

Models of Embedded Librarianship: A Research Summary

CERTAIN CHARACTERISTICS AND FACTORS CAN INFLUENCE THE SUCCESS OF EMBEDDED LIBRARY SERVICES, AND RESEARCH SPONSORED BY SLA IS HELPING IDENTIFY THEM.

BY DAVID SHUMAKER AND MARY TALLEY

Librarians and information professionals are seeking new roles that will enable them to align their services with, and raise their visibility in, their organizations and ultimately increase their value. The embedded services model offers new opportunities to achieve these goals by bringing information professionals into closer working relationships with others. This new vantage point can enhance their ability to understand customer work issues and information needs, opening the way to the delivery of highly-customized, value-added services.

Interest in the embedded services model has been increasing, but there has been little systematic study of it. Not

much is known about the factors that are associated with the model's success and the requirements to initiate and sustain it. The authors, funded by a 2007 SLA research grant, attempted to identify and study these factors and requirements.

In this project, we sought to gain a better understanding of the similarities and differences among embedded library services programs and to develop insights into practices that enable them to succeed. The project had four goals:

- To define criteria of "embeddedness" for library and information services programs;
- To define indicators of success and identify successful (model) programs;
- To collect data about the practices

followed by model programs in initiating, operating, and evaluating their services; and

- To develop recommendations for other librarians seeking to implement embedded services.

This article presents a brief summary of the research. The full report is available on the SLA Web site at www.sla.org/pdfs/EmbeddedLibrarianshipFinalRptRev.pdf.

Research Methodology

We organized the research project into three data-gathering phases. In the first phase, we administered a Web-based survey (Survey 1) to a random sample



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of 3,000 SLA members and received 1,001 responses (33 percent). Using a set of eligibility questions, we qualified 278 respondents as embedded, meaning they are directly engaged in providing specialized services to limited client groups within their organizations.

In the second phase, we invited the embedded librarians identified in Phase 1 to take another survey (Survey 2). Of these, 130 librarians submitted answers to the survey's 42 questions, which focused on the longevity and growth of embedded programs, the number of customer groups served, the education and experience of the librarians, the services provided, and the operation of embedded services.

The third phase consisted of site visits to four organizations with embedded information services to conduct in-depth interviews with the embedded librarians and their supervisors and

customers. Two for-profit organizations and two institutions of higher education were selected based on their responses to questions that indicated both program success and longevity.

A fourth activity, to monitor and analyze the literature of embedded librarianship, was conducted throughout the project

Criteria of Embeddedness

In Phase 1 of the research project, we tested the ability of three widely reported characteristics of embedded programs—location with a customer group, partial or full salary funding by a customer group, and supervision by a customer group manager—to distinguish such programs from other direct service providers. In addition, we gathered data to describe the circumstances in which embedded programs typically occur and to compare characteristics among embedded and

non-embedded service providers.

Our analysis found fewer differences between embedded and non-embedded respondents than we had expected. Location and customer funding patterns were linked to both embedded and non-embedded librarians, but they did not differentiate between them; likewise, supervision did not constitute a significant difference between the two groups. Therefore, we relied on the characteristic of providing specialized services as the single criterion of embedded library services for the subsequent phases of the study.

Our Phase 1 research also confirmed a number of important facts about embedded librarianship. First and foremost, embedded programs are healthy and widespread, as evidenced by the following:

- Almost half of the direct information service providers surveyed also

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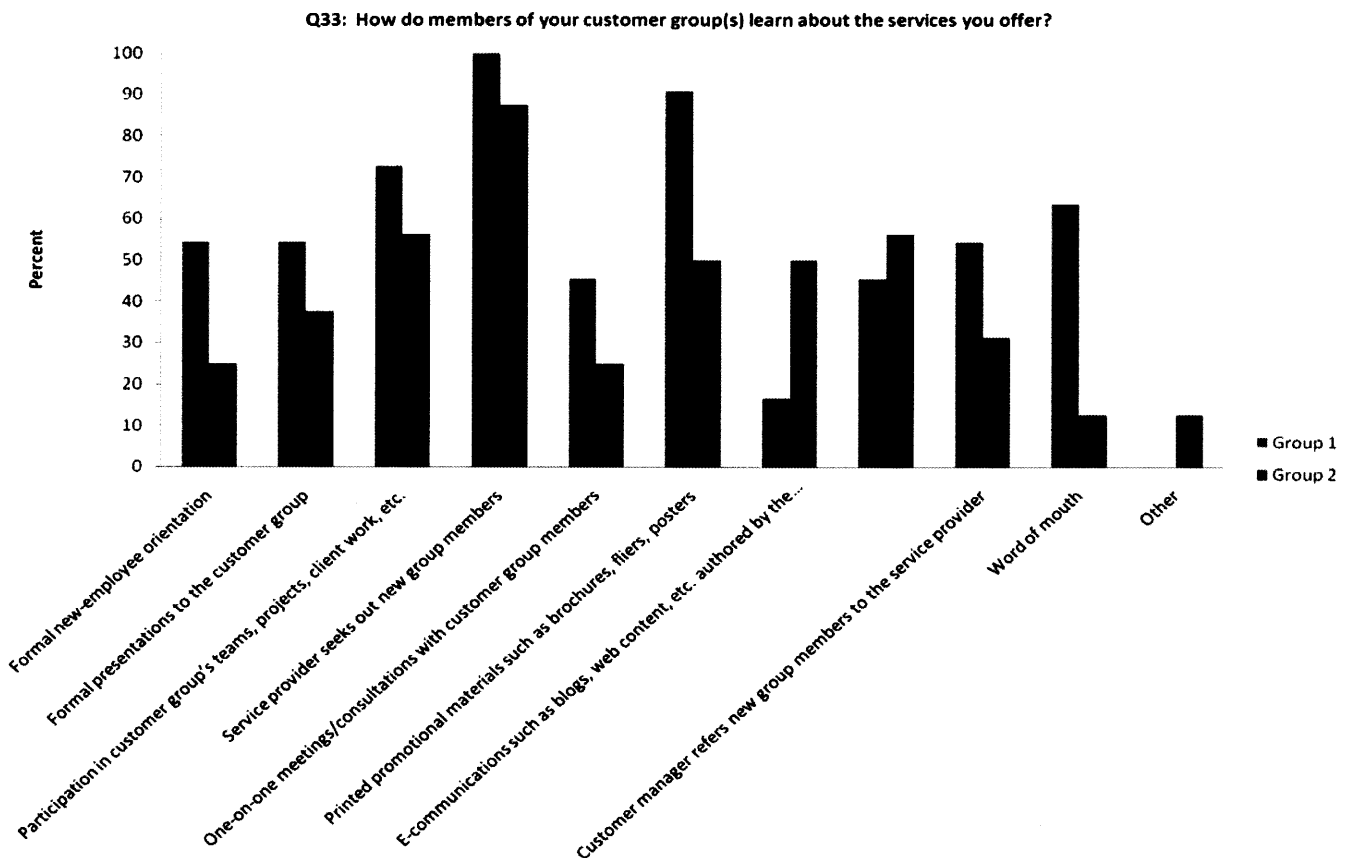


Figure 1: Indicators of Success: Marketing and Promotional Activities. Group 1 consists of librarians meeting all three measures of success (see page 33); Group 2 consists of librarians who meet none of these measures.

provide specialized services to one or more specific customer groups in their organization.

- Embedded programs occur in every organizational type surveyed. Higher education institutions predominate, but for-profit, nonprofit, and government organizations are also well represented.
- While 60 percent of respondents said that embedded services programs had existed for more than 10 years in their organizations, the numbers of programs in existence for shorter periods suggests steady, if gradual, growth.

In addition, the Phase 1 research found that relationship-building skills are paramount to implementing and sustaining an embedded program. The majority of embedded service providers reported engaging in seven activities that demonstrate close collaboration with customers and shared responsibility for outcomes.

Indicators of Success

Our next research goal was to identify successful embedded programs and their accompanying characteristics. We were particularly interested in exploring the role that management strategies for initiating, operating and sustaining, and evaluating embedded services might play in the programs' success.

We chose three measures as our criteria for success:

- Growth in the number of librarians or information professionals who provide services to the respondent's customer group(s);
- Increased demand for services from the customer group(s); and
- The development and delivery of new services to the customer group(s) over time.

Only 11 survey respondents met all three criteria. We labeled these 11 respondents Group 1. A slightly larger

number (16) of respondents met none of the criteria. We labeled these 16 respondents Group 2. A diverse range of organizations, including government agencies, institutions of higher education, and for-profit and nonprofit corporations, were represented in both groups (and in similar proportions).

We then analyzed the responses of these two groups for significant differences, using the technique of Small Sample Discrete Inference based on mid P-value (a statistical methodology for comparing very small samples). The analysis produced 22 significant differences in the way each group responded to pertinent survey questions. Each of these differences constitutes a distinguishing attribute of successful programs.

We grouped the 22 attributes thematically to create a survey of practices that successful programs perform more frequently than less successful programs. This resulted in four themes: marketing

Q34: Are these or any other type of information or measurement data collected for the purpose of evaluating services?

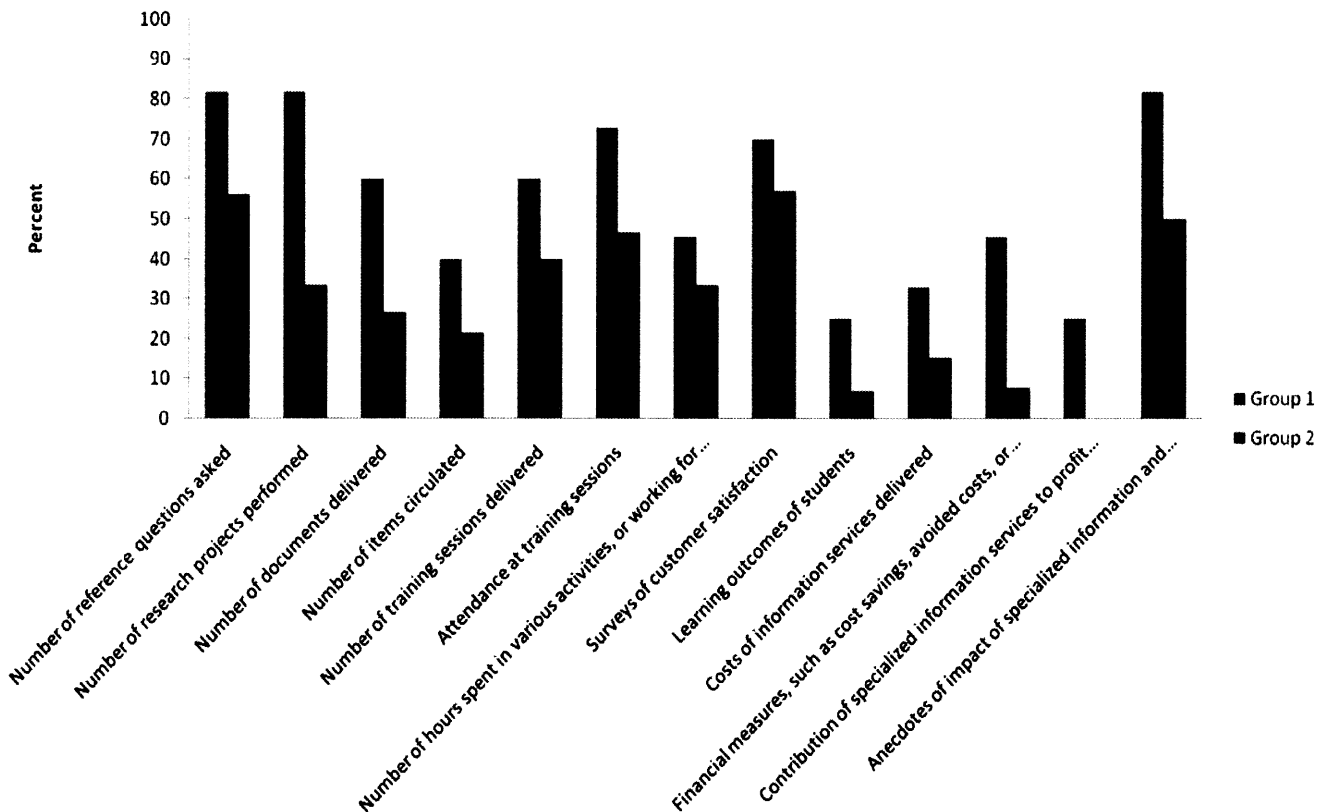


Figure 2: Indicators of Success: Use of Service Metrics. Group 1 consists of librarians meeting all three measures of success; Group 2 consists of librarians who meet none of these measures.

and promotion, service evaluation, services provided, and management support.

Marketing and promotion. Group 1 programs engaged in the following marketing and promotional activities much more frequently than less successful programs:

- Using word-of-mouth promotion;
- Distributing and displaying printed promotional materials, such as brochures, fliers, and posters; and
- Making presentations at employee orientations.

The use of word-of-mouth marketing is not surprising: One expects that those who use a successful, highly valued service will actively promote the service to other users and potential users. What may be surprising is the use of the other two activities, especially considering the popularity of electronic media such as blogs and Web sites. This is perhaps a reminder that traditional and low-tech media still have their place in promoting information services.

Service evaluation. Group 1 programs

engaged in seven types of service evaluation more frequently than Group 2 programs. The two most significant of these are (1) measuring financial outcomes, such as return on investment or cost avoidance, and (2) using service metrics to justify the continuation of services. These factors suggest that demonstrating the impact of specialized information services, preferably in financial terms, may be of the utmost importance in persuading organizational decision makers to support embedded programs.

Other practices followed by Group 1 programs were collecting anecdotes about the impact of specialized services on customer work and outcome, and keeping counts of research projects, documents delivered, reference questions, and training session attendance. Apparently, these metrics may still be useful in the operation and management of specialized library and information services programs.

Service types. Six types of services were more likely to be provided by Group 1 programs. Four are sophisticated, value-added services: in-depth research, competitive intelligence, training that is conducted offsite (away from library facilities), and shared instructional responsibility with subject faculty.

This clustering of activities supports a theme encountered in much of the literature: that the nature of the librarian's work becomes more sophisticated, with an emphasis on expert analysis and judgment, as the librarian becomes embedded in the customer group's work.

Management support. Finally, Group 1 programs reported stronger management support, as evidenced by these factors:

- Authorization from management (at any level) was not required prior to initiating specialized services.
- A manager/leader of the customer group facilitated the integration of the service provider into the group.
- The customer group contributed

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feedback to the librarian's performance review.

- A written agreement existed between the customer group and the service provider group.
- Authorization was required from the library/information group manager to initiate specialized services.
- Continuing education related to the customer group's area of specialization was required of the embedded librarian.

Taken together, these factors suggest a strong engagement between library/information service management and management of the customer group to support the specialized services.

Interestingly, we did not find relationships between success and other factors in the survey, including the following:

- The embedded librarian's education level;
- The embedded librarian's relevant training or work experience;
- Employer support for continuing education;
- The creation of written documentation at the time service was initiated;
- The type of documentation created when service was initiated; and
- The sharing of written reports with library management or executives outside the customer group.

Recommendations for Managers

We now believe there is a critical need to strengthen the management of embedded library services. Just as the embedded role calls for new skills on the part of service providers, it also calls for new management strategies. Therefore, we propose a series of steps for those who are managing library and information services.

We present this as the "Virtuous Cycle for Embedded Library Services"—a model for management action to develop and sustain a strategic repositioning of information services in the workplace.

Hire staff who can build relationships.

In his management classic, *Good to Great*, Jim Collins (2001) emphasizes the need to "get the right people on the bus." Our first recommendation echoes

his principle. The sine qua non of embedded library services is the librarian's ability to establish strong interpersonal relationships with customers. As our survey data and site visits show, these librarians excel at building relationships and are highly motivated. We believe that the expansion of embedded information services will create more demand for professionals with these skills.

Let them learn the organization and subject. Our research, particularly our site visits, reinforced the importance of the embedded service provider's subject and institutional knowledge. Formal academic study, continuing education, and on-the-job learning are all critical in developing the necessary knowledge. The key question for the manager is this: How will information professionals in your organization acquire the knowledge they need?

Empower them to offer the right services.

The common threads among successful programs were that the range of services increased over time and that sophisticated, value-added services were layered on top of basic library and information services. We infer that as embedded professionals gain trust and credibility with their customer groups, they are pulled into new roles and functions depending on the priorities of their customers. Managers must encourage this flexibility and give embedded information providers the freedom to shift their roles in response to customer needs.

Build alliances and communication with customer management. Successful programs are more likely to measure their activities and assess the value and impact of their services. Further, these programs communicate their metrics to customer management as evidence of the importance of embedded information services. To ensure success, managers must focus on evaluating their embedded services and sharing the results with their own superiors as well as their counterparts in the customer organization.

Another practice of successful programs is to engage customer management in activities such as integrating the embedded librarian into the group and providing input into the librarian's performance review. We see these activi-

ties as tangible signs of management's buy-in to the embedded service. In fact, communicating the value of the service to customer management and soliciting help and feedback should constitute a set of intertwined, mutually reinforcing management functions.

Support the embedded librarian's work.

Our final recommendation requires almost as great a shift in management approach as the preceding one: We believe that the manager must lead the promotion and evaluation of embedded services and not leave them to individual embedded staff members. The manager must also help embedded staff manage their workload. An effective strategy is to support "reach back" by embedded staff to non-embedded staff for assistance. Another strategy is to form staff teams, each with its own embedded information provider as the lead and other staff members who provide backup and support.

A related management challenge is to **maintain collaboration and communication among embedded information providers.** As ties to customers strengthen, ties to other information professionals can weaken. The energetic and creative manager can—and must—find ways to retain the collegiality that is the hallmark of library and information culture.

More Exploration Needed

In conducting this research, we saw that resourceful and energetic information professionals are employing the embedded services model successfully in organizations of many different types. We saw that they share certain characteristics, which we believe have contributed to their success.

We also came to realize how much we do not know or understand, and how much remains to be done in exploring this topic. We hope that others will add their stories and insights, and we look forward to learning from them. **SLA**

REFERENCES

- Collins, Jim. 2001. *Good to Great*. New York: Harper Collins.