TRENDS

CHANGING INDUSTRIES/CHANGING CONSORTIA: I3A (A CASE STUDY)

Andrew Updegrove

In the last two issues we examined several evolutionary trends in the standard setting world, each of which has manifested itself in the comparatively recent past. In this article, we take a longer view, and focus on a consortium performing important work involving technologies developed as recently as yesterday, and as long ago as the earliest days of print photography

Context: The accepted wisdom is that consortia were created as a short cut to standard setting, in reaction to what was seen as the failure of the more established, officially recognized standards development organizations (SDOs) to adapt to the pace of modern technological innovation and adoption. In light of the frequency of this explanation for the proliferation of consortia, it's easy to forget that there are other important differences between these two types of entities which contribute to the popularity of the consortium model.

Stated most broadly, a second major differentiator between consortia and the SDOs is that while the latter tend to stick to their standard setting knitting, those who create a consortium are free to define broader or different goals, and to conduct their operations accordingly. Additional activities most often involve the promotion of standardized technologies, and indeed there are many consortia that have been formed for the sole purpose of promoting a given standard (or related group of standards) that have been created by the SDO. Currently, several such organizations exist in the wireless arena alone (see http://www.consortiuminfo.org/links/wireless/).

In this case, the SDO and the consortium act synergistically for the benefit of the members they hold in common, with the SDO setting the standard, and the consortium conditioning the market through promotional and educational activities, training, trade show participation and the like. Of course, each member must join (and economically support) two organizations instead of one in order to achieve a single business result.

In other cases, the consortium seeks to perform all of the roles under its own virtual roof, defining and developing standards, and promoting them as well. In other cases, a consortium may be formed to simply promote a new way of doing business. For example, the ASP Industry Consortium, which grew to over 600 members in a matter of months, focused exclusively on promotion and education, creating white papers, best practice studies, and awards programs, among other activities.

Indeed, the proliferation of consortia in the modern world has resulted in part from the convergence of the worlds of trade associations and SDOs. Trade associations have existed for over 100 years to serve the general needs of an industry, providing a place for participants to share knowledge, plan promotional activities, share lobbying expenses, and otherwise further their collective interest. When technology sectors began to proliferate, however, the means to reach the same ends were somewhat different. In this new reality, agreement on standards became part of the necessary strategy to enable the growth of these new sectors, and the furtherance of the collective good.

The review which follows traces some of the steps in the creation and eventual merger of two organizations. Each of was formed for the same high level purpose, but at two very different times, using very different methods to achieve similar ends within the industries that collectively support the capture, preservation, viewing and sharing of pictures. The path of their disparate evolution and eventual combination illustrates the manner in which solutions to problems must organically adapt to meet changing circumstances, and the way in which the flexible consortium model serves to meet this need.

The Old. In 1946, a group of companies came together to form a traditional trade association, intended to promote "the widespread use and enjoyment of photography". The state of the art back then, and for decades thereafter, was print photography using chemical developing agents, and the name adopted for the new organization, appropriately, was the *National Association of Photographic Manufacturers*. The meetings of the organization were held in places like Las Vegas, with business being conducted over golf as well as in meeting rooms, and cigar smoke was the signature aroma accompanying dinner and drinks. As if to personify the Sinclair Lewis, heartland of America personality of this traditional trade association, its first Managing Director was named William C. Babbit.

But by the late 1990's, it was becoming apparent to the film-based image industry that a new technology - digital photography - had the potential to make serious inroads into the paper print-based world of photography, and some member companies felt that the times demanded a change. In an effort to address the challenges (and opportunities) presented by the new technology, the organization changed its name in July of 1997 to the *Photographic and Imaging Manufacturers Association (PIMA)*. But the organization did not abandon its roots or activities in the world of traditional photographic processes.

In 1997, digital photography was still very much over the horizon as a consumer product reality, and many impediments still stood between the perceived potential for electronic images and broad adoption in the marketplace. Not least among those impediments was the need to create the comprehensive suite of standards that would enable manufacturers of diverse types of equipment - from cameras to printers to scanners - to create a rich variety of products that could be used together. Just as significantly, additional standards were needed to permit digital photographers to take advantage of the Internet to transmit their photos to those half a world away, thus providing additional incentives to opt for digital equipment over traditional gear.

By the late 1990s, of course, this type of drill had become a recognized and familiar process, and the elements necessary to enable not only the rapid launch of interoperable products, but the swift generation of a broad market desire for those products, was well known. That mixture of fast technical process, conjoined with integrated promotional efforts by heavily involved and motivated players, clearly indicated the need for an organization equipped to perform both tasks. In other words, a consortium.

The New. Thus it was that only two months after the new PIMA name was announced, a group of leading camera, hardware, silicon and software companies (including the Eastman Kodak Company, Adobe, Intel and IBM), announced the formation of the Digital Imaging Group at the September Seybold Fair. The goal of the new organization was "to grow the market for digital imaging through collaborative 'infrastructure development' and market education". Alexis Gerard, a recognized expert in the emerging digital technology area, soon became its first President and chief spokesperson.

In the years that followed, both PIMA and DIG adapted to the rapidly changing realities of the imaging marketplace. DIG, which had been formed on a traditional multi-class model, adopted a novel "initiative" process, which permitted subgroups of members to propose projects which could either be undertaken by the organization as a whole, or funded by a subset of interested members who would take part in the work at hand. PIMA, for its part, found that its members' needs increasingly were tilting towards the digital world, but that the need for print photography programming continued as well.

The Common Road Forward. Not surprisingly, both the activities as well as the membership of the two organizations increasingly overlapped, as more and more traditional vendors began to offer, or consider offering, digital goods and services. By 2002, it had become clear that the needs of the members of both PIMA and DIG would benefit from the existence of a single organization that could provide a unitary voice for the entire industry.

The result was the combination of the old and the new organization into a new venture called *i3a* - the **International Imaging Industry Association**. Its new mission: "To accelerate imaging market growth by providing an open forum for streamlined development of global imaging infrastructure standards, promoting technology adoption, and serving as the industry voice on issues of common interest to members." Notwithstanding the new high-level goal, a number of traditional programs would continue. Today, i3a supports programs that not only address cutting edge digital technologies, but projects that serve processes as traditional as silver-halide photography and the recycling of photographic materials.

The new organization took advantage of the resources of both its predecessors, and the best aspects of each. Lisa Walker, the President of DIG, became the President of both organizations following a transitional period sharing management with the historical Executive Director of PIMA (now no longer with the organization). The combined organization also maintains a bi-coastal presence, with Walker on the West Coast, and the former PIMA office in New York serving administrative and other infrastructural services. The composition of Board of Directors of the combined organization demonstrates that it is a meeting ground of all interest groups, rather than being dominated solely by large manufacturers. Companies represented include many nationalities, and diverse business interests including cameras, printers, film, software and content (see i3a At a Glance, at the end of this article).

The DIG initiative process was also retained, as were the relevant committees and standards processes of each organization. As noted by Walker, " The Initiative process was born out of the need from the digital side of the house to utilize a more market driven standardization approach. The emerging digital market needed infrastructure support quickly, and could not afford the 5 year cycles typical of formal standardization methods." Moreover, allowing subsets of interested members to launch and support initiatives of vital interest to their aspect of the evolving imaging market helped avoid competition for resources and the need to pursue only those processes that were of more or less equal importance to all members.

Flexibility in the types of topics and programs being created was also better suited to a young, fast changing market, where some members saw the need to address some goals before others. The initiative process currently supports not only evolutionary, but revolutionary projects as well. In the former category, Walker points to the IT 10 Electronic Still Picture Imaging committee, which specifies storage media, device interfaces and image formats, and has developed the Picture Transfer Protocol, a transport and platform independent standard. In the latter category, i3a has launched the MPV initiative, which will enable the playback and exchange of collections of photo-video content.

But i3a also continues to administer and fully supports formal standards programs as well - an activity arising from the PIMA organization. When time is less of an issue and gaining global or governmental acceptance is of greater concern, projects can be channeled through these processes instead of the less formal initiative process. The organization serves as the Secretariat for several ISO processes, and is an ANSI-Accredited Standards Development Organization as well. i3a also serves as the principal industry interface with a number of US government agencies.

Sometimes, even more flexibility has been needed, and i3a has been creative in adapting appropriately. In 2002, for example, a group of members saw the need to launch an initiative to make it easier to attract consumers to digital photography, and launched the Common Picture Exchange Environment (CPXe) initiative. The goal of this initiative is to create interoperability standards and an open network environment which would enable consumers to obtain photographic prints and other innovative digital photo services from participating providers "using any digital camera, from any location, via any online photo site, from any retail printing service or printer" (www.pictureservices.org). In order to achieve this end, both a promotional as well as a technical effort would be needed, with the latter requiring a significant expenditure of funds to meet the business plan which several members proposed.

As a result, it was decided that i3a would conduct the specification development aspect of the initiative, while a group of interested members (Agfa-Gevaert AG, Eastman Kodak, Hewlett-Packard and Silverwire) would launch a new, affiliated not-for-profit membership organization called Picture Services Network, Inc. PSN's goal is to create an on-line, UDDI-based registry of vendors utilizing the CPXe specification to provide services to those who wish to create, use, and share digital images over the Internet. The organization has been incorporated and funded, and hopes to go on-line in June of 2003.

The CPXe Interoperability Specifications v. 1.0 and the formation of PSN were publicly announced in a press release by i3a this morning (February 27, 2003)]

The Future. The years ahead will present unique challenges to the businesses of the members of DIG. The tools for creating print-based images and the services for developing them continue to generate billions of dollars of revenues for those involved, from camera and film manufacturers to the retail outlets that provide developing services. Indeed, for retailers such as Walgreens, print developing represents a very desirable, high margin business that would be sorely missed if electronic storage of images were to totally replace print photographs, with no remaining role for a service provider in between.

In that regard, the current crisis in the music business, where sales of pre-recorded CDs plummeted by some 62 million units in 2002, provides a sobering reference point. If today's emerging consumers are conditioned to rip off music files via the Internet, burn them on their computers at home, and listen to them in MP3 form on their iPods, how long will it be before they prefer to transmit instant images via their camera enabled, digital phones?

While the industry can scarcely hope to stem the tide of consumer preferences, it can hope to understand those preferences better through sharing knowledge, and influence their direction through the generation of enabling standards and coordinated promotion. The benefit to those involved in the industry is clearly that those who can best anticipate the future are most equipped to react appropriately, with attendant avoidance of risk and realization of potential gain. By maintaining an organization such as DIG and working to evolve it to meet the fast pace of change in the imaging world, all of those who have a stake in the future of that industry will be more likely to succeed.

Conclusions. The flexibility which the consortium concept incorporates provides the ability to take a "holistic" approach to a commonly-defined business need. Those who identify a need may specify the approach needed to meet that need, and may evolve that approach in real time to address rapidly changing market realities, without being constrained by pre-defined expectations or rigid rules of conduct. i3a represents an example of how an industry which had lived within a particular technology for many years was able to adapt productively and quickly. A crucial enabler of that rapid response was the utilization of an organizational structure which was easily created, adapted, and even combined, rapidly and without complicating constraints.

Comments? updegrove@consortiuminfo.org

i3a at a Glance:

Date of formation	1946	
Current members	50	
Number of classes of membership	Three: Strategic, Participating, Associate	
Number of countries represented by current members	c. 10	
Currently Hosted Iniatives	CPXe	Common Picture eXchange environment
	MPV	MultiPhoto Video (joint effort with OSTA)
	WITI	Wireless Image Transmission Initiative
	DIG35	Metadata standards
	DIG2000	File format technologies
	IIP	Internet Imaging Protocol
	IT1	Film Paper and Plates

	IT2	Image Evaluation
	IT4	Photochemicals and Processing
	IT7	Instructional Audiovisual Systems
	IT9	Physical Properties and Permanence of Imaging Materials
	IT10	Electronic Still Picture Imaging
	IT13	Equipment Communication, Networks and Protocols for Photoprocessing Equipment
Number of issued standards or specifications	Administers over 250 ANSI and 300 ISO standards	
Other Significant Relationships	Primary imaging industry interface with: US Environmental Protection Agency (Silver Advocacy) US Occupational Safety & Health Administration Transportation Security Administration (Airport X-ray warning program) US Department of Commerce (Industry Statistics)	
Number of Supported Websites	Two: www.i3a.org (i3a site) www.pictureservices.org (PSN site)	
Member Companies Represented on the Board	Agfa-Gevaert N.V. Digimarc Corp. Eastman Kodak Co. Felix Schoeller Jr., GmbH Ferrania Imaging Technologies Fuji Photo Film Gelita Hewlett-Packard Konica Graphic Imaging Riccardo Genta, Ferrania Imaging Technologies	
Number of Staff	6	
President	Lisa Walker	
Director of Standards and Technology	Jim Peyton	
European Coordinator	Jean Barda	