

PRESS ARTICLE

One OEM is Providing Products That Will Keep Print Vital and Valued

By

**Harvey R. Levenson, Ph. D.
Professor Emeritus, Cal Poly
805-801-6025
hrlevenson@thegrid.net**

SAN LUIS OBISPO, CALIFORNIA, October 17, 2019 – As a longtime professor, researcher, and graphic communication industry professional, it has been my role and responsibility to advocate for technology, applications, and processes that bring to life the value of print.

Those who understand learning and communication understand that print is the most detailed, pervasive, meaningful, and informative form of mass communication, and has been since circa 1456, when Gutenberg invented the process of duplicating movable type. Yet, in the 21st century, many prefer to receive information in video clips or sound bites. Hence, I researched: What would the appeal be for print media if print (ink on paper) provided all three options—reading, viewing videos, and listening—and if such an option were available?

My explorations led me to Ricoh USA, Inc. and Ricoh Company Ltd. of Japan, a major Original Equipment Manufacturer (OEM) that empowers digital workplaces and enables businesses to elevate expectations with both print and digital communication services by keeping print in demand, helping prepare people to enter the printing industry, and improving the knowledge of those already in the industry. These communication products are Ricoh's Digital Literacy Curriculum and its RICOH Clickable Paper™ application.

CASE STUDIES

To determine if my hypothesis that Ricoh's Digital Literacy Curriculum and its Clickable Paper are viewed positively among users of print is accurate, I conducted three case studies.

It is important to understand that these case studies are not sponsored or endorsed by Ricoh, but represent independent, generic research to explore an OEM's introduction of communication products to support its hardware and software.

As an advocate of technology that advances the value of print media, I explored what OEMs are doing in addition to producing and marketing tangible products such as printing presses and related hardware and software. While I am not suggesting that other OEMs do not have communication products, Ricoh has been conspicuously involved in producing and marketing such support technology for many years. Hence, these case studies focus only on Ricoh and the added customer value the company brings through communication offerings.

The three case studies cover:

- 1) How a major Original Equipment Manufacturer (OEM) has moved into providing communication products.
- 2) Ricoh’s Digital Literacy Curriculum to help educate and train the graphic communication industry’s workforce for 21st century jobs.
- 3) How Ricoh’s Clickable Paper expands the value of printed products for all industries through an application that converts printing into interactive multimedia.

All three case studies are provided as free downloads via PDF links at the end of this review. A summary of each case study follows.

CASE STUDY 1

How a major Original Equipment Manufacturer (OEM) has moved into providing communication products—Digital Literacy Curriculum and RICOH Clickable Paper.

This case study, previously reported as a standalone study, describes the history of how Ricoh has developed its Digital Literacy Curriculum and Clickable Paper communication products.

In most cases, OEMs provide equipment installations and technical support as their main services to customers. However, few combine communication strategies to maximize the effectiveness of their hardware and software in meeting the needs of their customers and the greater printing industry. Ricoh does it through “intellectual products” to meet the communication needs of graphic communication companies and their customers in the 21st Century.

Ricoh USA and Ricoh Company Ltd. of Japan developed a three-pronged approach available to its customers and to the printing industry: its digital printing hardware and software; a Digital Literacy Curriculum for education and training; and its interactive Clickable Paper, a technology to enhance the communication effectiveness of printed products by transforming them into a gateway for interactive, multimedia experiences.

The objectives of the Digital Literacy Curriculum are to provide schools, companies, and other organizations with ready-to-implement digital communication education and training curricula. It enables hands-on learning for students, young and adult learners, with the skills necessary for careers in graphic communication technology.

Ricoh’s Clickable Paper offers its visual search application that identifies and provides access to one or multiple “hotspots” per page and multiple rich media results per “hotspot” for content delivery. Hotspots are authored and assigned by the content creator. “Clicking” a hotspot allows accessing videos, websites, sound tracks, and social media, as well as interactive “chat” opportunities with other readers. Realizing that different people learn in different ways, RICOH Clickable Paper supports those that learn best by reading, by hearing, by videos, or by a combination of such stimuli.

Additionally, this case study describes the first multimedia and interactive printed book using Ricoh’s Clickable Paper app.



CASE STUDY 2

How RICOH Clickable Paper expands the value of printed products for all industries through an application that converts printing into interactive multimedia. This case focuses on the Long-Term Care industry.

The second case study focuses on how RICOH Clickable Paper enhances communication in the Long Term Care Ombudsman (LTCO) community. Ricoh’s interactive app assists ombudsmen, facility residents, and families of residents to be effective advocates using print, video, and audio for providing information, exchanging information, answering questions, and providing training.

Three research methods were used in this case study: Descriptive Research, Survey Research, and Case Study. Respondents who tried the app or observed demonstrations answered multiple-choice (quantitative) questions and had the opportunity to provide comments (qualitative). The results showed that of four categories of responses, more than two-thirds (67) of 100 responses gave the Clickable Paper technology and app the highest rating. Approximately one-third (30) recorded the second highest rating, and only two responses fell into the third rating. No responses fell within the fourth or lowest category. From the qualitative responses, it was clear that after one or two uses of the app, the process became intuitive. The overall sense was that, starting with a printed document, being able to navigate, store, and move information electronically is helpful because it centralizes access in a portable, clickable page. Clickable Paper was considered useful when in the field working with long-term care residents because it provides easy access to key information, and encourages information exchange. Video training made intuitively accessible from a printed document was considered an important advantage.

It was concluded that there are few efficient, user-friendly efforts to make critical information available to ombudsmen and long-term care facility residents and their families. Clickable Paper overcomes this through a multimedia experience directly from printed documents. The outcomes of this case study, and the potentials of RICOH Clickable Paper supporting the humanistic values of the LTCO organization, were considered highly positive. Three printed documents using the Clickable Paper app were produced as examples and are downloadable as APPENDICES B, C, and D.



CASE STUDY 3

This case focuses on Clickable Paper for the music industry using the classical Japanese *shakuhachi* flute as an example.

The third case study focuses on how Clickable Paper enhances learning about and playing music using the classical Japanese *shakuhachi* flute as an example. It is also a tribute to Ricoh USA and Ricoh Company Ltd. of Japan for the rich Japanese heritage and culture that Ricoh represents.

Ricoh’s Clickable Paper app assists in converting traditionally printed (ink on paper) documents into interactive communication media that access video and audio for providing information, for exchanging information, for answering questions, and for providing training and instruction. This

application has the potential across the entire music industry in the way it promotes and demonstrates music, musical instruments, and musicians.

Three research methods were also used in this case study: Descriptive Research, Survey Research, and Case Study. Respondents who tried the app also answered multiple-choice (quantitative) questions and had the opportunity to provide comments (qualitative). The results showed that of four categories of responses, nearly three quarters (167) of the 240 responses (24 respondents answering 10 questions each. A 25th respondent provided only comments.) gave the Clickable Paper technology and app the highest rating. Approximately one-fourth (57) gave the technology and app the second highest rating, and only two responses fell into the third rating. No responses were recorded in the fourth or lowest category. In sum, more than 97 percent of the quantitative responses rated Ricoh’s Clickable Paper technology in the two highest categories.

It is evident from the quantitative and qualitative results that respondents were introduced to a new interactive multimedia experience. From teaching to learning, to observing some of the world’s leading *shakuhachi* grandmasters, teachers, players, and flute makers demonstrate their skill. Nearly all respondents saw this as a highly positive capability of Ricoh’s Clickable Paper. The vast majority expressed that the advantages of the technology are applicable to all of the music industry for a practical, educational, entertainment experience, and they represent a “cultural bridge” to the world of music and to meeting others of like interests. A book, *The Sound of Bamboo*, was published to demonstrate the Clickable Paper application.



The PDF links to each of these studies are:

CASE STUDY 1

<https://hrlsite.files.wordpress.com/2019/09/ricoh-communication-case-study-final-2.pdf>

CASE STUDY 2

<https://hrlsite.files.wordpress.com/2019/10/ltco-clickable-paper-case-study-edited-approved-10-14-19.pdf>

APPENDIX A

<https://hrlsite.files.wordpress.com/2019/09/appendix-a-clickable-paper-evaluation-questions.pdf>

APPENDIX B

<https://hrlsite.files.wordpress.com/2019/09/appendix-b-resident-rights-1.pdf>

APPENDIX C

<https://hrlsite.files.wordpress.com/2019/09/appendix-c-ta-guide.pdf>

APPENDIX D

<https://hrlsite.files.wordpress.com/2019/09/appendix-d-what-you-must-know.pdf>

CASE STUDY 3

https://hrlsite.files.wordpress.com/2019/10/sob-case_study-edited-and-approved-10-14-19-1.pdf



For additional information about these case studies, contact:

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