

The Gaps Model and Faculty Services: Quality Analysis Through a “New” Lens*

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Faculty service is an important function of U.S. academic law libraries. This article evaluates three types of faculty services programs using the Gaps Model to identify, analyze, and propose ways to fill four main gaps: knowledge, policy, delivery, and service quality.

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Introduction

¶1 How do we best evaluate the service quality of the 21st century U.S. academic law library? This question is frequently addressed in scholarly and professional literature. Sarah Hooke Lee, for example, explored this topic at length 12 years ago in anticipation of the most comprehensive review of the *ABA Standards for Approval of Law Schools* (the ABA standards).¹ Lee argued that traditional quality criteria tied to the print paradigm are inadequate and suggested ways for law librarians to update library quality assessment standards to protect the core missions of law libraries.² More recently, during and after the review and revision of the ABA standards, scholarly literature has discussed the standards for law libraries of the past, present, and future.³ However, although many agree that measurement standards have shifted from focusing on quantity to quality, few offer conceptual or practical suggestions about the specifics of a quality-based measurement model for law library services.

¶2 In this article, we look beyond the horizon of academic law libraries for possible solutions. Commercial industries use many different models to evaluate and assess service quality.⁴ Among them, the Gaps Model, developed in the 1980s for the business sector, is the most well-known and well-used model to analyze service quality.⁵ A look into the history and application of the Gaps Model in both for-profit and nonprofit sectors makes us confident about its potential usefulness in analyzing the service quality of academic law libraries. Since faculty services is one of the most important functions of U.S. academic law libraries, we choose to conduct our Gaps analysis in that department first. Evaluating the service quality of different faculty services⁶ models through this lens, we hope to find new channels to discover potential gaps and improve service quality.

Why the Gaps Model?

The Gaps Model: Brief History and Application in Libraries

¶3 The Gaps Model is the brainchild of A. Parasuraman, Valarie A. Zeithaml, and Leonard L. Berry. Based on the expectation-confirmation theory, the Gaps Model “illustrates how consumers assess quality, and takes into account the factors that contribute to determine quality in its various connotations.”⁷ After its first

1. See Sarah Hooke Lee, *Preserving Our Heritage: Protecting Law Library Core Missions through Updated Library Quality Assessment Standards*, 100 LAW LIBR. J. 9, 2008 LAW LIBR. J. 2.

2. *Id.*

3. See Theodora Belniak, *The History of the American Bar Association Accreditation Standards for Academic Law Libraries*, 106 LAW LIBR. J. 151, 2014 LAW LIBR. J. 9; Gordon Russell, *The ABA Section on Legal Education Revisions of the Law Library Standards: What Does It All Mean?*, 106 LAW LIBR. J. 329, 2014 LAW LIBR. J. 20.

4. For a survey of models evaluating service quality, see Hamid Tohid & Mohammad Mehdi Jabbari, *Service Quality Evaluating Models*, 31 PROCEDIA - SOC. & BEHAV. SCI. 861 (2012).

5. See Aurelio G. Mauri, Roberta Minazzi & Simonetta Muccio, *A Review of Literature on the Gaps Model on Service Quality: A 3-Decades Period: 1985–2013*, 6 INT’L BUS. RES. 134 (2013).

6. In this article, we focus on the narrow scope of faculty services, which are faculty research services including related document delivery services. Many points elaborated in this article apply to faculty services in broader terms as well.

7. Mauri, Minazzi & Muccio, *supra* note 5, at 134.

publication in 1985, the Gaps Model has been applied as a conceptual framework in different services sectors and to different geographical areas.⁸

¶4 “Quality is an elusive and indistinct construct.” Parasuraman, Zeithaml, and Berry started with this sentence in their groundbreaking work.⁹ Their observations about service quality, though describing the business sector three decades ago, still ring true in the context of academic law libraries today. Services provided by law libraries fit the “[t]hree well-documented characteristics of services—*intangibility*, *heterogeneity*, and *inseparability*.”¹⁰ Most services provided by law libraries are intangible. Reference, teaching, borrowing, support for faculty and students—these are performances rather than objects. Also, the performance “often varies from producer to producer, and from customer to customer, and from day to day.”¹¹ In addition, the “production” and “delivery” of those library services are often inseparable.

¶5 After reviewing works on service quality from previous researchers and gaining insights from explorative study in the form of executive and focus group interviews, Parasuraman, Zeithaml, and Berry conceptualized the Gaps Model of Service Quality, “summarizing the nature and determinants of service quality as perceived by consumers.”¹² From the explorative study, they concluded that “the quality that a consumer perceives in a service is a function of the magnitude and direction of the gap between expected service and perceived service.”¹³

¶6 A set of five gaps summarizes the model:¹⁴

- **Gap 1:** the gap between customer expectations and management perceptions of these expectations;
- **Gap 2:** the gap between management perceptions of customer expectations and the company or organization’s service-quality specifications;
- **Gap 3:** the gap between service-quality specifications and actual service delivery;
- **Gap 4:** the gap between actual service delivery and external communications about the service; and
- **Gap 5:** the gap between customers’ expected services and perceived services delivered.

¶7 Gap 5 is the foundation of a customer-oriented definition of service quality: the discrepancy between customers’ expectations of service and their perceptions of the actual service delivered. The first four gaps all contribute to Gap 5 because they closely relate to the design, marketing, and delivery of services.

¶8 The Gaps Model and SERVQUAL, a survey instrument developed after the creation of the conceptual model,¹⁵ have been modified and applied in academic libraries since the 1990s. Because SERVQUAL was originally designed for the busi-

8. *Id.*

9. A. Parasuraman, Valarie A. Zeithaml & Leonard L. Berry, *A Conceptual Model of Service Quality and Its Implications for Future Research*, 49 J. MKTG. 41, 41 (1985).

10. *Id.* at 42.

11. *Id.*

12. *Id.* at 46.

13. *Id.*

14. *See id.* at 45–46.

15. *See* A. Parasuraman, Valarie A. Zeithaml & Leonard L. Berry, *SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perception of Service Quality*, 64 J. RETAILING 12 (1988).

ness sector, it needed testing and modifications to become a useful assessment tool for academic libraries. In the late 1990s, researchers from Texas A&M University and the Association of Research Libraries developed an alternative instrument, LibQUAL+, to evaluate service quality in libraries. The LibQUAL+ project was initially supported by a three-year grant from the U.S. Department of Education's Fund for the Improvement of Post-Secondary Education.¹⁶ Since its inception in 2000, the LibQUAL+ survey instrument has been used to collect data from more than one million library users and one thousand institutions in the United States and abroad.¹⁷ The 2018 LibQUAL+ Survey Highlights indicate that 65 U.S. libraries participated in the survey at the conclusion of the calendar year, although none of them was an academic law library.¹⁸

We Need a Quality-Based Model to Embrace the Changing ABA Standards

¶9 By introducing the Gaps Model, we hope to reapproach the discussion of service quality from the perspectives of users and develop an instrument to evaluate the service quality in academic law libraries more systematically. Before we start the Gaps analysis, a brief overview of the evolving standards for academic law libraries may also be necessary.

¶10 As many have observed, “[a]pplication of the concept of quality to libraries is rooted . . . in a library’s relationship with its governing organization.”¹⁹ In the United States, the discussion of service quality in academic law libraries closely entwines with the discussion of the ABA standards.²⁰

¶11 Since 1952, the Council of the Section of Legal Education and Admissions to the Bar (the Council) of the American Bar Association (ABA) has been recognized by the U.S. Department of Education as the accrediting agency of law schools in the United States.²¹ Since the goal of accreditation is to ensure that institutions of higher education meet acceptable levels of quality,²² the ABA standards promulgated by the Council have long been used as a yardstick to measure a law library’s quality. One chapter of the ABA standards, chapter 6, is devoted to law libraries. The ABA standards set the criteria that law schools must meet to obtain and retain ABA accreditation. Winning ABA approval is essential for a law school’s graduates to satisfy the minimum legal education requirements for taking the bar exam in most jurisdictions or to obtain federal loans to pay for their legal education.

¶12 Theodora Belniak provided a comprehensive review of the ABA accreditation standards for law libraries from the late 19th century to 2014.²³ Using annual

16. Bruce Thompson, *Birth of LibQUAL+*, LIBQUAL+, https://www.libqual.org/about/about_lq/birth_lq [https://perma.cc/M5HT-VQVA].

17. *Id.*

18. ASS’N OF RESEARCH LIBRARIES, *2018 LibQUAL+ Survey Highlights*, LIBQUAL+, https://www.libqual.org/documents/libqual/publications/2018_LQ_Highlights.pdf [https://perma.cc/5UYQ-F3D3].

19. Danuta A. Nitecki, *Changing the Concept and Measure of Service Quality in Academic Libraries*, 22 J. ACAD. LIBR. 181, 181 (1996).

20. Lee, *supra* note 1, at 11–13.

21. AM. BAR ASS’N, STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS 2018–2019, at v (2019), https://www.americanbar.org/content/dam/aba/publications/misc/legal_education/Standards/2018-2019ABASStandardsforApprovalofLawSchools/2018-2019-aba-standards-rules-approval-law-schools-final.pdf [https://perma.cc/7UEK-7AH3] [hereinafter ABA STANDARDS].

22. See 34 C.F.R. § 602.1 (2019).

23. Belniak, *supra* note 3.

reports, conference reports, and other periodical materials from the ABA, she shed light on the rationales behind the changing standards and discussed their impact on law libraries.²⁴ From its formative years, the ABA has required law schools and law libraries to provide data and information in the form of checklists, questionnaires, and other forms to comply with the standards. The changes in the types of data and information collected by the ABA indicate that different measurement models were considered. Over the last 100 years, the ABA standards have evolved from input-based to outcome- and quality-based in response to changes in technology and pressures from the legal profession.

¶13 Until the early 2000s, the ABA's library standards relied consistently, if not exclusively, on an input-based measuring model.²⁵ An input-based model counts "the resources available to the system,"²⁶ collecting quantified data on the law library's staff, budget and, most important, the size of its collection tied to a "print paradigm."²⁷ From the late 1990s, with the revolutions in computer technology and easier access to electronic information, the once firmly established print paradigm has slowly but gradually melted away. The ABA standards of 1995 started to allow for "ownership or reliable access," and added "requirements focused on nontangible items such as services, teaching, and professional backgrounds of employees."²⁸ Despite criticism from many law librarians,²⁹ the title and volume counts lingered for almost another decade and were finally dropped by the ABA in the late 2000s. The Annual Questionnaire, which the ABA uses to collect data from law schools each year as part of the accreditation process,³⁰ stopped asking for volume or title counts from the 2008–2009 year; instead, the Site Evaluation Questionnaire started to "have a greatly expanded section on library services."³¹

¶14 The review and revision of the ABA standards from 2008 to 2014, the most comprehensive of such efforts undertaken by the ABA, echoed the "tectonic shifts in the educational landscape"³² triggered by "the economic recession" and "the crisis of confidence in legal education."³³ The revised library accreditation standards reflect the ABA's larger goals "to more concretely link library performance to the mission of the law school, to require measurements that are more outcome-related and focus on quality instead of quantity, and to alter the Standards to reflect the ways that legal information can be accessed or acquired in the 21st century."³⁴ The

24. *Id.*

25. Lee, *supra* note 1, at 10.

26. Martha Kyrillidou, *From Input and Output Measures to Quality and Outcome Measures, or, From the User in the Life of the Library to the Library in the Life of the User*, 28 J. ACAD. LIBR. 42, 43 (2002).

27. Lee, *supra* note 1, at 163; Belniak, *supra* note 3, at 162–65.

28. Belniak, *supra* note 3, at 169.

29. See, e.g., Lee, *supra* note 1.

30. See ABA STANDARDS, *supra* note 21, at 5 (Standard 104).

31. PAUL GEORGE & BILLIE JO KAUFMAN, REPORT TO LAW LIBRARY DIRECTORS ON UPCOMING CHANGES IN THE ABA QUESTIONNAIRES (June 30, 2008), <https://www.aallnet.org/allsis/about-us/officers-committees/committee-web-pages/liaison-aba-section-legal-education-admission-bar/report-law-library-directors-upcoming-changes-aba-questionnaires> [<https://perma.cc/6FVM-ZU9Z>].

32. Belniak, *supra* note 3, at 172.

33. James G. Milles, *Legal Education in Crisis, and Why Law Libraries Are Doomed*, 106 LAW LIBR. J. 507, 512, 2014 LAW LIBR. J. 28, ¶¶ 15–25.

34. KENT D. SYVERUD & BARRY A. CURRIER, COMPREHENSIVE REVIEW OF THE ABA STANDARDS FOR APPROVAL OF LAW SCHOOL MATTERS FOR NOTICE AND COMMENT 2 (Feb. 22, 2013), https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar

newly revised ABA standards shift the focus from what the library has to what the library does, and signals the adoption of outcome- and quality-related measurement models. However, the standards offer very little guidance as to how outcome- or quality-based measurements will be conducted.³⁵

¶15 Advocates of the outcome-based model agree that it is results oriented and user focused.³⁶ The Institute of Museum and Library Services, an organization influential in promoting the outcome-based model, defines “outcomes” as “benefits or changes for individuals or populations during or after participating in program activities, including new knowledge, increased skills, changed attitudes or values, modified behavior, improved condition, or altered status.”³⁷ Outcome measurement closely connects to the service-quality-based model we introduce below.³⁸ Because the impact of library services on users inextricably folds into users’ expectations and perceptions of service quality, better understanding the Gaps Model will improve our understanding and application of the outcome-based model.

Service Quality Reexamined from the Faculty’s Perspective

¶16 The creators of the Gaps Model firmly believe that service quality should be evaluated from the customer’s or user’s perspective. “The only criteria that count in evaluating service quality are defined by customers,” write Parasuraman, Zeithaml, and Berry. “Only customers judge quality; all other judgments are essentially irrelevant.”³⁹ From the early days when the Gaps Model and SERVQUAL were breaking ground in the field of library science, researchers have embraced the customer- or user-based approach.⁴⁰ In particular, “[i]dentification of universal criteria for customers to use in evaluating service quality, and the simplicity of utilizing a customer survey might offer library managers an incentive to monitor their users’ expectations and perceptions systematically as the basis for improving services.”⁴¹

¶17 The ABA standards identify “faculty, students and administration of the law school” as the three groups of “customers” or constituents that a law library shall maintain “a direct, continuing and informed relationship with.”⁴² Among the three groups, law librarians have long identified the faculty as “a key constituent” and “a steady user group” of the law library; this core group also “possesses great influence over the library’s operation” and “has clout with students regarding the

/council_reports_and_resolutions/20130222_notice_and_comment_standards_chs_6_7.authcheckdam.pdf [https://perma.cc/8T66-7PUJ].

35. Russell, *supra* note 3, at 337.

36. Peter Hernon, *Editorial: The Practice of Outcome Assessment*, 28 J. ACAD. LIBR. 1, 1 (2002).

37. Peggy D. Rudd, *Documenting the Difference: Demonstrating the Value of Libraries Through Outcome Measurement*, in PERSPECTIVES ON OUTCOME BASED EVALUATION FOR LIBRARIES AND MUSEUMS 16, 20, https://www.ims.gov/sites/default/files/publications/documents/perspectivesobe_0.pdf [https://perma.cc/AP4W-78MZ].

38. See Peter Hernon, *Outcomes Are Key But Not the Whole Story*, 28 J. ACAD. LIBR. 54 (2002).

39. VALARIE A. ZEITHAML, A. PARASURAMAN & LEONARD L. BERRY, *DELIVERING QUALITY SERVICE: BALANCING CUSTOMER PERCEPTIONS AND EXPECTATIONS* 16 (1990).

40. See Fred Heath & Colleen Cook, *SERVQUAL: Service Quality Assessment in Libraries*, in ENCYCLOPEDIA OF LIBRARY & INFORMATION SCIENCE 2613, 2613–14 (Miriam A. Drake ed., 2d ed. 2003).

41. Nitecki, *supra* note 19, at 183; see also Ellen Altman & Peter Hernon, *Service Quality and Customer Satisfaction Do Matter*, AM. LIBR., Aug. 1998, at 53.

42. ABA STANDARDS, *supra* note 21, at 39 (Standard 601).

library.”⁴³ Recent articles in this journal and others have explored different aspects of faculty services.⁴⁴ However, few have addressed the service-quality aspect of faculty services, let alone a standard to evaluate the quality of faculty services across institutions.

¶18 We focus our quality analysis on faculty services not only because the faculty is one key constituent, but also because the range of services provided and the organizational structure each institution adopts for its faculty services program offer fertile ground for comparison and analysis. Academic law libraries deliver faculty services in different models and varieties. One influential group, the AALL Academic Law Libraries’ Special Interest Section (ALL-SIS) Faculty Services Committee, reviews school websites and interviews individual librarians every few years, and concludes its efforts in one practical document, the ALL-SIS *Faculty Services Toolkit*.⁴⁵ The most recently updated *Toolkit* identifies three major models under which law libraries structure their faculty services programs:

- The centralized (or faculty services librarian) model is primarily led or managed by one librarian, whose primary responsibility is to manage and develop faculty services.
- The decentralized (or faculty liaison) model distributes faculty research assignments among a team of librarians. Each librarian develops and manages faculty services for a fixed group of faculty members. Librarians may conduct research for the faculty members assigned to them or hire or train research assistants to conduct the research.
- The hybrid model makes librarians collectively responsible for conducting research for the entire law school faculty.⁴⁶

¶19 By providing the Gaps analysis for each of the above models, we hope to open the discussion about developing both a conceptual model and a measuring instrument for faculty services, with the ultimate goal of improving the quality of faculty services across institutions. As two experts on library assessment standards point out, “[m]erely knowing the expectations is insufficient; that knowledge must be translated into performance that reduces the gap between expectations and the service actually provided. Gaps, especially large ones, identify areas for improvement.”⁴⁷

Gaps Analysis of Faculty Services Programs in the United States

¶20 In this section, we focus on examining the quality of faculty services offered in academic law libraries in the United States, utilizing the revised Gaps Model

43. Robert Hu, *PR for Academic Libraries: Focus on the Faculty*, AALL SPECTRUM, Feb. 2002, at 28, 28.

44. See, e.g., Stephanie Davidson, *Way Beyond Legal Research: Understanding the Research Habits of Legal Scholars*, 102 LAW LIBR. J. 561, 2010 LAW LIBR. J. 32; Sheri H. Lewis, *A Three-Tiered Approach to Faculty Services Librarianship in the Law School Environment*, 94 LAW LIBR. J. 89, 2002 L. LIBR. J. 5; Jane Thompson, *Teaching Research to Faculty: Accommodating Cultural and Learning-Style Differences*, 88 LAW LIBR. J. 280 (1996).

45. MORGAN STODDARD ET AL., ALL-SIS FACULTY SERVICES TOOLKIT, *Introduction*, <https://www.aallnet.org/allsis/resources-publications/faculty-services-toolkit-login-required/> [<https://perma.cc/H4JF-GPHE>] [hereinafter TOOLKIT].

46. See *id.*

47. Altman & Herson, *supra* note 41, at 53.

developed by Parasuraman, Zeithaml, and Berry.⁴⁸ Based on the unique characteristics of faculty services, we revised the original Gaps Model as follows:

- **Gap 1:** the gap between customer expectations and law library management perceptions of these expectations (knowledge gap);
- **Gap 2:** the gap between law library management perceptions of customer expectations and a law library's service-quality specifications (policy gap);
- **Gap 3:** the gap between service-quality specifications and actual service delivery, including communications about the service, which we consider an important component of the actual service delivery (delivery gap); and
- **Gap 4:** the gap between customers' expected services and perceived services delivered (service-quality gap).⁴⁹

¶21 The ultimate purpose of the discussion is to identify existing and potential gaps in current faculty services programs and propose solutions to fill the gaps. Through our review of faculty services programs in the United States, we recognize many, if not all, schools have some unique features in their programs.⁵⁰ However, to make the discussion more useful to a wide audience, we focus on the commonalities among schools by categorizing faculty services programs into the three major models already introduced: centralized, decentralized, and hybrid.

What Is Service Quality of Faculty Services?

¶22 Before we start our analyses, we need to define service quality and how to measure it. Service quality (SQ) measures the difference between a customer's expectations (E) and a service provider's performance (P). Thus, $SQ = P - E$. In the context of faculty services (FS), SQ translates to $FS(sq) = P(l) - E(f)$, or faculty services quality hinges on whether librarians' service as judged/perceived by faculty members meets the faculty's (perceived) expectation. If our service meets or exceeds the faculty's expectation, then it will be perceived as high quality. Otherwise, it will be considered as low quality.⁵¹ Therefore, the key is the difference between a customer's perceived expectation before the service is delivered and his or her experience after receiving the service.

¶23 Here we use this service-quality concept to evaluate three faculty services models to find to what degree they minimize the difference between faculty's expectation and libraries' perceived performance. Based on the original Gaps Model, we designed a faculty services model as follows:

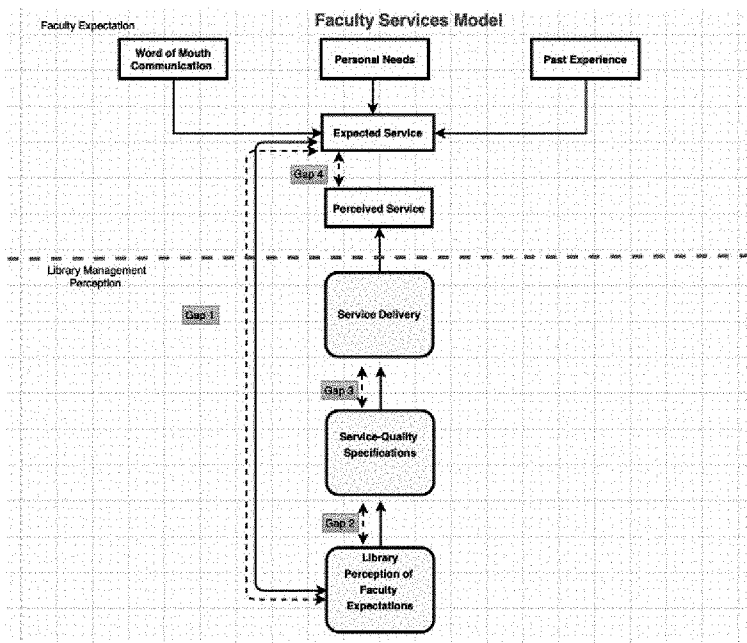
48. See Parasuraman, Zeithaml & Berry, *supra* note 9.

49. See Emel Kursunluoglu Yarimoglu, *A Review on Dimensions of Service Quality Models*, 2 J. MKTG. MGMT. 79 (2014).

50. ALL-SIS FACULTY SERV. COMM., FACULTY SERVICES SURVEY 2017, https://www.aallnet.org/allsis/wp-content/uploads/sites/4/2018/01/faculty_services_2017_survey.pdf [<https://perma.cc/FU6V-VKJC>].

51. See Raymond F. Zammuto, Susan M. Keaveney & Edward J. O'Connor, *Rethinking Student Services: Assessing and Improving Service Quality*, 7 J. MKTG. HIGHER EDUC. 45 (1996).

Figure 1
Gaps Model of Faculty Services⁵²



Gap 1: Knowledge Gap

¶24 Gap 1 contains three layers: the faculty's expectation of library services, the law library's expectation of library services, and the law library's perception of faculty's expectation of library services. A knowledge gap may form in one or more of these three layers.

¶25 First, individual faculty members may have different expectations of what a law library does. For instance, a newly joined faculty member whose previous library provided *Bluebook* editing may assume—mistakenly—that her new library offers the same service. Or, faculty members may be unaware of the library's full range of services, perhaps because the library does not effectively communicate them or because some members of the faculty do not follow up.

¶26 Second, a law library's expectations of its services may not match the faculty's. For example, if the library bases its understanding of faculty research needs only on previous projects or assignments, it may ignore emerging research needs. A faculty member who has focused on U.S. tax research may start to explore comparative tax legal issues, for instance. In that case, the library's expectation that its services are adequate may not agree with the professor's expectation. Third, the law library may misperceive what the faculty's expectations of library services are.

¶27 Many factors can create a knowledge gap, such as lack of a consistent and regular direct communication channel between a law library and the faculty it serves;

52. Figures 1–5 were revised and adapted from SERVQUAL model charts. See ZEITHAML, PARASURAMAN & BERRY, *supra* note 39, at 35–49.

lack of a mechanism that would allow the law library to track and receive updated information from the outside, not necessarily from a particular faculty member; or lack of a communication system ensuring that information, once received, is shared timely and accurately within the library either from top to bottom or vice versa. To address potential knowledge gaps both externally with faculty members and internally among librarians and library staff, a good faculty services program must include a system that promotes communication in both areas effectively, consistently, and uniformly. Furthermore, it is as important for law libraries to communicate their service scope and philosophy to faculty members at the appropriate time⁵³ and with the proper frequency,⁵⁴ to help them build a reasonable expectation of services they would receive. Faculty members' expectations of law library services may not always be right or reasonable, but are usually amenable to adjustment. It is important for law library administrators to clarify and communicate their expectations, values, and nature of services that they are willing to provide.

¶28 Most libraries today either have already set up or have the potential to set up systems that promote faculty services.⁵⁵ Librarians also have opportunities to keep abreast of faculty's general research needs by attending workshops or faculty talks. Many libraries also have ways to keep updated with faculty's legal research in general. For example, the University of Michigan Law School has created a faculty bibliography website that includes each member's publications, and the law library maintains the law school's digital repository. Washington and Lee Law School has a scholarly commons through which faculty's publications are recorded and promoted.

¶29 Stanford has a very similar website, called Law School Publications, that includes publications by faculty members, maintained by the law library. In addition, Stanford Law Library creates a separate faculty bibliography list and a biweekly newsletter (*SLS Today*) to provide updates on publications, presentations, and other activities by the Stanford law community. Echoing the practice at Michigan and Stanford, Boston College maintains an up-to-date institutional repository for law faculty, which collects a variety of scholarly works for preservation and access purposes. These collections help market scholarship of law school faculty members and thus increase their scholarly impact⁵⁶ along with the law school's reputation. They help librarians gain detailed knowledge of the faculty's research interests. And they help spread high-quality knowledge and research and further law schools' and libraries' teaching and research missions.

53. Timing is essential for any communication. In the academic context, the beginning of the semester may be a good time for some faculty who do not have teaching duties, but probably not for faculty who do. Or law review submission season may not be a good time to connect with the faculty members, but the weeks before the submission season may be a great time to communicate about their research needs. Some faculty members may prefer you check in with them at the beginning of each academic year, when they are working on their research agenda for the upcoming year, while others may prefer a different time or checking in on demand.

54. Marton Jojarth, *It's Not Nagging: Repetition Is Effective Communication*, LINKEDIN (Jan. 19, 2016), <https://www.linkedin.com/pulse/its-nagging-repetition-effective-communication-marton-jojarth/> [<https://perma.cc/UU2N-LT45>].

55. ALL-SIS TASK FORCE ON LIBR. MKTG. & OUTREACH, WHITE PAPER ON LIBRARY MARKETING & OUTREACH (2013), <https://www.aallnet.org/allsis/wp-content/uploads/sites/4/2018/01/whitepaper2013.pdf> [<https://perma.cc/9M4N-G5TL>].

56. Scholarly impact refers to scholars' contribution to the research field in which they specialize. Research field (e.g., law) here distinguishes it from research areas (administrative law), as many subcategories are interconnected and hard to separate for the purpose of measuring scholarly impact.

¶30 These regular communication channels operate effectively in many libraries, regardless of which faculty services model they use or would like to use. However, these channels alone cannot close the knowledge gap, as useful as they are as tools or resources. Different models provide inherent strengths and weaknesses that make some more fit for understanding faculty research needs. We next look at each model, using two criteria: effectiveness and consistency.

Effectiveness in Identifying Faculty Research Needs

¶31 Our examination shows that all models can be effective in identifying faculty's initial research needs as long as they use uniform faculty orientation programs or in-person meetings to understand and establish short-term plans to meet current research needs. However, when it comes to identifying long-term or emerging research needs, decentralized programs may work better than centralized or hybrid programs.

¶32 A faculty liaison (decentralized) program allows librarians to customize services to faculty members. Generally speaking, this type of program assigns one librarian to serve only a few faculty members, which facilitates a number of positive results: (1) faculty members develop more trusting long-term relationships with librarians, which allows more openness about research needs;⁵⁷ (2) time savings and more effective communication results from librarians becoming familiar with faculty members' preferred workstyles; (3) librarians develop skills in their faculty members' specialized areas of law and therefore better understand and appreciate faculty research needs in those areas; (4) librarians' accountability is increased,⁵⁸ which provides more incentives and motivation for self-driven performance than the other two models.

¶33 In contrast, a centralized system managed by one faculty services librarian may effectively serve immediate faculty research needs but fail with longer term ones. A librarian who either does most of the research alone or manages a group of research assistants will presumably have the research skills and broad knowledge to quickly understand and predict current and emerging faculty research trends. However, over the long term, high turnover rates may result from the nature of the position, including constant deadlines, time and energy spent training temporary student assistants, and the lack of varied job responsibilities. This makes it harder to build trusting, long-term relationships with faculty members.

¶34 A hybrid model utilizing a centralized platform in which a senior manager manages the service with a few librarians assigned to research tasks may ease some of the issues that a centralized program experiences. But librarians focusing only on research tasks may not have the accountability or incentives to build good relationships with individual faculty members, a goal encouraged by the other two programs.

57. There has not been much discussion in the library field regarding the effectiveness of personalized services beyond anecdotal evidence. But there have been a lot of studies in the marketing and business fields showing that personalized services tend to increase sales and loyalty. For example, see Shep Hyken, *Personalized Customer Experience Increases Revenue and Loyalty*, FORBES (Oct. 29, 2017), <https://www.forbes.com/sites/shephyken/2017/10/29/personalized-customer-experience-increases-revenue-and-loyalty/> [https://perma.cc/34ZW-3V3Z].

58. Individual ownership and freedom are keys to increase accountability. See DANIEL H. PINK, *DRIVE: THE SURPRISING TRUTH ABOUT WHAT MOTIVATES US* (2009); Henry Browning, *7 Ways to Build Accountable Organizations*, FORBES (Feb. 28, 2012), <https://www.forbes.com/sites/ccl/2012/02/28/7-ways-to-build-accountable-organizations/> [https://perma.cc/DUW6-EFUN].

¶35 Despite the fact a decentralized system has some inherent strengths in identifying and updating faculty research needs, its success largely depends on two factors: fairness and open communication. Each librarian must receive an equitable workload when faculty assignments are first made. It is also important for library management to periodically monitor workload balance among its team members. Tools that can help managers stay informed of librarians' workloads include statistics gathering and regular meetings.

¶36 From an institutional perspective, it is also important to have librarians develop more balanced skills. The decentralized program may encourage librarians to become specialists in certain areas over the long term and thus lose interest or the skills to perform services in other areas. Tools that can help develop more balanced skills and knowledge among a team include creating opportunities to share knowledge and expertise in meetings and through collaborative projects or asking faculty services librarians to join a rotation of some commonly shared responsibilities.

¶37 Another issue currently haunting library management is staff retention. Librarians move between jobs pretty quickly and for a variety of reasons. From the management perspective, it is important to build a mechanism to keep institutional memories no matter which model of faculty services a library decides to adopt. A system to preserve documentation, such as faculty correspondence and research deliverables, maintains high-quality services despite staffing changes. So too does a team with balanced skills and knowledge because its members can successfully take over assignments when someone leaves; a team of specialists may not contain the necessary overlapping skills and knowledge. Many libraries use technology tools such as Box, Dropbox, or local drives to store institutional knowledge. Other tools to consider include sophisticated legal document management tools commonly used by law firms, if the volume and complexity of faculty research projects require such a choice.

¶38 No matter which tools are used for records retention, they must include strong searchability and tagging features. It is easier for a library adopting a centralized model to keep all records, including email correspondence, because most or all faculty communication goes through one person. However, long-term goals are probably better met by storing relevant email correspondence on a central platform, especially given the increasing use of data analytics and artificial intelligence tools in developing service frameworks, as discussed in the section on Gap 4.

Effectiveness in Setting Clear Internal Policies and Guidelines

¶39 Effectively and accurately communicating the services a library offers will minimize Gap 1 differences. Before any external communication takes place, however, library management must establish clear policies and guidelines for what services the library provides to faculty members, both in the short and long term. Key factors to consider when forming such policies include the faculty's and the school's needs; the law library's perception of its role and mission; and the available library resources, including personnel and their talents. Most generally stated, an academic law library's mission is to fulfill the teaching and research needs of the law school faculty. Anything that further promotes faculty teaching and research needs should be considered as well.

¶40 However, library management should also consider the legal information profession's mission and goals, which in principle coincide with those of individual law libraries. Management must ensure that these missions and goals coincide in practice as well. Take, for example, a decision to offer a service or material that falls outside of traditional law librarianship service or collection models. On the one hand, offering this service may help satisfy a particular faculty member in the short term. On the other hand, in the long term, it may mislead others about our profession and expertise.⁵⁹ Suppose a faculty member regularly asks library staff to print out materials for him, which might be considered a paraprofessional's job. If the law library continues to provide such a service without any qualification or clarification, it will reinforce the faculty member's misconception of our profession. Over time, this misconception may grow to include his sending other tasks to library staff or seeing the two positions—assistant and librarian—as interchangeable.

¶41 Other practical issues faced by library management include whether resources are sufficient to provide all legal informational services necessary to meet the library's mission. If not, management must consider which services shall be prioritized to develop in the short term. Which should be the focus in the long term? How should the library juggle long-term goals with short-term needs? These important considerations require library management review when it comes to setting up the scope of faculty services that a library would like and can afford to offer.

Effectiveness in Communicating Library Services to All Stakeholders

¶42 Once policies are set, it is important to communicate them clearly to all people involved in implementing them and, more essentially, to make sure they will be communicated to all faculty accurately and consistently. When it comes to communication, both content and methods are essential. For internal communication to library staff, it is important to communicate not just the policy or guideline itself, but also the reasons and rationale behind the policy setting. The library leadership may also consider adopting technological tools such as Slack, Trello and monday.com⁶⁰ to ensure timely feedback and to make adjustments based on the feedback. For external communication to faculty, it is important to strategize about effective and flexible communication channels and timing based on the institutional culture and practices, as well as teaching schedules, to reach the largest audience possible.

¶43 There are potential gaps with each service model. The centralized model appears to have the greatest advantage here. It is easier to maintain consistency and uniformity of information when all communications go through one person. It is also quite essential to keep constant communication between the faculty services librarian and library management to make sure any changes or misunderstandings are cleared in a timely fashion.

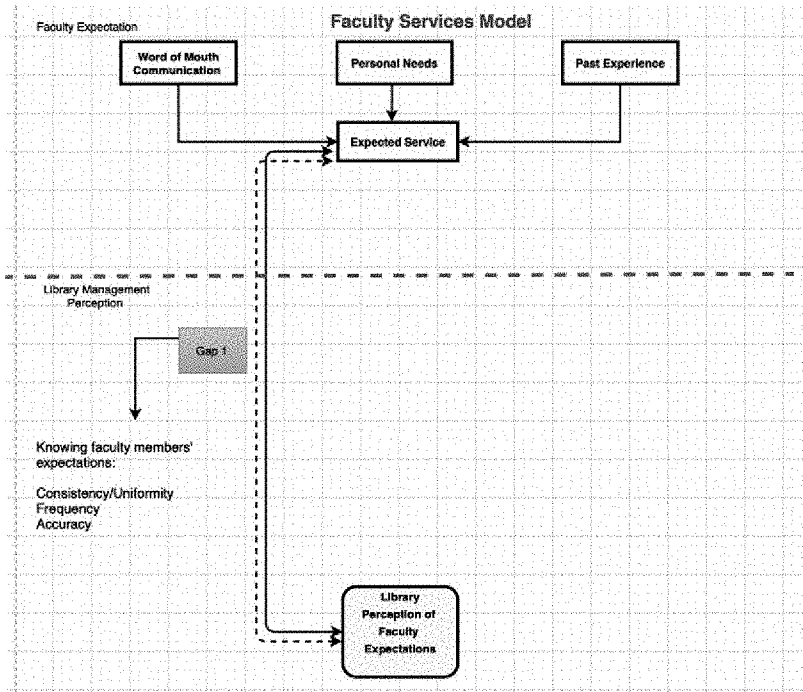
¶44 The decentralized model has more potential gaps, however. For example, each librarian may have a different understanding of the same policy, especially

59. This does not mean that law librarians should not embrace changes. We should be “nimble—not *willing* to change, but *eager* to change.” James S. Heller, *Retrospective: 30 Lessons Learned (and a Few Strokes of Luck) at the Crossroads*, 111 LAW LIBR. J. 121, 140, 2018 LAW LIBR. J. 6, ¶ 104 (emphasis in original).

60. See CAPTERRA, *Monday.com vs. Trello vs. Slack*, <https://www.capterra.com/project-management-software/compare/135003-72069-147657/Slack-vs-Trello-vs-monday-com> [https://perma.cc/939E-JDE7].

Figure 2

Gap 1: Knowledge Gap



when it comes to gray areas, and therefore may communicate policies differently to different faculty members. Moreover, when faculty members communicate their needs to their liaisons, the needs may not be timely communicated to library management, especially when they are not run-of-the-mill requests. Therefore, proposed solutions to fill gaps here include establishing constant communication channels internally, both with library management and within the reference team, to make sure services are uniform and timely.

¶45 The hybrid model has an advantage in keeping faculty needs and preferences in a centralized, open platform. However, it largely relies on individual librarians' self-awareness to inform library management and the team of any special faculty needs, as individual librarians are not charged to develop long-term faculty relationships, are usually assignment-driven, and are not expected to look at correspondence between faculty members and other peer librarians. Therefore, constant communication channels to keep everyone informed become even more essential for a hybrid service model. Possible tools to maintain effective communication channels include regular team meetings and a centralized and updated sheet of special or new faculty needs or preferences.

Gap 2: Policy Gap

¶46 Gap 2 discrepancies occur during the process of program design and standards setting. In other words, once management identifies faculty needs and creates a program to address them, it must verify that the program performs effec-

tively. An effective program establishes guidelines or standards that instruct the right group—those who actually perform the services—with the right information—which faculty services the library provides. Faculty services can range from “everything that faculty members ask” to only strictly defined functions (e.g., bibliographic services). No matter where on the service spectrum the guidelines point, they deserve thoughtful deliberation about how to meet faculty needs without compromising the profession’s image and core mission.

¶47 Strong guidelines also consider patron hierarchies. For example, are faculty services extended only to tenured and tenure-track faculty members? To teaching faculty, including fellows and visiting professors? Or, are tiered services developed for different kinds of audiences? Furthermore, guidelines should define the average turnaround for services provided. For example, a library can decide that all substantive legal research requests will be handled within two weeks, with rush requests being done in two days.

¶48 Generally speaking, definitive guidelines are clearer, easier to follow, and more uniform, making them preferable in most cases. However, an effective service builds in exception handling and fault tolerance mechanisms, concepts that originated in the field of computer science. Exception handling mechanisms outline when and what types of exceptions are made, who carries the authority to make exceptions, and how the impact of exceptions is minimized. Sometimes, an exception becomes the start of a new rule. Fault tolerance mechanisms in computer systems generally use four phases: “error detection, damage confinement and assessment, error recovery, and fault treatment and continued system service.”⁶¹ Borrowing from these concepts, a good faculty services system includes ways to avoid error, detect error, minimize damages caused by error, and recover from error.

¶49 Incorporating these considerations, we propose the following checklists for libraries to consider when setting standards and building effective faculty services:

- *Request take-in.* Guidelines should identify who takes in initial requests and through which channels. These decisions often correlate closely with a library’s model, be it centralized, decentralized, or hybrid. All requests, for example, might come through a centralized email system and then be distributed to individual librarians through a fixed schedule. Or a faculty services librarian might take in all requests and make the distributions. In a decentralized faculty liaison program, each librarian might take in requests from the faculty assigned to them. No matter which model a library uses, its faculty services program should use an equitable and clear distribution mechanism that includes properly authorizing librarians to assign service requests and ensuring collaboration between the librarians and other research staff, regardless of the reporting structure.
- *Reference interview.* All library research staff need clear and uniform guidelines on how to conduct a reference interview. Librarians taking in requests need to understand the nature of research tasks, their preferred timeline, and their purpose, all appropriate topics for the reference interview. For example, a request for resources on the effectiveness

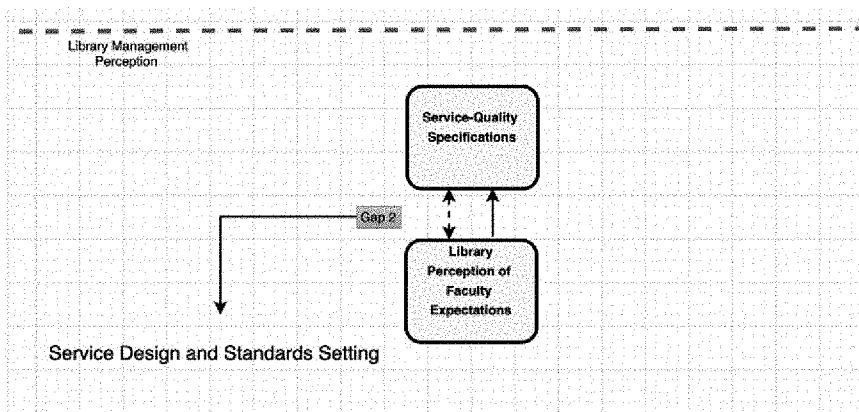
61. For more discussion, see PETER A. LEE & THOMAS ANDERSON, *FAULT TOLERANCE: PRINCIPLES AND PRACTICE* (2d rev. ed. 1991).

of online education might require a broad, comprehensive approach, perhaps requiring many hours, or a much narrower one because the requester needs only a few sources to support one argument. A library following a decentralized liaison model may have an advantage here because a librarian assigned to a small group of faculty members is more likely to know the context of a particular request due to a long-term collaboration. Librarians working in a centralized or a hybrid model may have less context for analyzing a research request, especially when they are first collaborating with faculty members. Mastering reference interview techniques requires a great deal of training and experience, so in libraries following a model in which students conduct faculty research, librarians should conduct reference interviews or closely monitor those who do.

- *Standards setting.* No matter which model a library adopts, standards must be developed in advance and subject to periodic reviews. Standards should include turnaround time, types of services covered and not covered, the scope of patrons served, and memo formats and templates.
- *Open minds and embracing changes.* We also advocate that law library management keep an open mind when setting standards. Not only should legal research trends and the faculty’s emerging needs be taken into consideration at the beginning of the standards-setting process, but law library management should also periodically review its standards to embrace new trends as they arise.

Figure 3

Gap 2: Policy Gap



Gap 3: Delivery Gap

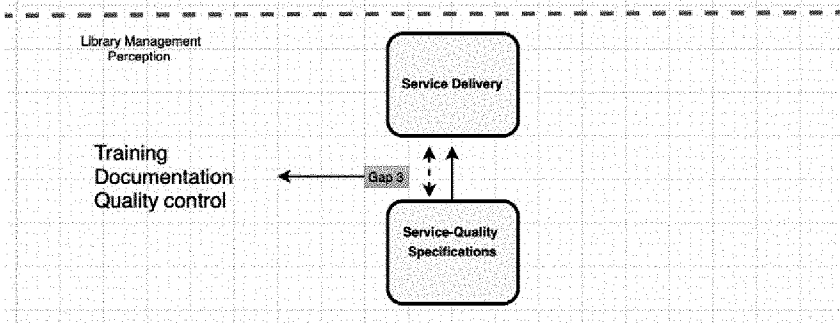
¶50 Gap 3 reflects a mismatch between the service delivery specifications set by law library management and the actual service provided and delivered by the performers. For example, suppose a library’s default rule when scanning a book chapter for a professor is to include the title and copyright pages for cite-checking

purposes. If the library staff person scanning a chapter forgets to include the front-matter pages or does not even know that this requirement exists, a gap occurs.

¶51 Two key measures can help close the gap here: training and quality control. First, effective training includes communication of library policies, reference interview skills, and research knowledge both in depth and in breadth. Working on an assumption that a professional librarian has already acquired the necessary skills and knowledge when taking on an assignment, the training may be easier and less time consuming for the libraries that adopt either the decentralized or the hybrid model. Unfortunately, the assumption is not always true, on at least two levels. First, librarians, especially inexperienced, entry-level librarians, may not have acquired the necessary skills and knowledge. As a result, it is imperative that whoever manages a library's research services program, regardless of model, fully appreciates each librarian's skill and knowledge level, and provides customized training plans. A librarian's other job responsibilities may provide training opportunities as well, which can be folded into the training plan. For example, teaching and collective development assignments help broaden and deepen librarians' research knowledge. Working at the reference desk helps librarians improve their reference interview skills, which is essential for ascertaining a faculty member's need in making a particular research request. Therefore, when devising training plans, a creative manager thinks outside the research services box and collaborates with library management to maximize staff members' learning opportunities.

¶52 It is also important to communicate with and set the same training expectations with staff involved in the delivery process, but outside the core faculty services team, as the delivery process is an indispensable part of the faculty research process. Sometimes, it requires cross-unit training and communications to make sure the performance meets library management's and faculty's expectations. Many libraries may unconsciously or intentionally set up a higher expectation for professional librarians than for other professional or paraprofessional staff. This might make sense in other domains of library functions, but it may actually harm the library and the quality of service in the long term when it comes to providing research services. First of all, many paraprofessionals have accumulated a lot of knowledge and experience through the years. Setting a lower expectation for them might actually discourage them from performing at a higher level. Second, without proper training about service standards, their knowledge and experience is wasted. Third, close training and regular communication with them about how important their work is for the entire service could motivate them to do their tasks more efficiently and with better results.

¶53 Second, quality control is an essential function in all library research service programs. In a research service program that uses a centralized model, the faculty services librarian should check the quality of each assignment performed by a temporary student research assistant or an inexperienced librarian. This type of quality control is time-consuming and requires high-level research skills and knowledge, as well as excellent judgment and the ability to provide constructive feedback. These should be the top skills to look for when recruiting and hiring a faculty services librarian for a centralized faculty services model. For decentralized or hybrid models, it is essential that librarians share the same quality expectations defined by library management. Best practices are communicated to everyone, and preferably in writing, on a regular basis.

Figure 4**Gap 3: Delivery and Communications Gap****Gap 4: Service-Quality Gap**

¶54 Gap 4 represents the difference between the faculty's expected service and the perceived service experienced. Gap 4 incorporates the previous three gaps. When library management designs a faculty services program, it must not only consider how to address Gaps 1–3, but also include a mechanism to periodically evaluate Gap 4 lapses. Doing so requires a more holistic view of the challenges of managing and providing faculty services in light of their unique characteristics and the constantly changing outside environment, such as emerging trends in legal research, new law school priorities and educational missions, and the nonstop disruptors of our services.

Concluding with the Big Picture

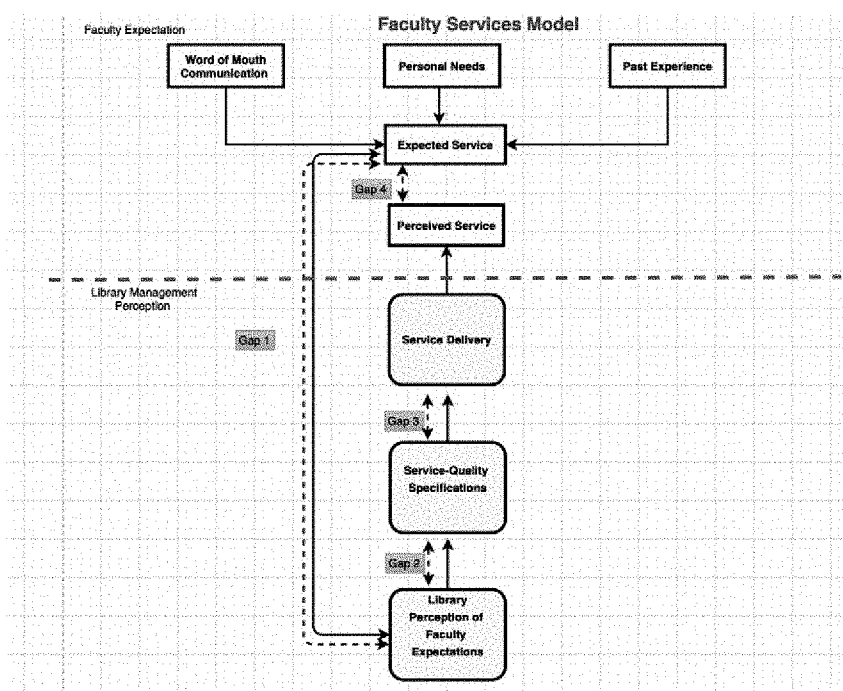
¶55 In looking ahead to solutions, we recommend a proactive and aggressive framework to improve faculty services and eliminate service gaps by using our profession's comparative advantage: that is, our core specialized knowledge, developed over the long history of our profession.

¶56 Major challenges to providing beyond-expectation faculty services come from the nature of the services themselves and the constantly changing needs of our clients. The first challenge is an internal one. A faculty services program possesses characteristics of both tangible products and intangible services. As a result, when measuring the quality of faculty services and trying to fill Gaps 1–3, library administration should consider the characteristics associated with both the services and products delivered.

¶57 Furthermore, providing quality faculty services requires the investment and effort of the reference staff, librarians, and paraprofessionals alike. It requires the knowledge and expertise built by the entire library staff over time. Accurate and user-friendly catalogs save research librarians' time significantly, whereas constantly delayed delivery services may ruin the quality of the research services, no matter how great the end product is. The product of faculty services is a team effort. Just as winning an NBA Championship takes seamless collaboration among

Figure 5

Gap 4: Service-Quality Gap



team members, both on- and off-court, providing quality faculty services takes the entire library staff's constant and thoughtful contributions.

¶58 The second challenge is an external one. Some of the faculty's changing needs derive from shifts in individual faculty members' research interests, but many result from changes to collective research interests determined by consumer needs in the larger legal marketplace. For example, driverless cars are already on the street, but without a framework to regulate them. Playing this kind of regulatory catch-up generates significant research interest among professors and clinicians, the primary clients for law library research services, thus driving a need to focus on developing legal frameworks in newly emerging service industries.⁶²

¶59 Whether we want to admit it, academic law libraries no longer occupy the ivory tower or safe harbor; these havens no longer exist. Disruptive technologies and services are everywhere. Our profession is not at its apex, when every researcher had to use the law library to find research materials. Even back then, it was not

62. For instances of robust discussion of the emerging legal issues in this area, see Mark Lemley & Michelle Lee, *Robotics and Law: Stanford Legal on Sirius XM*, YouTube (August 17, 2018), <https://www.youtube.com/watch?v=jnSKBwgfNo> [<https://perma.cc/9RRJ-Y72N>]; Robert L. Rabin, *Uber Self-Driving Cars, Liability, and Regulation*, STANFORD LAW SCHOOL (Mar. 20, 2018), <https://law.stanford.edu/2018/03/20/uber-self-driving-cars-liability-regulation/> [<https://perma.cc/3ELK-7XMT>]; Sarah J. Simkin, *Top 8 Legal Implications of Self-Driving Vehicle Technology*, PRACTICE POINTS (Feb. 21, 2018), <https://www.americanbar.org/groups/litigation/committees/business-torts-unfair-competition/practice/2018/top-8-legal-implications-of-self-driving-car-technology-litigation/> [<https://perma.cc/68VH-DHBP>].

library professionals who were considered indispensable for research; it was the libraries holding the books, journals, and archives considered necessary elements for research.

¶60 Disruptive innovation is not a new term,⁶³ but it permeates everything today. Many innovative ideas and products are gradually disrupting the core position of our profession as a legal information and legal research profession. For us, the best defense is a good offense. To continue to provide essential, high-quality research services, we must think and act proactively and aggressively. It is essential for each law library leadership team to consider building an institutional capacity to promote professional development and to expand all library staff's knowledge and expertise, both in depth and in breadth, as a top priority.

It Takes a Village

¶61 Eiglier et al. suggests three fundamental features of service that also apply to our faculty services: intangibility, direct organization–client relationship, and consumer participation in the production process.⁶⁴ Thus, when designing an effective faculty services program, the quality of service lies not just in the quality of research findings or deliverables. Of course, those are important parts of the quality matrix, but there are others. In other words, any communication with faculty is essential, and libraries cannot afford to have a weak link in any part of that communication. More specifically, when it comes to designing internal training, library administration must create training plans for everyone, not just the core team of reference librarians. Training research assistants, part-time workers, and paraprofessionals deserves at least equal attention. In addition, training with team members who do not often directly communicate with faculty members but do interact with library customers, including faculty members in less obvious ways, such as the technical services team, is just as important.

Focus on the Profession's Comparative Advantages

¶62 When designing a valuable and sustainable faculty services model, we need to focus on our profession's comparative advantages. Two main characteristics of our profession are specialized knowledge of legal research and information, and our legal reference service orientation.⁶⁵ In the era in which both the legal research and legal information landscapes are constantly changing and subject to disruptive technologies and innovative services,⁶⁶ it is paramount for law library leaders to

63. It is at least 23 years old. See Joseph L. Bower & Clayton M. Christensen, *Disruptive Technologies: Catching the Wave*, HARV. BUS. REV., Jan.–Feb. 1995, at 43.

64. PIERRE EIGLIER ET AL., *MARKETING CONSUMER SERVICES: NEW INSIGHTS* 77–115 (1977).

65. For more discussion on the defining features of law librarianship as a profession, see Alex “Xiaomeng” Zhang, *Discovering the Knowledge Monopoly of Law Librarianship under the DIKW Pyramid*, 108 LAW LIBR. J. 599, 2016 LAW LIBR. J. 29.

66. See, e.g., Tarun Khanna, *When Technology Gets Ahead of Society*, HARV. BUS. REV., July–Aug. 2018, <https://hbr.org/2018/07/when-technology-gets-ahead-of-society> [<https://perma.cc/F2NY-JN85>]; Roger Smith, *Legal Education, the Profession and Technology: A Publisher's Challenge*, LAW, TECH. & ACCESS TO JUSTICE (Mar. 24, 2017), <https://law-tech-a2j.org/training/the-challenge-of-technology-a-legal-publisher-speaks/> [<https://perma.cc/G7MY-SGE5>]; Zach Warren, *Legal Tech's Predictions for 2019 in Innovative Technologies*, LAW.COM (Dec. 20, 2018), <https://www.law.com/legaltechnews/2018/12/20/legal-techs-predictions-for-2019-in-innovative-technologies/> [<https://perma.cc/NC32-QYZS>].

design a service framework driven by these innovative changes. For example, it is clear that big data and data analytics have arrived and have started to visit a significant impact on our profession. When designing a faculty services program, then, we must consider how to develop and train librarians with the basic skills to assist faculty research in emerging fields. We need to take advantage of the data already found in our libraries related to faculty research interests and research information behavior and use it to narrow the gaps.