APPLICATION OF BENCHMARKING OF SERVICE OPERATIONS FOR IMPROVING SERVICE ORGANIZATION PRODUCTIVITY & EFFICIENCY

A White Paper for the Reverse Logistics Industry

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ABSTRACT

This White Paper presents an analysis of operating benchmarks and service performance metrics for field service and closed loop supply chain organizations within the High Tech Service Industry. Through a series of tables, graphs and charts the authors provide a detailed analysis of multiple aspects of field services and service logistics supply chain operations. Dividing the total High-Tech Service industry into eight technology service sectors the reader is presented with the current operational metrics within each technology sector followed by an analysis of the industry averages compared to “Best in Class” metrics. This analysis also includes an examination of key performance parameters of internal depot repair (i.e., reverse logistics) operations versus external (4th Party depot repair) service operations and providing a direct comparison of the average unit repair cost and performance data.

The methodology of the benchmarking process is fully discussed and documented within this study. The data produced within this White Paper was collected over a period of a number of years rather than a single “snapshot” survey resulting in a more “stable” picture of the field service industry; the strengths and weaknesses of this process is discussed by the authors, as are other factors that affect the benchmark metrics presented in this White Paper.

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A. INTRODUCTION
The high-tech service industry, in general, as well as independent third party, multivendor equipment service, and fourth party service organizations have become much more focused on improving their productivity and efficiency. The issue of strategic and tactical benchmarking has, therefore, gained increased attention and criticality. The ISO 9000 process for quality management and control emphasizes the importance and use of benchmarking as a key to the comparative measurement of service operations and customer oriented performance against industry and market norms and standards. In running service as a line of business or profit center, it is critical to determine the optimum approach to achieving the best profit levels and at the same time meet customer service needs and requirements. Unfortunately, in the industry there are relatively few accepted or published benchmark parameters and targets which can be used by the typical service organization or manager in both establishing an effective service strategy, and in assessing and evaluating performance relative to industry standards and norms, or customer needs and requirements.

This type of data, if properly evaluated to determine key driving parameters and critical targets could be extremely useful in improving service productivity and efficiency. This analysis focuses on that objective.

D.F. Blumberg Associates, Inc. (BAI), as part of its process of management consulting to the service industry, has tried to fill the critical benchmarking data to improve service productivity need by developing an extensive base of benchmark information and data parameters, by class, technology of products serviced, by type and size of service organization, and by geographic region serviced. This information was based, in part, upon extensive in-depth "Service Market Audits" and studies conducted by BAI for more than 450 small, medium, and large service organizations, supporting OEM manufacturers, dealers, distributors, and independent third, MVES, and fourth party maintainers operating in the US,
Europe, and globally, conducted over the 1988-2001 timeframe. These organizations were involved in the service and support of a broad array of technology, including:

- Information Technology
- Office automation and office products
- Telecommunications and data network products
- Medical electronics and technology
- Building Automation
- Industrial Plant Systems Controls
- Retail, Financial, and Point-of-Sale (POS) technology
- Home and Consumer Goods

In addition, BAI has developed extensive non proprietary data on service requirements and performance by technology and vertical market segment as part of carrying out more than 500 market research studies in the service market to determine user requirements and needs for service, and to measure customer satisfaction and service performance as perceived by the user. Finally, BAI has collected considerable published data on service oriented companies organization, operations and productivity and on the service market in which they operate. The non-proprietary elements of all of these sources of data were then used to develop key benchmark data (Figure 1), using the general process shown in Figure 2.

We originally published an executive summary of our benchmark findings in 1993, covering data developed for the period 1988-1992, based on 90 companies. A second analysis based on a 100 company sample, for the period 1993-1995, was completed and updated in 1996. This information was updated again in 1999 on a 120 company sample, for the period 1995-1998. The current analysis contained in this report is based on 130 firms who participated in D. F. Blumberg’s benchmarking program during the period 1999 through 2001. The benchmark parameters and standards developed from that process and data sources are discussed below.
FIGURE 1

BAI Data Sources Used in Developing Benchmark

- Survey of Management and Administrative Staff (Secondary Perception)
- Survey of Field Service Engineers (Primary Perception)
- Customer / End User Survey (Primary Perception)
- Direct Independent Spot Checks and Measurement
- Management Systems Data and Reports

BENCHMARK MEASUREMENT MECHANISMS

STATISTICAL ANALYSIS AND EVALUATION

QUALIFICATION EVALUATION

FINAL BENCHMARK STATISTICS AND DATA

Source: D.F. Blumberg Associates, Inc.
FIGURE 2

General Methodology and Process in Developing Benchmark Data

Source: D.F. Blumberg Associates, Inc.
DONALD F. BLUMBERG

DONALD F. BLUMBERG is an internationally recognized authority on the service and support industry and market, and on the design, operation, service, and support of computer, telecommunications, process control and plant automation, and related high-technology equipment and software service. Mr. Blumberg is the President, Chief Executive Officer, and founder of D. F. Blumberg & Associates.

Mr. Blumberg’s education includes a Bachelor of Science Degree received in 1957 from the University of Pennsylvania in Electrical Engineering, majoring in computer sciences; a Master of Business Administration degree with a major in management and operations research, received in 1958 from the Wharton School of Business. In 1963, he also completed all course work leading to a Ph.D. in applied Economics with a major in microeconomics and business planning from the Graduate School of the University of Pennsylvania.

Mr. Blumberg has more than thirty-two years of experience in strategic planning, market research, and management of service operations. He has served as a consultant to a broad array of vendors in the high technology service industry, advising them on how to organize, operate, direct, manage and market their hardware and software systems integration, application, installation, and field maintenance and repair organizations.

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Mr. Blumberg's work centers on assisting clients in utilizing information technology and market intelligence to view service as a strategic line of business, and pursuing service opportunities to improve market share, customer satisfaction, revenue and profit margins. He is an author and lecturer on topics of concern to the service industry. He has appeared as a speaker at prior AFSMI conferences and has published articles in The Professional Journal, Service News, and Customer Support Management magazine.

Mr. Blumberg attended Temple University, where he received a Masters of Business Administration degree in Marketing, and a Bachelor of Arts joint degree in Political Science and Economics.
D.F. Blumberg Associates, Inc. (BAI) is the oldest, largest and leading management-consulting firm to the High-Technology Services Industry. The firm provides client services in the area of strategic planning, market research, productivity, expert witness, and mergers and acquisitions. Serving clients worldwide since 1969, BAI has pioneered in viewing service strategically and has played a major role in the development of the High Tech Service industry, in general and the promotion of Independent service specifically. The firm continues to create advanced strategies and tactics for improving the profitability, quality, and productivity of service organizations.

Reverse Logistics Trends, Inc. is a trade association focused on supporting third party service providers (3PSP's) whom OEM's outsource to. The association makes available to OEMs business and technology intelligence to strengthen the decision-making process for outsourcing their customer support services to 3PSPs. We support the total Reverse Logistics Industry, with focus on reporting industry news, providing conferences and trade shows while commissioning research to benefit our membership.
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