Concluding Observations and Resources

he previous chapters provide a descriptive account of the state of the library technology industry based on documented events and on trends revealed in historical data. This final section builds on these objective events and trends and offers some possible scenarios that may play out in the future. These forecasts must be taken with a large dose of skepticism. This discussion is meant to reinforce the reality that the industry remains in motion and that libraries must be vigilant regarding many possible outcomes.

Ongoing Movement among Current Players

EBSCO Information Services is a mature family-owned business that will endure indefinitely. The company has a pattern of regularly making new business acquisitions or partnerships. This trend will continue. Possible acquisition targets are varied. Will EBSCO eventually acquire an ILS vendor? It has previously avoided such a tack and now has embarked a strategy in the library services platform arena based on FOLIO and other open source initiatives. Recent partnerships reflect a growing interest in open science, opening the possibility of expanded business interests in the scholarly communications tools and analytics sector. Although EBSCO may continue to make some new acquisitions of content products, general activity in this area has slowed, with even Elsevier focusing on analytics and workflows for new business acquisitions.

ProQuest likewise will be a permanent fixture of the industry. Its current ownership status—including both family ownership and leveraged private equity investment—may change. The long-term maturity of the company may come through becoming a publicly traded company, though such a possibility is highly speculative. ProQuest will likely continue to make business acquisitions, though future possibilities hinge on the outcome of the FTC review of its acquisition

of Innovative Interfaces. Should the FTC require any modification of that acquisition, it seems less likely that ProQuest would make additional investments in other ILS companies.

SirsiDynix will likely see a change in ownership in the next few years. While the length of investment periods varies among private equity firms, these ownership arrangements have limited duration. SirsiDynix has been owned by ICV since December 2014. This term of just over five years marks the typical time in which a private equity firm begins to consider its exit options. ICV Partners acquired SirsiDynix through its ICV III fund. Out of the eight portfolio companies involved with this fund, ICV has concluded only one investment to date. This suggests that ICV keeps its portfolio companies for a relatively lengthy term of investment and that it could retain SirsiDynix for a few more years. Companies acquired via this fund in 2013 remain in ICV's current portfolio. Possible arrangements when ICV exits this investment would include making follow-on investments or selling the company to interested investors or strategic acquirers.

The Library Corporation remains as the last founder-owned and -managed company in the industry. Although there has been no public messaging of an interest in selling the company, all the other long-standing founder-owned ILS companies have eventually sold to investors or strategic acquirers. VTLS, founded in 1974 by Vinod Chachra, was sold to Innovative in 2014; Innovative Interfaces, founded by Jerry Kline and Steve Silberstein in 1978, was sold to Huntsman Gay Global Capital and JMI Equity in 2013; Sirsi Corporation, founded by Jim Young, Jacky Young, and Mike Murdock in 1979, sold majority interest in the company to CEA Capital Partners in 1999.

General Product Trends

We are currently in a period where both legacy products

and new generation products are active. The legacy products will eventually wind down to extinction, representing a contraction in the number of active products. Specifically in the academic library sector, the number of libraries relying on Aleph, Voyager, Sierra, Horizon, and Symphony will decline as implementations of Alma, WorldShare Management Services, and FOLIO increase. Some of these traditional ILS products may endure longer based on the loyalty of libraries to the associated vendors. Trends for adoption rates of Koha in this sector are less clear.

We can likewise anticipate some contraction in systems among public libraries. The overall product distribution will narrow from the current fragmented state, though what systems might prevail in the longer term is less clear. Product trajectories among public libraries differ from those in the academic sphere. Beginning in about 2011, there was a widespread trend toward the adoption of library services platforms by academic libraries. The public library sphere lacks an obvious new product direction. Traditional ILS products continue to prevail. OCLC positions Wise as a new type of product, but it is early yet to predict whether it will gain widespread momentum. Axiell Quria has generated interest in Europe, though it lacks any momentum in the US even though Demco Software has signed on as its US distributor.

The two main open source integrated library systems, Koha and Evergreen, have seen consistent trends of moderate adoption that are not likely to be interrupted. A set of well-regarded companies provide support services enabling the use of these products by libraries without in-house technical expertise. FOLIO. the new open source library services platform, seems well positioned to become established as a competitor to the existing proprietary products. EBSCO Information Services, ByWater Solutions, and Index Data have each entered the fray of commercial support services for FOLIO.

The subsector of companies offering open source support services embodies many of the characteristics of the fragmented ILS sector in its earlier phase. Several companies are competing within a limited economy offering similar services. Given this challenging business environment, it would not be surprising to see formal or informal business partnerships in the future. The dynamics of this subsector differ from those in the proprietary software field due to wellestablished relationships of cooperative competition.

The Future of the Industry

There is little possibility that the path toward consolidation of the library technology industry has arrived at its destination. Space remains for future busines transactions. Changes in ownership arrangements of some of the companies are inevitable. We can expect at least some of these transactions to result in deeper industry consolidation.

The library technology sector faces a period of unprecedented challenges. The COVID-19 pandemic crisis has brought enormous disruption to libraries, and many will face devastating budget reductions in the short term from which they are not likely to recover quickly. Companies reliant on libraries for their ongoing revenues will face their own hardships. While revenue associated with existing contracts may be protected, it seems likely that the next round of sales of products and services will be bleak. Our market volume analysis reflected a downward trend for new system procurements already in place before the crisis. Further slowing of new sales opportunities will be exceptionally painful. This anticipated harsh business climate may accelerate the pace of future business transactions as weakened companies seek new, more sustainable outcomes.

Looking beyond current crisis conditions, the library technology industry seems likely to continue its movement toward a mature set of businesses, less dependent on temporary investment arrangements. We can expect some of the midsize companies under private equity investment or private ownership to become acquisitions targets of large-scale businesses within, or adjacent to, the library business environment. So far, the businesses making strategic acquisitions of library technology companies have been comfortably within the sphere of those already involved in related products and services. Future transactions may venture further afield. Businesses in the scholarly publishing sector come to mind. Given precedents such as Sage's acquisitions of Talis and Lean Library and the increasing involvement of Elsevier in workflow and analytics, it would not be unreasonable to suggest interest from this adjacent business sector. Another sector to watch for possible involvement in library technology companies might include educational technology businesses, especially those offering learning management systems.

Libraries can benefit when their technologies are produced by organizations able to set business strategies not bound by short-term financial goals. It is difficult to achieve substantial progress in product development when maximum profitability must be achieved within the midterm horizon of typical private equity investments. The multiple rounds of private equity ownership of Ex Libris, through which it produced multiple market-leading products, serve as the counterexample. But in very broad strokes, when small or midsize companies consolidate into enduring businesses such as EBSCO Information Services, Pro-Quest, Follett, OCLC, or Constellation Software, they can shift away from a constant mode of positioning themselves for eventual sale and work toward more

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sustainable long-term product trajectories.

Acquisition by one of these mature companies does not guarantee success. Personnel reductions, rigorous financial targets, and other aspects of business integration are the brutal reality of business acquisition. Yet the forced discipline of a new parent company, efficiencies offered by new technical and business infrastructure, and funding opportunities for development projects can help drive positive outcomes.

Consolidation has not turned out to be the death knell of the technology industry that many feared. The quantity of choices has indeed narrowed, but competition remains vigorous. Our analysis of the quantity of vendors and products active each year reveals more competition today than in past times. Especially in the academic library arena, meaningful differences can be seen among the systems options available today compared to the less differentiated products of the previous era. While future events cannot be predicted with certainty, we can reasonably expect further consolidation. Time will tell whether an ever more consolidated environment will yield strengthened technology systems or if it will constrain innovation.

Related Resources

This issue of Library Technology Reports draws heavily from the author's previous contributions to Smart Libraries Newsletter, also published by ALA. The list below also includes two articles that appeared in Computers in Libraries. Each of these articles documents key events as they happened. This report provides a broader perspective and demonstrates how these events have contributed to the broad evolution of the industry characterized by deep consolidation.

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