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15-20 Sept 1991

Varna, Bulgaria

**ISME'91**

**PROCEEDINGS**

**International Seminar**  
**Information Systems and Market Economy**



## SOFTWARE MARKETING - SOME PROBLEMS AND PERSPECTIVES

## S y n o p s i s

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The aim of this talk is to:

- define basic notions of the marketing theory;
- compare the technological software life cycle with the marketing one;
- discuss basic components of the marketing strategy, preferably using examples from the current practice in Bulgaria;
- formulate some recommendations for future development of the software marketing policy in Bulgaria.

1. Introduction.

The production of software has been dramatically increased for the last 30-35 years. With some delay the theoretical foundations of software production (software life cycle models, measurement-metrics, quality assurance, production organization, etc) have been also developed. This, however is not true for the marketing process of software products. As stated in [1] "the application of marketing methods and practices to the marketing of software products can only be beneficial and, indeed, is sorely lacking". This, paradoxically, is an advantage for the practice in Bulgaria - as is well known and due to a lot of factors marketing in Bulgaria is not enough developed. Hence, the distance between Bulgaria and Western countries is generally considerable, but not in the field of software marketing, where this distance could be rapidly reduced.

Nine different definitions [2, 3, 4] of "marketing" are considered. Based on some of them one more, which is more pragmatic and useful for this talk, is proposed: a set of scientific, organizational and technological means for investigating a given market and purposefully exerting influence on it.

## 2. Technological vs. marketing software life cycle (SLC).

Many technological SLC models have been developed for the last twenty years. A clear trend to more adequate reflection of the real processes can be observed - starting from the purely chronological models (Boehm, Freeman), followed by their modifications (prototype, cascade), functional (Hamilton-Zeldin), bi-dimensional (Gunther) to the most recent evolutionary (Krasner).

We suppose a well defined marketing SLC should be useful for the better understanding of software marketing. Moreover, a comparison of marketing vs. technological SLC seems to be a key issue for software developers. After some reflection we decided to consider the marketing SLC, proposed in [1] and the technological of [5].

According to [5] the technological SLC can be broken down into six phases - (1) analysis, (2) feasibility, (3) design, (4) programming, (5) evaluation and (6) use. The marketing SLC consists of the following stages (phases): idea generation, idea screening, concept development and testing, business analysis, product development, marketing strategy development, market testing, commercialization and pricing. The comparison of both models shows that the first and the second phases match. (3) is partly covered by "concept development and testing", the rest of (3), as well as (4) and (5) are covered by "product development", (6) remains with no corresponding phase. This comparison is instructive at least for two reasons - a) it shows to the software developer that the technological SLC is only a part of the marketing SLC; b) probably, the marketing SLC are far less developed (as theoretical models) than the technological ones.

## 3. Software marketing strategy in Bulgaria.

As is well known the first step of the marketing strategy is to select the target market. In practice the Bulgarian software producers are restricted in many ways due to their (relatively) limited number, lack of access to external



markets, low level of users' qualification and hence - no need and no possibilities for implementing more specialized and/or sophisticated software products. A number of interviews with foreign businessmen and scientists confirmed that despite the quite acceptable (and in a lot of cases - very good) quality of Bulgarian software the foreign market still remains almost closed due to three factors - natural language, different user's interfaces and bad or non-existing communication (for the need of support and maintenance).

As far as the marketing mix (the four p's - product, price, promotion, place) is concerned, Bulgarian producers, less or more intuitively keep close to the theoretical recommendations. However a few peculiarities should be pointed out. Up until last year software prices were not market based, but determined on arbitrary concepts or even at random. Starting from February 1, 1991, where prices in general were liberated, a clear trend to market founded prices is observed. One example only - still in 1990 a payroll program could be purchased approximately for five average month salaries. Now the price is less than two such salaries. In this synopsis we must skip the detailed analysis of this phenomenon. For the promotion of the software products a very restricted set of possibilities is available. This is to some extent connected with the "fourth p" - the place. At this stage neither specialized shops are available, nor bookstores use to sell software. It is rather promising that an increasing number of software manufacturers have recently started to exhibit their products at national and international fairs or other exhibitions.

Advertisement of software products is developing very fast since last year. A drawback (not only for software) is the lack of legislation in this area. But nevertheless the adds still remain correct. They seem and sound according to general rules for effectiveness. Unfortunately, no appropriate analysis or even investigations have been so far carried out, hence we can not say how effective advertisement of software is.

#### 4. Conclusions.

a) it becomes obvious that theoretical research in the field of software marketing is necessary;

b) the foreign experience in general marketing should be rapidly acquired;

c) the interest of the potential customer to have not only a software product, but a full solution of his particular problem, should be taken into account;

d) it is clear that effective software marketing can only be reached by joining the efforts of marketing experts and programmers;

e) the new established BAIII - Bulgarian Association of Informatics and Information Industry should actively find its place in these processes.

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