Creating an online store for marine scientists

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In 2001 Ocean Scientific International Ltd (OSIL) decided to concentrate its marketing effort in electronic media, which included e-mail newsletters and website promotion. This article details one aspect of the campaign, the setting up of an e-commerce site for the sale of its products.

he Internet has become a regular feature of many peoples' everyday lives as a source of information, a means of communication and, more recently, for trade. The number of Internet users continues to increase every day. A recent study has shown that the average number of at-home users for 12 selected countries increased by four million during August to September 2004, with most of the increase coming from European countries (see Table 1).

Two thirds of Internet users are now online shoppers according to a study by the Pew Internet and American Life Project in Washington, USA. Four years ago 36 million people had bought something online. The new Pew research puts the current number at 83 million.

Purchases over the Internet by businesses have also increased. The UK Office for National Statistics has shown that 29% of businesses bought goods and services over the Internet in 2003 - an increase of 13% on the 2002 figure.

So, as the world embraces Internet shopping as a whole, how has this affected the purchasing habits of the marine scientist? Well, not a lot at present but things are changing relatively quickly. It is ironic that the Internet and the World Wide Web have resulted from the efforts of scientists and academics in recent decades but the very same people have been the slowest to embrace online shop-

Country	August '04	September '04	Growth %	Change
Australia	8,817,815	8,850,479	+0.37	+32,664
Brazil	12,019,552	11,992,791	-0.22	-26,762
France	14,222,597	15,197,078	+6.85	+974,481
Germany	29,215,331	30,073,931	+2.94	+858,600
Hong Kong	2,673,388	2,483,261	-7.11	-190,127
Italy	14,930,690	16,622,066	+11.33	+1,691,376
Japan	35,646,372	36,277,805	+1.77	+631,433
Spain	7,466,380	8,498,602	+13.82	+1,032,222
Sweden	4,694,397	4,646,457	-1.02	-47,940
Switzerland	3,321,652	3,170,841	-4.54	-150,812
UK	21,783,154	22,505,058	+3.31	+721,903
USA	137,038,072	135,423,830	-1.18	-1,614,242
Totals	291,829,401	295,742,198	+1.34	+3,912,797
Source: Nielsen/l	NetRatings			

Table 1: Active home Internet users by country, September 2004.

ping for products and services.

In many cases it is more likely that their employing institutions have provided barriers to Internet trade through fears of losing control of their institutional paper trails. This is quite understandable as large quantities of money can be involved and, at the end of the day, much of the finance has originated from public funds and must be properly accounted. However, changes are taking place here too. Electronic banking, purchase orders, credit card payments and e-mail documentation are becoming regular features of business dealings with a wide range of companies and institutions.

Some e-commerce sites already exist in the marine science and technology sector. Scientists' confidence in online purchasing is being boosted by the high quality service of electronic bookseller outlets such as Amazon and by the efficient delivery service of companies such as Federal Express and UPS.

Online 'shopping cart' stores, specifically for marine products, are few and far between. Some organisations offer online catalogues for books, charts and data, whereas others offer full online purchasing. More general scientific supplies can more readily be sourced and purchased via the web and it is even possible to purchase used scientific instruments on eBay.

Not all products and services lend

themselves comfortably to online selling. Many products are too complex, too high-value or require installation and ongoing support.

OSIL supplies products and services for environmental measurement particularly related to marine, freshwater and meteorological applications. This includes a range of high-precision calibration standards for salinity, conductivity, nutrients and dissolved oxygen and it was these products which were deemed to be best suited for an online store as they are all readily available from stock.

The goal of the campaign was to become the market leader in e-commerce for seawater products and the strategy was to display existing products to a wider market and to introduce new products. The tactics employed included: the establishment of an online store for marine scientists using existing and new relevant products; the investigation of new markets for the existing products using web advertising and market research; and the introduction of new products for new markets.

Firstly, it was important to establish a 'brand' for the online store. OSIL is well known in the environmental monitoring market for the supply and service of instrumentation of which seawater standards forms a small part. So, in order to promote the products, Seawater

Keyword	Impressions	Clicks	Click Through Rate
Seawater	99,738	1943	1.95%
Salinometer	954	29	3.04%
Marine chemistry	1374	13	0.95%
CTD calibration	11	1	9.09%
Practical salinity	63	1	1.59%
Marine scientist	133	1	0.75%
Marine scientific	92	0	0.00%

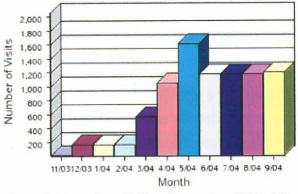


Figure 1. November 2003 to September 2004 visits.

Table 2: Google Adword results for www.seawatersolutions.com

Solutions was chosen as the brand name for the new site.

The target market is marine scientists, who normally operate in the following sectors: oceanographic and marine commercial companies; international agencies; universities and academic research centres; military laboratories; government departments; and aid organisations.

Seawatersolutions.com aims to add value or some differentiation to customers because it helps them to procure the seawater products they need, in a more convenient way. It was considered important to provide a site which was easy to navigate and which created confidence in the users. A series of targeted market surveys allowed the development of the site to its present form and ongoing improvements are planned as the business grows.

The Site

Key features of the site include: a single location to cover trade from any part of the world; easy navigation steps with clear instructions on screen; a secure payment method; multiple currency options available at the check-out together with freight options to cover worldwide shipping options; and a 'technical library' for product support.

• Single location: The e-commerce site is based on 'X-sight', a custom programme produced and supported by UK-based Lan2Lan Ltd. The Lotus Domino-based product is essentially a database which can be easily edited locally at OSIL and then replicated with the host server. This allows regular updating of product details, prices and promotions.

This single site is accessible worldwide and orders can be placed at any time of the day or night. Once an order is placed, Customer Services at OSIL is alerted by email and the transaction is completed.

• Easy navigation: It is important that users of the site find it easy to navigate and operate. An obvious statement perhaps, but one all-to-often overlooked by online companies. The site lays out product information in logical, expandable sections, which allows the user to explore

the product details according to their requirements. 'Shopping Cart' transactions are easy to execute. A high degree of flexibility allows the customer to make changes to the order at any time.

• Secure payment: A 2001 study by Brigham Young University (USA) showed credit card security fears to be the biggest barrier to online shopping. In recent years bankers and technologists have worked together to improve online financial security and, as a result, there has been significant growth in Internet shopping and other areas such as online banking. However, there are still some areas of concern and for that reason OSIL decided to retain a degree of control over the payment process. Once an order has been submitted at the Seawater Solutions checkout page the customer receives an acknowledgement (by e-mail) and the order is received (also by e-mail) by OSIL Customer Services, which then contacts the customer directly. This method offers a high degree of payment security but also allows details of the order and delivery to be checked and confirmed before shipment.

• Multiple currency: All prices shown on the site are in GB pounds sterling. However, a calculator embedded in the checkout page allows the customer to select payment in an equivalent amount of US dollars or euros. This allows OSIL to work from one price structure but permits clients to pay in a convenient currency for them. Freight options are also calculated at the checkout according to the delivery zone worldwide.

• Technical library: Technical information is an important addition for most products used in marine science. The technical library covers a wide range of topics concerned with the production and use of OSIL's seawater standards. This includes the definition of practical salinity, composition of seawater and the preparation of standards for dissolved nutrients.

Results

The key to success with any website is the amount of traffic it generates. Because the products on seawatersolutions.com are specialised, the number of visitors is limited by the market size. Various tactics have been utilised to increase traffic to the site.

An html newsletter is produced quarterly and is e-mailed to a targeted database of marine scientists. This newsletter contains product news, pricing information and special offers which link directly to the e-commerce site. Press releases in trade journals have also helped to promote the site along with postcard campaigns to existing customers.

One of the most significant improvements in traffic to the site has resulted from the use of a product called Google AdWords. The Google network reaches about 80% of Internet users (according to Media Metrix, December 2003) and AdWords allows the creation of productspecific online advertisements which are linked to specific keywords. Table 2 shows some of the typical keywords which were used in the OSIL campaigns, the number of times they appeared (impressions) and the number of times the link advert was selected (clicks).

The number of visitors to the Seawater Solutions website has increased significantly since its launch in October 2003 (see Figure 1) and business transacted through the site has grown steadily.

The successful operation of an Internet shopping site is a challenging task. Many large companies have expended considerable funds in order to attract customers to their Internet shops. This is particularly true for companies which have already established non-Internet trading outlets (e.g. banks and supermarkets). It is important to encourage that first visit so that customers can experience for themselves the advantages of web-based products. The more traditional forms of publicity such as magazine advertising and product press releases play an important role in this respect.

While it is unlikely to replace the majority of its business methods, OSIL will continue to develop and promote its Internet shopping site as a method for promoting certain products and to offer a convenient way for some customers to purchase.