From Punched Cards to Apps & iPads – 55 years of P-D-R

Foreword

How many associations can boast more than 50 years of intense knowledge sharing? How many have been able to sustain support for the aims of their association and successfully assist their member companies in the development of information services improving coverage, distribution and ensuring optimum use of the chemical, biomedical and pharmaceutical information for common benefit? The Pharma Documentation Ring can do so proudly, and for 55 years the P-D-R has been a leading example of what sector collaboration in the information field can achieve.

This collaboration is carried by the vision of the P-D-R which has four common aims it strives to fulfill:

(Figure 1)
20 companies, 4 common aims

Supported by a unique personal relationship between members and the strong commitment to contributing and joining resources for a common purpose, P-D-R members have benefited greatly over the years.

Relationships with stakeholders in the information world have also developed significantly and have been a very strong driver especially over the past few decades. The outcome of this relationship and interaction with stakeholders has been of mutual benefit not only to P-D-R member companies, but also to other information groups within the wider Pharma industry.

(Figure 2)

What P-D-R means to it's members

An Historical Overview

Collaboration and networking, a primary focus of P-D-R, isn't an invention of Web 2.0. It was in 1958, the same year that Mattel introduced Barbie, NASA was founded and launched the first satellite, and the Atomium was built for the Expo'58 in Brussels, that some information specialists from five German pharmaceutical companies had the idea to join forces and make important scientific literature retrievable. Before this time each company was reading more or less the same content to support their R&D staff. Due to the rapid growth in the number of publications and patents during the mid-fifties it was decided to rationalize these activities and efforts[i]. The P-D-R (short for "Pharma-Dokumentationsring") was founded.

The aim of the P-D-R at this time was to select and index relevant documents from the literature, to write abstracts based on agreed rules, and to distribute copies of the corresponding punched cards and microfilms to all cooperating members[ii]. Due to the limited space on a punched card, the P-D-R companies developed fragment codes for chemical structures and biomedical terms allowing them to properly index all relevant aspects of the publications. The Ringcode was born and survived for many decades even when the punched cards were replaced by more sophisticated techniques.

Some years later in 1964, the biomedical literature documentation was licensed to the British company Derwent Publications (today's Thomson Reuters) and it succeeded as Ringdoc (today's Derwent Drug File). About 10 years later the P-D-R's chemical reaction coding system was also transferred to Derwent Publications which then evolved as Chemical Reactions Documentation Services. Both services were developed further in cooperation with P-D-R companies. These two systems were literature based but patents in the pharmaceutical area have also been of great interest for these companies. During the 1970s, the P-D-R saw gradual growth, becoming more international, and continued to process patents using its Ringcode until 1978. In the 1980s a new focal point was found for the organization placing an emphasis on exchanging experience and intensively testing commercial systems and databases of interest to the R&D-based pharmaceutical industry. As a result there was a steady growth in membership[iii] with a peak in the late 1990s before the mergers in the pharmaceutical industry started.

Founding Member Companies

The founder member companies were Bayer, Ciba (now Novartis), Knoll (now Abbvie), Merck, and Thomae (now Boehringer Ingelheim). Today, the P-D-R has 20 member companies from Europe, the US, Japan, and Australia and is still a non-profit organization. Member companies should be research-based pharmaceutical organizations. There is no membership fee but members must commit to contribute proactively to the work of the P-D-R by actively participating in meetings, working groups and task forces, as well as acting as a coordinator of a P-D-R topic or as host for an AGM or a special meeting.

Figure 3

2013 Member Companies of the P-D-R
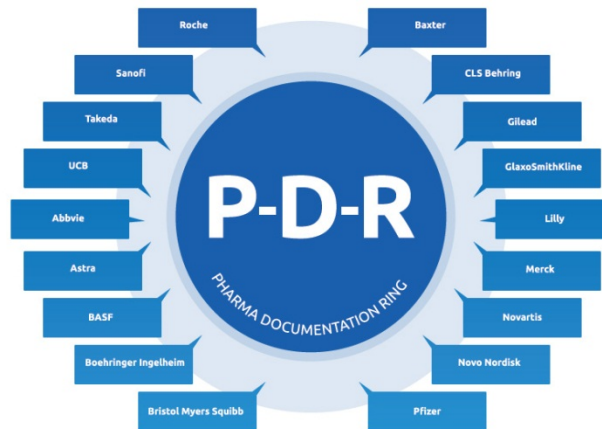
Whilst the original aims of the P-D-R remain the same, from a content point of view the P-D-R has adapted its focus to ensure that it remains relevant to the changing business expectations of an information/knowledge management function in today's global research-based pharmaceutical company where the landscape is dynamic. For information/knowledge management functions in the pharmaceutical industry it has never been more critical to deliver added value, lead by excellence and drive innovation.

How is the P-D-R organized?

The organs of the association are the Annual General Meeting which is attended by all member companies, the P-D-R Executive Board which usually has 4 members and is elected by the AGM for two years, and the Topic Group Teams which work continuously on their respective topics of interest.

The AGM is hosted on a rotating basis and is a highlight of the P-D-R calendar. Before the meeting so-called company reports are distributed via mail. Each member company writes in a common structure about their activities in the information sector during the last 12 months. During the AGM highlights are presented followed by a Q&A session. These reports have a long tradition and are seen as a useful tool that enables some benchmarking and the creation of new ideas for other companies. Another agenda item is the report from the topic teams which meet virtually throughout the year. The topic sessions focus on biomedical information, business

information, chemical information and patents, information and knowledge management, library affairs and copyright, innovative technologies & emerging trends, and the P-D-R website. Each year 1-2 topics are selected as strategic sessions. These sessions get more time on the agenda and can be supported by external speakers. Beside some internal P-D-R topics time is spent for ad-hoc discussions about varying hot topics.

Figure 4

The Information Technology Work Group in Action

Figure 5

The P-D-R Executive Board works all year round. It prepares and runs the AGM together with the host company, selects the strategic topics, allocates members to the topic groups, initiates special meetings, adapts the scope and guidelines to the changing needs, and is the first contact for providers, other information organizations, and potential new members.

The 2013 P-D-R Executive Board (Henning Nielsen, Andrew Clark, Joanna Woodward, Claudia Koerner and Matthias Stabb)

The topic teams are coordinated by one P-D-R representative. Each member company has at least one participant in one of the teams. The teams exchange their experiences around the

year and have regular virtual meetings with the P-D-R board. They initiate surveys and prepare their session for the AGM.

Current themes amongst the topic groups include:

Product literature databases and medical information, competitor information, knowledge management, how users interface with information, return on investment, internal and external data integration and changing methods for accessing information. New and emerging trends in both the industry and in technologies are a focus for all groups as the P-D-R looks to the future.

Annual General Meetings

A successful AGM is one that is described as 'topical', 'relevant', and 'fun' so when the agenda for an AGM is first discussed by the Board during a planning meeting in February, it aims to bring these components together, building on member feedback from the previous year's AGM. At a time when for many organisations, travel budgets are tight, a relevant agenda is critical to ensure the meeting is a good investment of time for attendees.

Themes for an agenda are varied and reflect changing trends in the industry, particular challenges that are being faced by information functions or in anticipation of where the association believe the information industry will go next.

Sessions are interactive including time for learning, sharing experiences, reflection, and networking. For some participants the AGM is the only time they get away from normal daily routines and the P-D-R Board aims to recognise this by ensuring a focused meeting free from work distractions. Some P-D-R members use the meeting as a time for professional development amongst the many other opportunities that the meeting might present.

As the P-D-R has evolved over the last 55 years, so have the themes for the AGM and the arrival of the digital age has presented numerous opportunities to deliver a varied agenda. Big data and the growing adoption of mobile technologies to access information are two examples where the P-D-R has put a greater emphasis in recent years.

During the 40th AGM of P-D-R 14 years ago, the focus was very much on printed materials and intranets (with only around 350 electronic journals available). Today the focus reflects data feeds, electronic content, mobile devices, and 'added value'. However, there are management related topics that never become outdated, for example knowledge management and the demand for showing return on investment.

The 54th meeting of the PDR was held in Königswinter, Germany, from 18th – 21st September 2012 and was a typically fun and topical meeting. Highlights included case studies on successful marketing campaigns which included interactive video cards advertising core information services, to eye catching visuals and branded materials. Members could gather new ideas and learn what had worked well and what hadn't been so successful. There were also case studies as part of a lengthier strategic session on members' mobile strategies and achievements.

The Hot Topics session gave the group further opportunity to discuss mobile technologies along with other current issues including the complexities of content access, outsourcing strategies, doing more with less, and changing funding models.

During the three days each of the P-D-R's seven topic groups presented on developments made during the year. Presentations included:

- a comparison of drug pipeline data sources,
- a simulated interview that focused on crowd sourced business models,
- return on investment and how this can be demonstrated,
- an overview on how clinical trials resources are used and positioned within P-D-R member companies, and
- interfacing and faceted search portals with organised information that can be structured, searched, and accessed.

In conclusion within the reviews of information developments in each of the member companies, the recurring themes continue to be downsizing, alliances, collaborations and divestitures resulting in changes in staffing models and decreasing or flat budgets. There were also common themes around the migration to SharePoint2010 for library portals increasing their functionality

and the focus of training for customers to self-serve information services. Who knows what the theme will be of the AGM in another 15 years' time?

Special Meetings

Beside these three organizational parts of the P-D-R, there are tasks forces and special meetings on demand. The Special meetings started in the late 1990s and topics were around Intranets, e-Journals, the Future Integrated Information World, Linking, Copyright, Taxonomy, and Text Mining. Different to the AGMs, more people were invited to attend e.g. the experts from the member companies and vendors and suppliers who were active in these fields. These meetings are often the basis for some further work in smaller groups to create a better mutual understanding.

After the e-journal special meeting in 1998 a task force was established to work on a set of standard licensing terms for e-Journal. During the course of three years and an intense collaboration between P-D-R, the Association of Learned and Professional Society Publishers (ALPSP), and the International Association of Scientific, Technical and Medical Publishers (STM) the "STM/P-D-R sample licence for journals supplied in electronic form" was launched in 2000. Later revisions followed, and included the "Medical Information Clause". This model license made the e-journal negotiations easier for both sites, P-D-R companies and publishers, and took the special needs of research-based pharmaceutical companies into account. Several publications on this successful collaboration can be found on <http://www.p-d-r.com/content/publications/>

More recent examples were two special meetings around usage rights in the context of text mining in 2009 and 2011. In the first place it created a common understanding of usage and rights among users, here the pharmaceutical companies, the publishers, the intermediates, and the copyright agencies. All sites had the opportunity to meet their peers face-to-face and to discuss their open issues and to explain their respective background for wishes and requirements on one hand and for restrictions and limitations on the other hand. As a consequence a task force was established to work on the licensing issues. The recent result is the updating of the P-D-R sample licence to grant text and data-mining rights to use the content to which each of the P-D-R members subscribes. This will enable companies to negotiate rights

with publishers to use downloaded data in their internal systems with the confidence that they are seeking rights identical to others in the sector. The agreement was reached between P-D-R, the Association of Learned and Professional Society Publishers (ALPSP), and the International Association of Scientific, Technical and Medical Publishers (STM) on Sept 17th 2012 A press release can be found at www.p-d-r.com/content/press_releases/archive/listing.

P-D-R and the Future….

Is there a future for an association like the P-D-R? We strongly believe so. Information and innovation are directly linked, so information management is an indispensable asset for our companies if we shall continue to invent new drugs to improve the lives of patients.

But we live in a challenging world where the overwhelming availability of information carried by a constantly developing information technology scene transforms the classical library collection management into context driven information sourcing, access, and interfacing. "Keep me updated in my specific fields of interest," is the constant demand from users. Likewise the information scientist's traditional roles in information retrieval and dissemination are now transformed into information discovery, analysis, and consultancy with a whole new set of competencies needed. We are constantly moving in the forefront of information discovery trying to find new ways and tools to produce answers and insights from the immense pools of information available. So text and data mining, Big-Data, analytics are the new buzz words in the field. The constant demand for our services is carried by a demand for value adding, and information scientists that are embedded in projects and decision making processes delivering consolidated and curated input in a professional research and intelligence framework.

These challenges and changing roles also present great opportunities, and we have a much better chance to drive this in a continued collaboration and in partnership with the information industry and its different stakeholders.

The P-D-R, with its strong history of such collaboration and a unique environment of trust and sharing, has a great future in shaping the non-competitive space, where we can support each other and influence the information environment to understand our needs and challenges.

With initiatives like the "The Blueprint of an Ideal Corporate Information Center" which was published as an article in Nature Reviews Drug Discovery 2012 (June 1)
www.p-d-r.com/content/e7/e1419/BlueprintICIC_P-D-RHomepage2.pdf,
we try to address this future, and to define our roles and maintain the necessary support from our companies. We also strive to continue our collaboration with the information industry stakeholders and live up to our aim of providing a forum for the information industry serving the pharmaceutical sector.

If you represent a pharmaceutical company and would be interested in joining the P-D-R please contact one of the Executive board members. Further details about the Association can be found on the web at www.p-d-r.com.

The 2013 AGM will take place in Chicago, hosted by Abbvie, and in 2014 it will be back in Europe, hosted by Belgium based pharmaceutical company, UCB.

(End)

References:

i   A. Mullen, The Pharma Documentation Ring – its Development, Current Status and
         Outlook, Derwent Meeting, May 1992
ii   K. Specht, From Punch Cards to Internet; P-D-R 40th Anniversary, May 1998
iii   Y. Dubosc and A. Mullen, Overview of Activities of the PDT, DN&P 7(9), November 1994