6

Managing Director: Peter Llewellyn; Editor: Chris Ross; Production/editorial: Gill Gummer; Typesetting and artwork: Blenheim Colour

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronically, mechanically, recorded or otherwise, without written permission from the publisher. The publisher and author have made every effort to ensure the accuracy of this publication but cannot accept responsibility for any errors or omissions. Registered names, trademarks etc. used in this publication, even when not marked as such, are not to be considered unprotected by law.

Bulk print sales and multi-user electronic licenses

All KeywordPharma publications are available for reprinting in bulk quantities on demand. We will be pleased to discuss any branding requirements you have – for example you may wish to include company logos and advertorial. Likewise, individual e-documents can be licensed for multiple-user access, either on web sites or on company intranets and, if appropriate, adapted to your own requirements. All enquiries should be directed to the Managing Director, Peter Llewellyn, at NetworkPharma peter@networkpharma.com

Using ROI Data

for Effective Decision Making in Pharmaceutical Marketing

Dr Andrée K Bates

Executive summary

The pharmaceutical industry is under significant pressure to consider its costs very carefully. Since marketing budgets often represent a major proportion of a company's cost base, they can easily become the target of budget cuts. Although marketing investments are profitable, in the main, returns are now under intense scrutiny, with all budgets being squeezed. The pressure to measure marketing return and effectiveness has never been stronger.

Currently, much budget is spent despite marketers being unable to identify which combination of activities has the greatest growth potential, and without knowing what specific effect individual activities are having on market share. Because of this drive for marketing accountability, return on investment (ROI) metrics have become the focus of much attention and are frequently used to guide decisions on budget allocation. Unfortunately, many of these techniques are limited to historical analysis and history does a poor job of pinpointing the way forward in an ever-changing marketplace.

However, approaches are now available that *can* help a company determine where and how its marketing activities can work together and which synergistic combinations will deliver profitable value growth. This review examines the different techniques and optimal approaches available.

Contents

• Introduction	4
• About the author	4
• The importance of measurement	5
• ROI in pharmaceutical marketing	5
• Is ROI even the right question?	7
• Econometric models of ROI in pharmaceutical marketing	8
• What to look for in an ROI model	9
• Moving beyond ROI to real marketing accountability and effectiveness	9
• Case study	10
• Conclusion	15
• References	15
• Further reading	15

Introduction



Pharmaceutical marketers are understandably preoccupied with measuring marketing performance. The challenge is how to make the most of a limited budget with a programme that demonstrates measurable return on investment (ROI). The difficulty is how to distinguish the specific returns of individual programmes and the synergistic effects that exist between programmes to provide even higher return. If perfect ROI information was available then the task would be easy – but this appears to be elusive for many pharmaceutical executives.

In the past, much marketing mix allocation was determined using a combination of performance data, statistical modelling and human judgement. Although this has its value, subjectivity usually ends up playing a more significant role, with decisions often being made based upon marketers' experiences, gut feelings and what they think their competitors are doing. The result is that the anticipated results are not achieved. Without rigorous systematic marketing measurement techniques it is easy to overlook key variables that can affect the results of the analysis and the impact of marketing on sales and profit.

A host of tools are now available to help marketers achieve more rigorous analysis of activities. However, despite all the advances in ROI analysis techniques, many companies would be hard pressed to *prove* which of their marketing activities are working to impact brand sales and which are not – and by how much. Why? Because, used as a marketing effectiveness measure, these techniques are often insufficient to guide effective decisions about where and how to spend to deliver real growth. Many of these techniques rely on historical analysis that is fundamentally flawed in today's environment. In addition, they do a poor job of accurately pinpointing the bundle of activities that will generate the most profitable revenue and growth in the future.

This report will examine the different techniques being used and the optimal approaches available today, and how some of these obstacles can be overcome.

Dr Andrée K Bates

January 2006

About the author

Dr Andrée Bates is the Managing Director of Campbell Belman Europe. She works with top-tier healthcare companies to create measurable marketing ROI, accountability and effectiveness advantages. In this capacity, she has given presentations at 36 conferences over the past 5 years in the USA, Europe and Japan, and has been invited to lecture on ROI for the pharmaceutical MBA programme at INSEAD Business School. She is currently involved in collaborating with two university pharmaceutical marketing senior lecturers in the ROI field.

Andrée's career has encompassed academic, clinical and pharmaceutical positions internationally. She has gained wide recognition within the international healthcare industry for ROI and marketing effectiveness measures in pharmaceutical marketing, and is the author of many publications on this topic in peer-reviewed journals (including the *International Journal of Medical Marketing*) as well as the author of several chapters in books on this topic (including *Medical Marketing Manual*, *Marketing to Win Market Share*).

Campbell Belman Europe provide mathematical tools and processes for measuring the sales impact of specific sales and marketing mix components. They offer fact-based analyses that combine current market activity (not simply historical data) with current sales and spend data, using analytical modelling to quantify the real sales impact of specific activities and what needs to change to measurably impact market share.

Andrée can be contacted at abates@campbellbelman.com

Using ROI Data

for Effective Decision Making in Pharmaceutical Marketing

The importance of measurement

"That which can't be measured, can't be managed."

Old business proverb

Measurement is of course crucial. Pharmaceutical marketing managers know that the pressure to measure marketing effectiveness and return has never been stronger. Today's pharmaceutical marketer must define and deliver quantitative measurements that justify how investment in specific marketing programmes is paying off for the company. There are two main underlying reasons for the increasing importance of measurement: the imperative for the marketing team to get better at what they do, and accountability to the C-suite (i.e. Chief Executive Officer, Chief Finance Officer [CFO] etc.).

Marketers need metrics to show that their programmes work – and to change the ones that don't. Without metrics to track performance, marketing plans are not worth the paper they are written on. Marketers need to know their current position, their desired outcome and what it will take to get there. Metrics provide the means to track progress and demonstrate accountability, and allow the marketers to know, act upon and improve the impact of their marketing activities. With customised systems in place to measure performance, a marketing team can readily gauge and continuously fine-tune its market strategy to compete in an ever-changing market place.

The drive for accountability in all processes is escalating and measurement is an integral part of that process

Since marketing budgets often represent a significant proportion of a company's cost base, they can easily become the target of budget cuts whenever lack of performance catches up with unjustified marketing plans. Establishing and tracking return metrics will improve marketers' successes in securing an appropriate marketing budget from the CFO. As budget battles become more frequent and uncomfortable, marketers can make marketing more effective only by measuring and understanding what is working and what isn't.

These metrics must also be clearly and convincingly communicated to the appropriate audiences.

The drive for accountability in all processes is escalating and measurement is an integral part of that process. So, love them or hate them, every pharmaceutical marketer now has to live by metrics. Metrics should always be used to set benchmarks and then to measure results after an initiative is implemented. Without them, there can be no assessment of ROI.

ROI in pharmaceutical marketing

"The fact that the share value of the pharmaceutical industry has fallen by about 20% over the last year has put more emphasis on profit. The top line has been driven down in Europe with price reductions forced upon us and there is a threat of a slow down in the USA which could lead to further price cuts. All this puts pressure on the industry to think about its cost base."

Rob Wood¹
AstraZeneca

Faced with intolerable market pressures, it is understandable that pharmaceutical marketers have become fixated with measuring marketing performance and want to demonstrate accountability. Because of this, ROI metrics and techniques have become the focus of much marketing attention and are frequently used to guide decisions on budget allocation. However, many pharmaceutical executives fully understand that traditional financial accounting measures such as ROI can give misleading signals for continuous improvement and innovation – activities today's competitive environment demands. However, *something* must be used to gauge marketing effectiveness and accountability, and ROI appears to be the industry's most favoured current term. Although some pharmaceutical marketers misguidedly use ROI in the traditional sense, it is increasingly becoming a blanket term for marketing effectiveness and accountability to the C-suite rather than a measure of ROI *per se*.

It is obvious why the use of ROI initially is so appealing. The essence of ROI is simple: did you get more back than you put in? The benefits of this approach are clear:²

- It connects inputs and outputs to increase the odds of getting the results required. ROI helps marketers rigorously review spends.

- Executives gain more clarity on what they are spending, and why.
- Many costs previously disguised are pulled out and evaluated.
- It has also forced marketers to seek out and kill many of the pet projects that did not reap benefits.

Pharmaceutical marketers want to demonstrate that they are spending wisely but often lack the information to make well-informed decisions. ROI techniques have improved senior management confidence in the marketing employed and are being championed by many companies. Various methods are currently employed to measure ROI. These include market research techniques, customer relationship management (CRM) techniques, traditional ROI techniques, marketing mix models and econometric models.

There are multiple flaws in the way ROI is analysed in the pharmaceutical industry

However, in their eagerness to embrace ROI, marketers often get so caught up in the tools and techniques for measuring it that they receive mountains of data that are not easily connected to strategic marketing decisions. There are multiple flaws in the way ROI is analysed in the pharmaceutical industry. This review should act as a cautionary tale for those venturing into the ROI minefield and will examine traditional ROI calculations and the more recently available marketing mix and econometric models.

Traditional ROI limitations

Formula limitations

ROI in the strictest sense of the word is usually calculated using a formula. There are many formulae used to calculate ROI and most of these have at their core something along the lines of:

$$\frac{\text{Revenue impact (of activity)} - \text{Cost (of activity)}}{\text{Cost (of activity) to give the ROI}}$$

An example of this for e-detailing could be as follows:^{3,4}

$$(a/c) \times 100 = \%ROI$$

$$a \text{ (revenue attributed to e-detailing)} = (pRx - Rx)$$

$$b \text{ (actual cost per e-detail)} = (i/n) + c$$

$$c \text{ (cost of campaign)} = b \times n$$

where pRx = revenue from prescriptions written as the result of e-detailing, Rx = baseline revenue, i = initial investment in e-detailing technologies, n = number of e-details completed, c = cost per e-detail excluding initial investment.

This formula may contain certain assumptions but it is probably a good place to start by way of an example. Let's examine this briefly.

Revenue impact of the specific activity: Marketing is a synergistic integrated activity. Activities work in tandem with each other to drive prescribing behaviours. The activities in isolation are not what usually create the final results. ROI approaches isolate discrete activities to measure the main effects but often miss the interaction effects and cross impact of activities. The biggest problem with traditional ROI approaches is that they separate the impact of individual activities and do not sufficiently take into account the synergy between activities. Since activities work hand-in-hand, one needs to be able to know what combination of activities will produce the optimal results. Many activities overlap and are influenced by other areas, so isolating this can be quite difficult. However, although these go further than straight ROI analysis in untangling the specific overlapping activities, they suffer from the same limitations as ROI in that they focus on historical performance to make the decisions rather than taking into account what is happening in the current market environment. This makes them limited in their accuracy as to which specific combination of activities will have what impact moving forward.

Traditional ROI and related techniques do a poor job of pinpointing the specific bundle of sales and marketing activities that will really drive growth most effectively and profitably based on what is happening in the market place right now

Costs calculation: For many marketing activities this is straightforward. The costs associated with any activity can easily be calculated. However, there are often associated costs that are not captured: for example, if an activity led to a spike in sales resulting in a need for more product and additional distribution and sales-force activities it would be difficult to capture these additional costs in the ROI calculation. If a company were trying to prune its portfolio based on ROI then this critical information would be difficult to acquire as the costs would lie outside marketing. Overheads, such as costs of staff time to the activity etc., should also be included to ensure that the overall return is equivalent to the weighted return across all activities.

Timing: The duration often includes several variables that can include things such as quality of content, competitive activity, market noise etc. We know that

many marketing activities have impact over multiple time periods and their benefits can last for even longer. If a discrete period for revenue generated (e.g. the first month or quarter) is used, it may be underestimating the return. This is accounted for in some models by making the numerator of the return equation a multi-period measure, but in practice ROI analysis tends to be over the course of a campaign or budget cycle. The reason for this is probably because by making the multi-period ROI calculation one would be required to make many assumptions about the future and these could be too easy to manipulate – so neither approach is really entirely valid.

By using ROI techniques we are running the risk of concentrating on high short-term sales results rather than combining this with long-term value. High short-term value activities can sometimes erode a company and a brand's long-term value if not combined effectively with other activities. And a company and a brand's long-term value is really what is crucial – erosion of this with merely short-term quick wins must be avoided. As Dr Brian Smith so succinctly states "At the top of a company, sales do not matter, profits do not matter, even return on investment is a secondary concern. What matters is share price and what drives share price is the creation of shareholder value. Many marketing directors, obsessed with branding and other promotional tactics, miss this fundamental truth of modern business and so destroy the wealth of their company's ultimate owners."⁵

Measure what is easily measurable only

ROI approaches are often based only on what is measurable. This makes sense of course – if you can get data on it, measure it. Common areas for ROI analysis are e-detailing, CRM, advertising campaigns and direct mail. However, companies use a much broader set of sales and marketing activities, and many traditional ROI approaches tend to exclude activities that are more difficult to measure. As a consequence, key elements of the total marketing investment are missing. To make the greatest impact, marketers need to understand the full range of activities that create demand for their product and how these interact. Examining ROI only on what seems to be possible to measure means missing out a few (sometimes sizeable) pieces of the pie that may actually be extremely important and under-funded.

Boost marketing budget return rather than top-line profit and brand-value growth

By deciding what 'return' you get from your marketing budget you are really looking at *cost recovery* rather than

profitable growth. From this kind of mindset marketers are looking at *historical return* to determine productivity of each activity to assure senior management that the cost will be recovered. This leads mistakenly to a mindset that a *higher ROI* is always better, which simply is *not valid*. One brand⁶ spent US\$10 million on marketing that generated a US\$5 million profit. This would be a back-of-envelope ROI of 50%. However, another brand spending US\$30 million generated a profit of US\$10 million. This would be a back-of-envelope ROI of 30%. So, in this example, the higher ROI is not necessarily a sign of a prudent investment. Straight ROI may *not* be the most suitable sole metric for evaluating market investment, since it favours high returns at the expense of real growth and profit.

*Straight ROI may **not** be the most suitable sole metric for evaluating market investment, since it favours high returns at the expense of real growth and profit*

Whereas traditional ROI and related techniques have helped companies measure the impact of individual marketing investments after the fact (which doesn't always provide the means to manage these accurately going forward), they do a poor job of pinpointing the specific bundle of sales and marketing activities that will really drive growth most effectively and profitably based on what is happening in the market place right now.

Is ROI even the right question?

"To find the right answer, one must first ask the right question."

S Tobin Webster

ROI is an over-hyped term and a preoccupation with it is driving accountability in the wrong direction. Two studies⁷ – the Analysis of ROI for Pharmaceutical Promotion (ARPP) study and the ROI Analysis of Pharmaceutical Promotion (RAPP) study – examined a variety of sales and marketing activities across several brands and came up with ROI numbers for each activity for every US\$1 spent (Table 1). However, there are huge gaps in the research of these

ROI activity	ROI/US\$1 spent
Direct-to-consumer detailing	US\$0.19
Traditional detailing	US\$1.72
e-Detailing	US\$2.48
Journal advertising	US\$5.00

Table 1. ROI numbers for each activity for every US\$1 spent, according to the ARPP and RAPP studies.⁷

studies, with many of the key variables in the analysis ignored. Different forms of promotion have varying impacts on different markets at different times and with different underlying strategies. The researchers totally ignored the fact that the impact of any programme requires elements such as targeting, strategy and implementation. Each of the individual brand activities in one area could have been good, bad or indifferent for the different programmes, but the studies lumped all the same activities (e.g. journal advertising) across many different brands in one category, diluting the findings to virtually useless.

*Traditional ROI approaches **will not** accurately help a company determine **where** and **how** its marketing activities can really work together and what combination will deliver profitable growth that they need*

For example, there are many analyses of various programmes of e-detailing for individual brands. Some of these were poorly planned and executed, providing very little return, whereas others were very well planned and provided significant return. In both ARRP and RAPP, these differences and the factors contributing to them were not taken into account and the mean of each activity was taken. Interestingly, both these studies were co-sponsored by AMP (Association of Medical Publications) and ABM (American Business Media) and, unsurprisingly, the data showed that journal advertising had the highest ROI of any activity!

While it is tempting to navigate by a single number as illustrated above, the concept of ROI is more than just a number. It's also more than marketing jargon. It's a way of thinking about how an investment in a specific programme will pay off over time. What we are really looking at is marketing *accountability* and *effectiveness*.

Using traditional ROI approaches *will not* accurately help a company determine *where* and *how* its marketing activities can really work together and what combination will deliver profitable growth that they need.

Econometric models of ROI in pharmaceutical marketing

Due to the inherent limitations of traditional ROI models, many pharmaceutical companies are now embracing *econometric* ROI models. In the simplest terms, econometric models measure *past* relationships between variables (usually marketing activity spend and sales or market share) and then attempt to forecast how changes in some variables will affect the future course of others.⁸⁻¹¹ However, despite the relative sophistication of

most of these models, the analyses are usually based on *historical data* combined with current sales data, which actually does very little to predict what will happen in a changing market environment.⁹

*Econometric models measure **past** relationships between variables and then attempt to forecast how changes in some variables will affect the future course of others*

Econometric models were embraced initially by the finance sector many years ago.¹⁰ However, after the great stock market crash of the 1980s, according to respected sources such as the *Economist*, it was evident that only a handful of people in the world had predicted it. None of these were technical analysts using econometric models in their calculations. This is not a criticism of analysts and econometric models *per se*. It is merely that, without taking the changing market dynamics into account, simply using econometric models based on historical relationships between input and output means real predictions cannot be made.⁹ These are particularly inadequate today given the dynamic nature of the pharmaceutical marketplace.

Historical performance is not going to be able to 'prove' the return on a marketing programme for the future, as it may not pay off in the same way since the environment in which it is operating is dynamic.⁹ For example, when a product is launched, sampling may be found to be a valuable marketing activity to drive prescriptions. However, a little further into the life cycle of the product, sampling may not help drive prescribing as much. In fact, by sampling, the brand is really simply paying for market share, which ceases to become economically viable in large quantities. However, if one uses a econometric model – without looking at current prescriber perceptions and data – it may mistakenly suggest that sampling is still vital for driving significant prescribing, as the model would be correlating old relationships using historical data to predict. In reality, at this point in time for this product, sampling could in fact be doing very little to drive prescribing and long-term brand growth.

Most econometric (and other) ROI models rely only on historical data. Without access to *current* customer-based data,¹² analysed hand-in-hand in econometric-type models using predictive algorithms, it remains impossible for company executives to effect change with any real degree of certainty that their efforts will produce the right results. *The past does not equal the future*. This is something that must be kept in mind when evaluating different ROI models especially in as unstable an environment as the pharmaceutical industry.

Summary

Despite all the apparent benefits of econometric approaches to ROI, they are only a small part of the pie for making marketing investments more effective. The approach is worthwhile; however, since the majority of econometric models in the pharmaceutical market place today do not take current market perceptions into account, they are simply not going to be able to make predictions with any degree of certainty and amount to little more than guesswork. If the market place was very stable and very little changed over the years then they would have more validity. However, in the current climate they simply do not cut it when used without current market perception data. In fact, use of these techniques often thwarts a company in realising its full potential for profitable growth and long-term value increases. To prove marketing effectiveness, current customer perceptions must be analysed hand-in-hand with predictive econometric models.^{10,12}

Since the majority of econometric models in the pharmaceutical market place do not take current market perceptions into account, they are simply not going to be able to make predictions with any degree of certainty

What to look for in an ROI model

Whatever method is used to measure marketing effectiveness (ROI) it must, at a bare minimum:

- establish what is happening in the perception of the market at the time of the modelling (*not only historically*)
- yield a detailed, understandable, unequivocal, empirical measure of how brands (your own and your competitors) are perceived by the market, now (*not historically*)
- identify the components of the mix currently driving market performance
- identify weaknesses within your own brand that require remedial action
- identify strengths within your own brand that might be used as a foundation to build the brand's stature and market share
- know how these strengths and weaknesses fare, in relation to the level of market share and competitors

- identify and quantify the relative impact and value of each element in the mix, and what is the best synergistic combination of the promotional mix for optimal product performance
- be able to utilise the model to better allocate funds internally based on reliable evaluation of likely returns
- respond rapidly to changes in the external environment and competitor activities
- enable priorities to be set for sales and marketing activities, and identify the measurable impact changing specific activities, by a set amount, in a set way, will have on sales
- provide an empirical base measure from which to track performance in the future.

Critically, you should be in a position to know how to optimise your sales and marketing resources accurately to develop selective strategies that are geared to budget for optimal overall growth and profit. You must also be able to find solutions to the major problems that are inhibiting growth and make full use of the opportunities presented by its strengths.

Using the traditional ROI, marketing mix and econometric approaches *will not* accurately help a company determine *where* and *how* its marketing activities can really work together, and what combination will deliver the profitable growth that they need. However, there *are* approaches that can. These approaches *combine* current market perceptions with econometric-type models connecting inputs and outputs, and are able to predict, with the highest degree of mathematical certainty, what is impacting market share, what is not, what needs to change, and by how much, to increase profitable brand growth.

Moving beyond ROI to real marketing accountability and effectiveness

As previously stated, currently much budget is spent despite marketers being unable to isolate which synergistic combination of activities has the greatest profit potential, and without knowing the specific effect individual activities are having on market share. Most ROI and econometric models tend to focus on activities and investments, and the models try to find links, but a crucial component in the constantly changing pharmaceutical sector is missing: market perceptions.

A strong ROI model needs to examine and incorporate all the relevant components: the market environment, customer attitudes, brand sales and marketing activities, brand sales/market share and econometric models. What is missing is the means to put all data into perspective – to convert them into a meaningful form for marketers and in a manner that takes into account the size of the brand and current market environment

and perceptions, as well as its market share, and uses econometric relationships to show a clear way to move forward for the brand.

However, whereas current market sentiment is crucial for any kind of predictive model, on its own it is by no means sufficient. Current dynamic customer perception data *must* be utilised in combination with strong predictive mathematical models. By combining current customer sentiment (researched at the point in time of the relationship model creation) with econometric models, marketers *can* achieve the highest possible levels of predictive accuracy.

One system, outlined in the case study on this page, collects current up-to-date customer perceptions data (from target physicians) and feeds this into econometric models that include market share data and brand spend data. This drives a prediction that has the highest possible degree of mathematical certainty (as it takes current customer market data and econometric data into account). This model was developed in collaboration between the pharmaceutical industry and leading actuarial professors.¹² Although this model is not 100% accurate, it has been found in studies examining over 10 years of back data to be sufficiently accurate for measurable brand growth. It is certainly the most accurate system available in the market today to grow a brand's market share and sales^{10,12} – if the results are actually used! Over a 1-month period, the system rigorously examines the multiple inputs (around 50) that influence a brand's growth from the prescriber's point of view and then inputs this against hard data to find relationships. The areas are assessed for all brands in the specific category (since the activity of one brand can influence that of the competitors) and include:

- The importance to the target prescribers of each of the different areas (product attributes; representative activity – quality and quantity; visual materials; communication activity – such as advertising, journal write-ups, publicity, sampling, opinion leader programmes etc; sentiment; and other market issues such as formulary issues, specialist endorsement etc.)
- How each individual brand rates on each characteristic related to how its competitors rate.

*By combining current customer sentiment with econometric models, marketers **can** achieve the highest possible levels of predictive accuracy*

The results are put into econometric modelling systems that mathematically convert the information into a function of the brand's activities and market share/constant related to the market shares of its competitors. This allows the brand team to examine the cause and effect relationship between each sales and marketing activity

(and messages) and what synergistic combination of activities will produce what impact in sales over time.

Forward-thinking pharmaceutical companies now use this unique diagnostic management tool. It is proven to provide real and actionable data on the strengths and weaknesses of their brand activities, and what it will mean for their market share, in a format that top executives can buy into and trust.

Forward-thinking pharmaceutical companies now use this unique diagnostic management tool

Case study

How a UK general practitioner (GP) brand increased its market share by 140% in one 6-month period without increasing sales and marketing budget, as predicted by the model used for ROI.

Background

The model used in this case study combines market data, current prescriber perception data, brand activity data and sales data. It puts these into econometric-type models so that marketers can understand what is happening, why it is happening and be able to act upon the information with highly predictable results.

A newly launched product was struggling to build market share and had recently entered a crowded market place with many competitors. The brand team initiated the Campbell Belman analysis to see how it could grow its market share in the most timely and cost-effective manner. The UK GP brand examined in this case study had a market share of 1.0% when it first initiated the Campbell Belman Predictor system in December 2004.

For simplicity, the results of the overview analysis are presented in a graphic format for each brand, which is a snapshot of the brand for that point in time. The overview of the performance of this brand for its level of market share can be seen in Fig. 1. The calculated market shares for each characteristic are plotted across an axis that represents the actual market share: x-axis = market share; y-axis = how well the brand is supporting or not supporting its market share for each attribute. It is immediately apparent at a glance whether confidence in a brand is likely to lead to a loss or a gain in market share in the future, and which specific confidence characteristics are impeding or assisting company growth.

How to interpret Fig. 1.

The line in the middle of the graph indicates the current market share level of 1.0. If the brand was performing equivalent to a 1.0% market share brand, the bars would be flat on that line. If a bar is above this line it

MARKET SHARE DECEMBER 2004

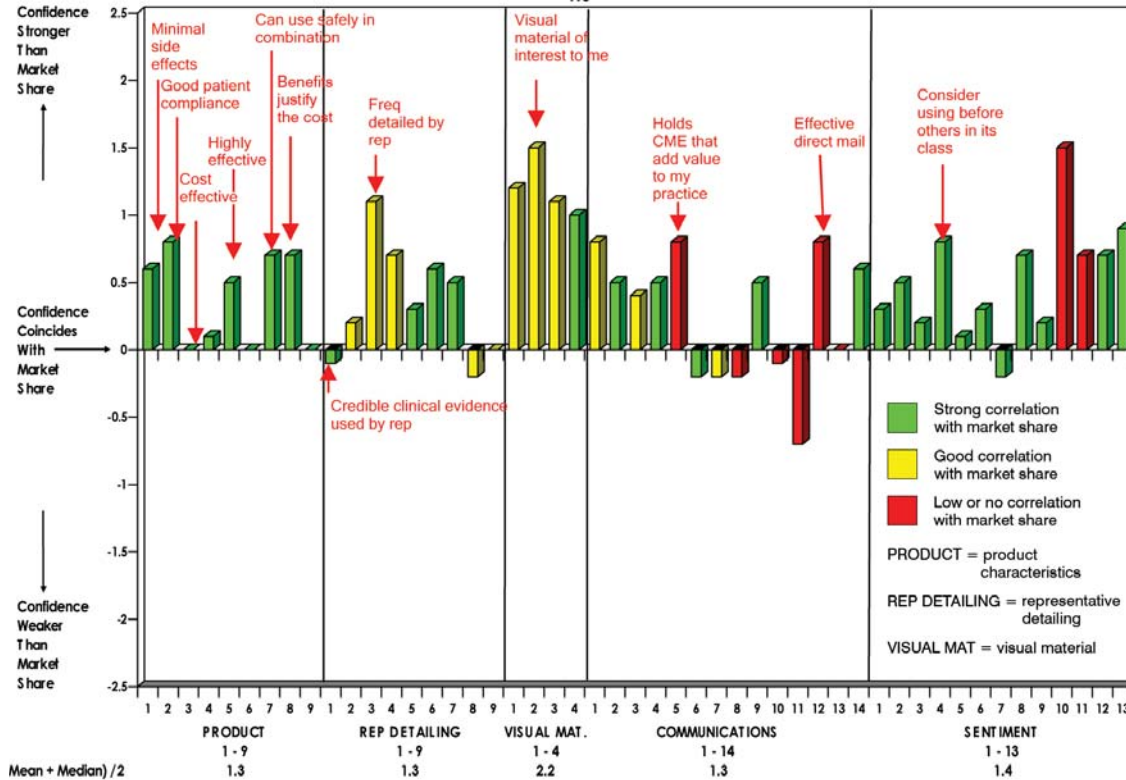


Fig. 1. The brand overview at a market share of 1.0% in December 2004.

indicates that the attribute is performing better than the current market share indicates (therefore growing the brand), and if a bar is below the line this means that the attribute is contributing to a loss in market share. The first section represents product characteristics, the second focuses on representative detailing (quality and quantity). The third centres on visual material, the fourth on communication activities (advertising, journal write-ups, continuing medical education [CME], sampling etc.) and the fifth sentiment and market issues (including primary care organisation formulary issues etc.).

Overview of market perceptions of drug against market share

For its size of market share, the drug is perceived by its target audience to be effective, safe and have minimal side effects (Fig. 1). It is also viewed as expensive – but the benefits justify paying the higher price. The representatives were overall supporting the market share but not in all areas, and their performance was not strong considering the small size of the brand. They were seen to be visiting doctors frequently but were not using enough clinical evidence to move the brand forward. Moreover, their call quality was not strong. They did not have a sound knowledge of the product and its competitors, nor did they provide a meaningful reason to use the brand. The visual materials, however, were of interest to the doctors. The communication activities were also not strong for the size of brand. The three strongest communication

activities were: advertising, which reminded doctors of the product's benefits, CME events and direct mail.

The sentiment toward the brand was supporting its market share but would not be strong enough to push the brand much past a 1.4% market share in the next 6 months unless targeted budget allocation changes were made.

Sales this brand stands to gain from using the system

Fig. 1 shows that, for the size of market share in December 2004, the brand was supporting its market share of 1.0% overall. In fact, if it continued along its current strategy, based on what it was doing, and what its competitors were currently doing, it was predicted to gain an additional 0.4% market share over and above where it currently was, bringing its market share up to 1.4%. (Naturally, to get the actual predicted growth figure from this mathematical system, each attribute is weighted according to the impact it has on market share, as discovered from the driver analysis [e.g. 'credible clinical evidence' has a higher weighting than 'direct mail'] and against the competitors' strengths and weaknesses uncovered.) However, the system also analyses the competitors' strengths and weaknesses and, in doing so, found that by reallocating the current budget for this brand in a different way this brand could actually grow to 2.4% market share (rather than only 1.4%) *in the same time period without increasing the budget.*

	SCORE TO BE ACHIEVED	% EXTRA EFFORT REQUIRED
COMMUNICATIONS		
HAS HIGHLY VISIBLE ADVERTISING	2.0	11.8
AD REMINDS ME OF DRUG BENEFITS	1.0	6.7
HAS IMPRESSIVE WRITE-UPS IN JOURNALS	1.0	12.5
RECEIVES FAVOURABLE PUBLICITY	1.0	10.0
HOLDS CMES WHICH ADD VALUE	1.0	11.1
HAS EFFECTIVE PATIENT DIRECTED PROGRAMME	1.0	20.0
FACILITATES PATIENT TREATMENT AND REVIEW	1.0	14.3
MAKES EFFECTIVE USE OF EDETAILING	1.0	33.3
COMPANY IS A LEADER IN THIS THERAPY AREA	1.0	14.3
HAS ADEQUATE SAMPLES AVAILABLE	1.0	16.7
HAS EFFECTIVE TELESales ACTIVITIES	1.0	100.0
HAS HIGHLY EFFECTIVE DIRECT MAIL	3.0	37.5
IS A BRAND PATIENTS FREQUENTLY REQUEST	1.0	33.3
PROVIDES TRUSTWORTHY CLINICAL EVIDENCE	1.0	6.3
Sub Total	1.5	14.5
SENTIMENT		
I AM CONFIDENT PRESCRIBING IT	2.0	9.1
CONFIDENT USING FOR FIRST LINE TREATMENT	2.0	16.7
I KNOW IT WILL WORK IN 9 OUT OF 10 CASES	1.0	11.1
CONSIDER THIS BEFORE OTHERS IN ITS CLASS	1.0	14.3
DRUG PCO PREFER DOCTORS TO PRESCRIBE	1.0	25.0
SORELY MISS IF IT WEREN'T AVAILABLE	1.0	25.0
WOULD NOT SUBSTITUTE ANOTHER GENERIC	1.0	50.0
IS A DRUG BRAND ON MY PRACTISE FORMULARY	1.0	14.3
SEE THIS REFERRED BY SPECIALISTS	1.0	9.1
BRAND I PRESCRIBE AS A LAST RESORT	1.0	8.3
FOR PATIENTS WHO CAN AFFORD THE BEST	1.0	11.1
CONFIDENT RECOMMENDING TO COLLEAGUES	1.0	8.3
IMPROVES PATIENTS QUALITY OF LIFE	1.0	4.8
Sub Total	1.4	11.1
TOTAL	1.1	8.3

Table 4. Summary of market-to-share prediction tables for communication activities for one market share point increase. Percentages are not additive but more a guide for the marketer. The weightings of impact on market share of each activity are also taken into account in the final recommendations given – however, this chart is a useful crib sheet for the brand team.



2.4% market share, the system tells us that they would need to reallocate budgets slightly differently.

Table 2 provides an example of how to read this kind of table for representative detailing activity, and identifies the percentage extra effort required in specific detailing areas to move market share from 1.0% to 2.4%. However, representative detailing frequency increases are costly, so the analysis examines all areas (including messages and other marketing activities) to determine the best, most cost-effective manner in which to grow the brand. Tables 3 and 4 provide market-to-share score predictor tables for communication activities of the brand.

Although the Campbell Belman analysis team works out the change in budget allocation required for each client brand to reach the optimal forecast, the brand teams can also deduce this from the tables shown. In general, budget can be decreased from the activities with a low or no correlation with market share and moved to those activities with a strong or good correlation with market share depending on what weighting they have. Also, a brand may have already invested heavily in an area. In this case it can then refer to the market-to-share score predictor tables for each of these characteristics and note the impact an increase in budget in that activity would have.

The brand team provided Campbell Belman with marketing budget spends and from this the team were given even more precise direction on changes required in individual spends to meet the forecast. So, the brand team was advised to reallocate the marketing budget (and other areas such as representative activity). For the sake of this example we will focus on communications budget only, as shown in Fig. 2.

By making these changes, the system predicted that in the following 6–8 month period, assuming the competitors continued down the paths they were currently on in terms of brand strategy, this brand would increase to around 2.4% market share.

By making the changes in budget allocation suggested the brand increased its market share to 2.4%

Six months following this, the brand was again analysed the same way and the results in July 2005 can be seen in Fig. 3. Hence, by making the changes in budget allocation suggested the brand increased its market share to 2.4%. In addition, the brand is now showing strong growth signs and is expected to grow to 3.4% market share if it continues as it is, although, again, slight changes have been recommended to allow this brand to grow to an even higher potential.

Summary

In the 6-month period that this small brand used the Campbell Belman system and followed its recommendations, its market share grew from 1.0% to 2.4% (in a market growing around 10% annually). The system allowed the brand team to:

- show how the brand is performing for its size and against competitors on an equal playing field

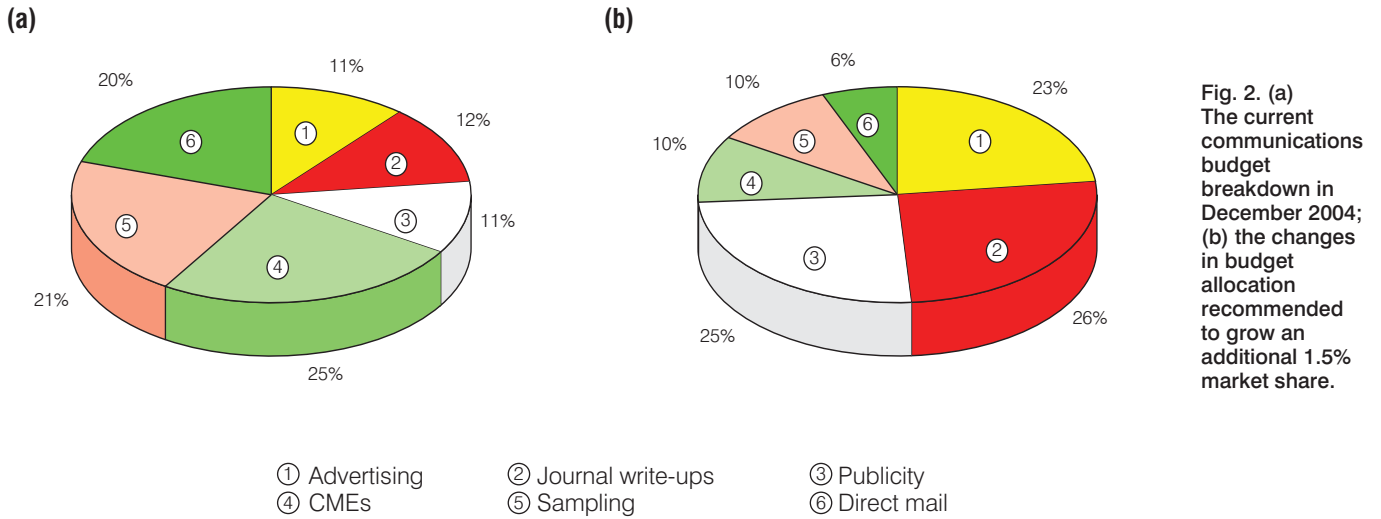


Fig. 2. (a) The current communications budget breakdown in December 2004; (b) the changes in budget allocation recommended to grow an additional 1.5% market share.

- identify the components of the mix currently driving market performance for the brand – and where marketing efforts will be most productive
- identify which sales and marketing activities are impacting market share and which are not
- identify and quantify the relative impact and value of each element in the sales and marketing mix
- show what the market share will be in the following 6–8 months if activities continue as they are
- show that highest market share potential is based on the brand's strengths and the vulnerabilities of competitor brands
- identify the best synergistic combination of the promotional mix for optimal product performance and growth
- how to allocate funds based on a reliable evaluation of highest future return
- show where the budget can be safely diverted from, and where this budget should be diverted to, in order to grow market share a specific amount
- identify how to respond most effectively to changes in the external environment, including competitor activities.

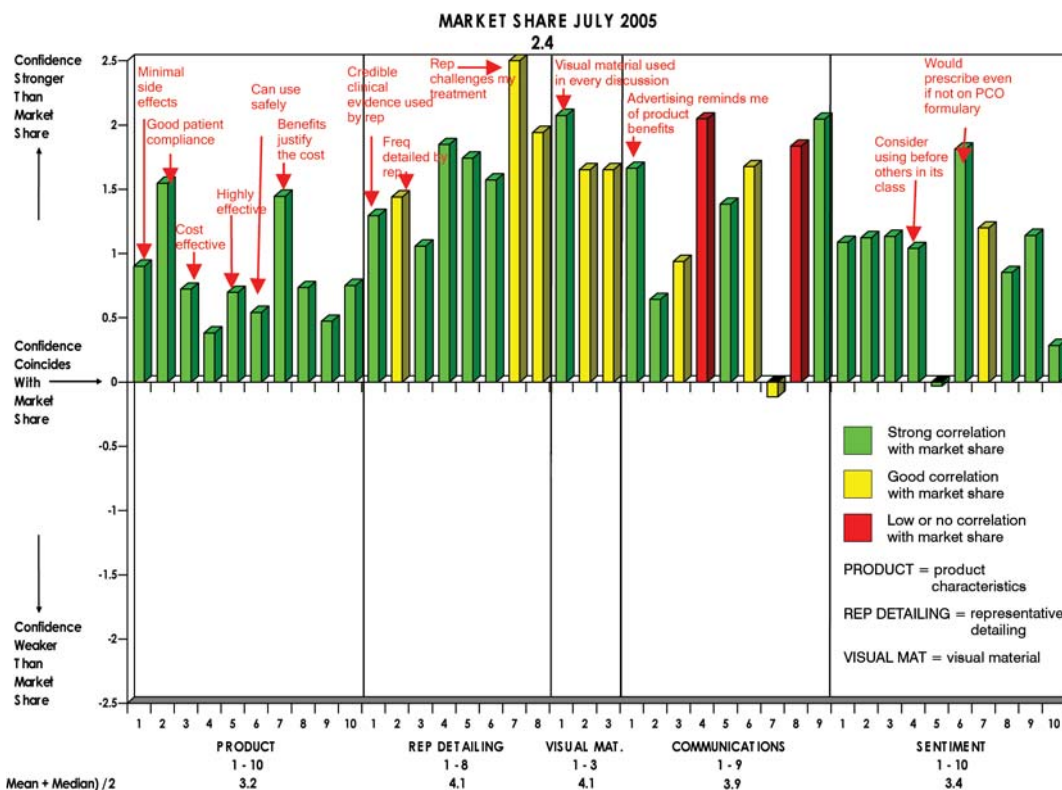


Fig. 3. The brand overview at a market share of 2.4% in July 2005.

Conclusion

Marketing executives are under pressure to justify their marketing investments to the Board. They want methods to show accountability and a demonstrable return from their marketing activities. ROI has been a very appealing metric because it provides clarity on spending and shows where to weed out activities that are not pulling their weight. But ROI models tend to focus on activities and investments, and while models try to find links, they are missing a crucial component in the dynamic pharmaceutical sector market. ROI models utilise historical data, which is inadequate in a changing environment. Studies of both ROI models and econometrics¹⁰ have demonstrably proven that even these more sophisticated models are found to be severely lacking when it comes to this dynamic sector due to not taking current market perception data into account. Using these approaches *will not* accurately help a company determine *where* and *how* its marketing activities can really work together and what combination will deliver profitable growth that they need.

The key to effectively integrating the strategy, marketing investments, profit and value growth depends upon a much fuller understanding of all the elements involved and incorporating as many of these as possible.¹⁰⁻¹² Thus, there is a need to examine and incorporate all the relevant components possible in an ROI model.

There is a need to examine and incorporate all the relevant components possible in an ROI model

One approach^{10,12} that can help a company determine where and how its marketing activities can really work together and what combination will deliver profitable value growth – with the highest degree of mathematical certainty available currently – combines current market perception data with econometric models and is able to predict what is impacting market share, what is not and what needs to change, and by how much, to increase profitable brand growth.

Leading pharmaceutical executives have identified this and are now moving forward with a higher degree of mathematical accountability in their marketing than ever before.

References

1. Warne C. Measure for measure. *Pharm Marketing* July 2005:530.
2. Bates A. Implementation and integration of marketing strategies that deliver significant ROI. Presented at 5th Annual Pharmaceutical Marketing Congress, 14–15 November 2005, Amsterdam, The Netherlands.
3. Bailey E, Bates A. eDetailing. In: *A Strategic Analysis of Implementation and ROI*. Mednet Media, 2001. Available from the author on request (abates@campbellbelman.com).
4. Bates A, Bailey E, Rajaguru I. Why pharmaceutical marketers must measure return on investment to ensure profitable edetailing campaigns. *Int J Med Marketing* 2002;2(4):287–92.
5. McDonald M, Smith B, Ward K. *Marketing Due Diligence; Reconnecting Strategy to Share Price*. Butterworth Heinemann, 2005. ISBN: 0750667273.
6. Bates A. Expanding on the ROI of both traditional and new media sales and marketing approaches. Presented at Marketing ROI USA, 15 June 2005, Philadelphia, USA.
7. Neslin S. ROI of pharma promotion (RAPP). Strategies for evaluating and maximizing ROI from pharmaceutical marketing. Presented at IQPC, 28 October 2003, London, UK.
8. Hymans SH. Forecasting and econometric models. *The Concise Encyclopedia of Economics*. Available at www.econlib.org/LIBRARY/CEETitles.html
9. Philip HE, Hymans SH, Donihue MR. Merging monthly and quarterly forecasts: experience with MQEM. *J Forecasting* 1991;10:255–68.
10. Klein LR, ed. *Comparative Performance of U.S. Econometric Models*. Oxford University Press, 1991. Especially chapters 1, 3, 10, 11 and 12. ISBN: 0195057724.
11. Klein LR, Young RM. *An Introduction to Econometric Forecasting and Forecasting Models*. Lexington Books, 1980. ISBN: 0669028967.
12. Frangos C. Regression of perceptions of influential people on the market share in listed companies. Presented at 20th European Meeting of Statisticians, 1992, University of Bath, UK.

Further reading

Rod MRM. Marketing ROI for Pharma. A KeywordPharma Conference Insights Review. NetworkPharma 2006. ISBN-13: 9781905676002.

Other related KeywordPharma titles available from www.ThePharmYard.com



Marketing ROI for Pharma

A KeywordPharma **Conference Insights** by **Dr Michel RM Rod** Published January 2006

ThePharmYard product code kwpp001

ISBN-13: 978-1-905676-00-2

An in-depth report from the eyeforpharma 5th Annual Pharmaceutical Marketing Congress, held in Amsterdam, 14–15 November 2005, written by Dr Michel RM Rod.

Executive summary

The pharmaceutical landscape is volatile. Research and development costs are soaring, purchasing power is being vested in fewer parties and regulations on pharmaceutical promotion are being tightened. Companies are under greater pressure to control spending and drive profits.

Return on investment (ROI) remains the common mantra from the boardroom downwards. Marketers are being asked to deliver bigger profit margins from diminishing marketing budgets and to demonstrate accountability when making promotional investments. With a better understanding of ROI analysis, pharmaceutical companies can develop and implement more effective marketing communications and enhance profitability.

The 5th Annual Pharmaceutical Marketing Congress – Marketing ROI for Pharma – held in Amsterdam 14–15 November 2005, organised by eyeforpharma, showcased a diverse range of opinion in its attempts to establish best practice. This *Conference Insights* review provides analysis of the pertinent issues raised in selected presentations made at the event. It details issues such as how market research can play a major role in informing the decision-making process, and examines why the industry must adopt a more systematic approach to segmentation, targeting and positioning. Critically, it asks whether ROI is actually the best metric for evaluating marketing success.

Contents

- 5th Annual Pharmaceutical Marketing Congress – programme
- Introduction
- About the author
- A turbulent environment
- Data, analytics and targeting
- Segmentation, targeting and positioning
- Successful implementation, execution and ROI measurement
- References

About the author

Dr Michel Rod left his role as Manager of Intellectual Property Development at the University of Calgary, Canada, to begin an academic career at the School of Marketing & International Business at the Victoria University of Wellington, New Zealand, in 2001. He has a medical sciences background having received a BSc (Hons) in Pharmacology & Toxicology from the University of Western Ontario and an MSc in Medical Sciences (Neurosciences) from the University of Calgary. After having worked for several years in medical research, and sales and marketing environments, he completed his PhD in Commerce at the University of Birmingham, UK, in 2003.

His research interests include the development and management of collaborative relationships amongst university, industry and government organisations within the health sciences sector, pharmaceutical promotions, as well as the commercialisation of university-developed intellectual property. He has published in *Science and Public Policy*, *Qualitative Market Research*, *Canadian Journal of Neurosciences*, *Canadian Journal of Psychology*, *Stroke*, *Brain Research Bulletin*, *Management Research News*, and the *Journal of Transnational Management Development*.

All KeywordPharma publications are available for purchase individually in e-document format at www.ThePharmYard.com – along with hundreds of other titles from independent publishers.



KeywordPharma publications are all available to purchase individually as e-documents from ThePharmYard – along with hundreds of other documents from independent publishers such as John Wiley & Sons, Dove Medical Press, The Medicine Publishing Company and CSF Medical Communications. ThePharmYard is free to everyone to access when needed, no registration required. Pick and choose and buy just the information you need, when you want it, as you want it, and use it straight away.



ThePharmYard already has hundreds of articles on offer, many of which are not easy to get hold of elsewhere, and more are being added all the time. A small selection of what can be found at ThePharmYard is listed here. Check out www.ThePharmYard.com and search using the product code or browse the database.

Drug reviews:

Finasteride in Benign Prostatic Hyperplasia

ThePharmYard product code: csf129b

Alfuzosin in Benign Prostatic Hyperplasia

ThePharmYard product code: csf128b

Irbesartan in Hypertension and Cardiovascular Disease

ThePharmYard product code: csf127b

Symbicort® in Chronic Obstructive Pulmonary Disease (COPD)

ThePharmYard product code: csf125b

Inegy® in Lipid Disorders

ThePharmYard product code: csf124b

Alendronate in Osteoporosis

ThePharmYard product code: csf123b

Metformin in Diabetes

ThePharmYard product code: csf122b

Expert briefs:

The Indian Biopharmaceutical Industry

ThePharmYard product code: chltn007

Mexico's Pharmaceutical Potential

ThePharmYard product code: chltn006

The Indian Contract Research Industry

ThePharmYard product code: chltn005

Japan's Biopharmaceutical Challenge

ThePharmYard product code: chltn004

Licensing updates:

Bayer Helps J&J Expand Cardiology Franchise

ThePharmYard product code: pventures126

Therapy Focus: Neuropathic Pain

ThePharmYard product code: pventures125

Can European VCs and Universities Make Money from New Biotech Spin-Offs?

ThePharmYard product code: pventures124

Industry reports:

Early Stage and Discovery Deals: Strategy, Structure and Payment Terms

ThePharmYard product code: bhead010

Late Stage Deals: Strategy, Structure and Payment Terms

ThePharmYard product code: bhead009

Research and development articles:

Peptide Crosslinked Micelles: A New Strategy for the Design and Synthesis of Peptide Vaccines

ThePharmYard product code: dove067

On the Way to Building an Integrated Computational Environment for the Study of Developmental Patterns and Genetic Diseases

ThePharmYard product code: dove066

Silk-Fibroin-coated Liposomes for Long-term and Targeted Drug Delivery

ThePharmYard product code: dove065

Nanofibers and their Applications in Tissue Engineering

ThePharmYard product code: dove063

Medical Marketing Manual

Edited by Paul Higham and Peter D Stonier

Published by Euromed Communications

The Manual has been written by senior medical and marketing executives in the pharmaceutical and allied service industries as a guide to the commercial development of medicines, particularly the interaction between the research, development, medical and marketing functions.

The Editors have used their wealth of experience and knowledge in both the medical research and marketing spheres to provide a unique publication, which in 18 chapters and several supplements covers all important aspects of the subject.

Each chapter and supplement is available to purchase individually as an e-document from ThePharmYard, including the following titles:

Branding Pharmaceuticals

ThePharmYard product code: emed058

Going Over-the-Counter: the Medico-marketing Implications of Changes to the Legal Status of Medicines

ThePharmYard product code: emed057

eDetailing – A User's Manual

ThePharmYard product code: emed055

*Using ROI Data for Effective Decision Making
in Pharmaceutical Marketing*

a KeywordPharma **Expert Review**
available from ThePharmYard

ThePharmYard product code: kwp002



ThePharmYard provides instant access to a unique database of specialist information which is particularly relevant to individuals working within the medical and pharmaceutical industries around the world. Titles from a diverse range of independent publishers are available to purchase in electronic document format for immediate access.

**Access medical and pharmaceutical industry
information at www.ThePharmYard.com**