

# Peter Wahlgren\*

## The Quest for Law. Legal Sources via IT

### 1 Introduction

The Quest for Law was a research project conducted at the Swedish Law and Informatics Research Institute between 1993-1997.<sup>1</sup> The results of the study have subsequently been utilised in numerous evaluations of commercial IT-products developed for the legal market,<sup>2</sup> and the theoretical models developed in the project are also a basis for practical assignments and teaching activities in the Master's Programme in Law and IT,<sup>3</sup> offered by the Law Faculty at Stockholm University.

The aim has been for this work to contribute to the identification of the future requirements of the legal domain, with regard to legal information systems and other services traditionally related to law libraries. The intention has also been to discuss strategies and appropriate features that may be developed in order to meet such requirements.

At a somewhat more detailed level, one objective of the study has been to identify and analyse factors of relevance for the evaluation of legal IT products and in the following sections these aspects of the study are summarised.

### 2 Evaluation of IT products for law

#### 2.1 Background

The initial aim was to present a model that could be used in order to evaluate IT-related products and services and, more precisely, to formulate some criteria for the evaluation of phenomena of this kind. This approach was motivated by the fact that in the legal domain the knowledge of this development is rare and not very well documented. At the same time, there is little doubt that in many cases it is necessary to make choices regarding future IT investments in order to survive as a lawyer or a legal organisation. In this respect the

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<sup>1</sup> The full documentation of the project is available in Peter Wahlgren, *The Quest for Law: Law Libraries and Legal Information Management of the Future*, Stockholm: Jure 1999.

<sup>2</sup> The evaluations have continuously been documented in *Juridisk Tidskrift*, one of the major Law Journals in Sweden. So far, some 20 products have been reviewed.

<sup>3</sup> <http://www.juridicum.su.se/iri/engindex.htm?studentinfo/master/master>.

potentialities with respect to rationalisation and quality enhancements are too important to be neglected. Consequently, the ability to evaluate various products and services is crucial.

With few exceptions, early studies of IT-based products for the legal domain have focused on technical aspects.<sup>4</sup> In Sweden, for instance, during the 1970s and 1980s several user surveys were completed, focusing on the first national legal information retrieval system, *Rättsdata*. These attempts were tentative and the questionnaires used in these studies basically reflected concrete technical issues, mingled with vague ideas about user friendliness. Simultaneously, an awareness of the need for legal standards was present. Any general considerations about such standards remained, however, inarticulate, and the relevant aspects to be investigated were by no means obvious. Technical aspects are, of course, still important, but as the development of IT continues, it is becoming more and more obvious that systematic evaluation must include a number of additional aspects. To accomplish this, several approaches are possible, and in this study a few of them were outlined. An attempt was also made to relate a number of such aspects to each other, in order to create a practical model for evaluation.

The starting point for this undertaking was the assumption that all legal information systems are to a large extent reflections of choices concerning i) information content, ii) technical aspects and iii) organisational arrangements (see figure 1 below).

## 2.2 *Information content*

In this respect the study was devoted to the requirements connected with legal information, as these may be understood from an analysis of legal work processes and legal work situations of various kinds. Legal information was viewed in this context from the point of view of methodology. That is to say, the ambition was not to make an inventory of emerging legal problems and accompanying requests for regulations. Nor was this an attempt to try to predict legal issues of a substantial nature that can be expected to attract interest in the future. Instead, the focus was set on how legal information as such is employed and utilised in legal work processes, as they can be described at various levels. In other words, the aim was to provide a general description of the requirements that may be related to legal information – whatever legal domain they appear in. In this undertaking various functions of legal information and their relationship to legal work situations were investigated, the assumption being that an analysis of this kind should be useful for the development of future strategies of law libraries and other institutions and persons concerned with the administration of legal information.

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<sup>4</sup> Jon Bing, *Legal Decisions and Computerized Systems*. In: P Seipel, *From Data Protection to Knowledge Machines*. Deventer: Kluwer Law and Taxation Publishers 1990 (Computer Law Series 5) at 224.

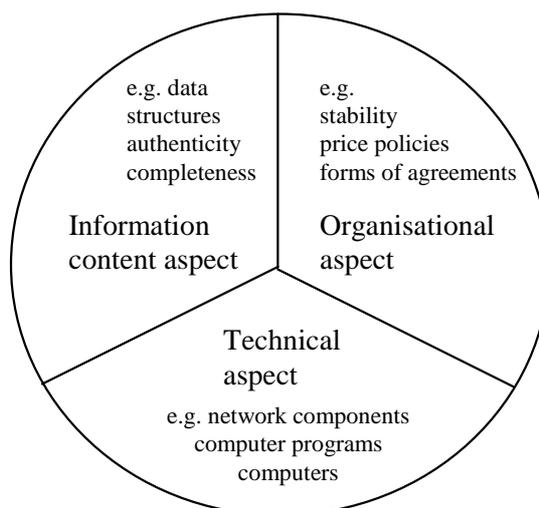


Figure 1: Basic components of legal IT applications and Legal IT systems

Thus, a somewhat more precise goal was that the study should enhance the understanding of the kind of legal products and services that may be useful to develop, and, furthermore, that the work should provide some indications of how legal information management resources ought to be allocated. In this undertaking three different levels at which various types of legal requirements can be defined were addressed – (a) the general, jurisprudential level where also the government’s administration of public legal information has a decisive influence, (b) the organisational level, reflecting presuppositions of the organisations working with legal information, and (c) the situation of the individual lawyer.

(a) The analysis of *general requirements* clearly showed that the so-called *doctrine of legal sources* gives strong indications as to how legal information ought to be handled. Despite this, it became apparent that it is impossible to work out any universal code comprising an elaborate design strategy for legal IT-systems based on the existing descriptions of the content and hierarchical order of legal sources. In this respect the law is an all too complex phenomenon. It is also obvious that legal sources are ascribed various degrees of importance in different jurisdictions. An important drawback of a general design strategy based on an analysis of the doctrine of legal sources is furthermore the fact that conditions in different law areas vary, and that all development activities concerning legal IT systems must be adjusted to the domain in question.

The complications following from the domain-dependent nature of legal information must not, however, overshadow the fact that the doctrine of legal sources actually provides a number of standards which have to be taken into consideration in all undertakings dealing with legal information systems. It must also be observed that the analysis of the doctrine of legal sources clearly indicates a number of quality aspects which reflect the requirements of society at an aggregate level. Important illustrations in this respect are the principles of freedom of information, standards concerning free exchange of information, the importance of promulgation, etc.

It is also noticeable that the doctrine of legal sources makes explicit a number of factors that can be utilised in order to delimit and select materials in the process of legal information management. Examples of such factors are descriptions of subject-matter relevance, formal and hierarchical relevance, obsolescence, and so forth.

What this all adds up to is that the doctrine of legal sources will in most cases provide the necessary starting point for an analysis of the relevant legal material in a given area of

law. Likewise, there is little doubt that the doctrine of legal sources constitutes the most reliable framework for legal information management.

(b) The investigation of the *organisational level* makes it apparent, in turn, that in all realistic enterprises involving IT in the legal sector organisational requirements must influence the ways in which the legal material is selected. It is also obvious that organisational requirements may be of relevance for the ways in which the more subtle aspects of the material can be handled, relating, for example, to continuity, authenticity, and completeness.

The analysis further shows that requirements at the organisational level should determine the ways in which legal materials of various kinds ought to be combined and amended. It is likewise clear that the organisational framework will provide indications concerning the type of meta-information that must be included in a feasible legal information system. In this context it is also important to notice that different organisations within the same domain may exhibit quite different requirements, due to their having different objectives. Also worth mentioning is that various users within the same organisation may have different opinions about the ways in which the material ought to be best managed, and about prioritisation.

(c) The fact that users' opinions vary is even more apparent when the requirements of *individual lawyers* are studied. At this level it may be even correct to say that at some point all lawyers will have their own opinion concerning the ways in which the legal material ought to be managed. This is not only a reflection of the fact that all individuals working with legal material will have different needs, owing to differences in the tasks they have to face, but also a consequence of different lawyers having different background knowledge and different opinions on law.

Another conclusion from the analysis of individual lawyers' requirements is that law should be perceived as a network of component structures appearing at different levels of abstraction. This is a consequence of the fact that users will require various legal components in different situations. For instance, in the initial phase of the analysis of a legal problem a lawyer will seek for a legal concept describing the problem at a general level. The objective will then be to be able to delimit the issue from the legal point of view. In order to obtain a more distinct picture of the situation, in the following phase attention may have to be shifted towards legal rules and definitions of interrelated concepts (prerequisites). Thereafter, some methodological rule may have to be investigated, e.g. a rule concerning evidential value that may be ascribed to a certain fact which has been established. In the final stages of legal reasoning, search activities may aim at explicit references (documents) of a formal nature, etc.

In this perspective, documents and text units, concepts, legal rules, and rule systems are only a few examples of the components of the complex network that constitute legal knowledge. Some levels of the network (e.g. document structures with explicit references between associated documents) are clearly visible, while others (e.g. rule-structures) can only be perceived after a thorough investigation of legal texts. It may be also noticed that some of the relevant component structures necessarily generate secondary structures. Document categorisation, for instance, implies supplementary structures, specifying authors, publication series, and so forth.

The general conclusion drawn from the study of requirements of legal information was therefore not only that these requirements are domain dependent, but also that situations in which law is to be used, together with the identity of the users, must be accepted as the point of departure in the design of legal IT-systems.

### 2.3 *Technical aspects*

The exploration of technical aspects revealed, in turn, that demands concerning legal information systems vary to a considerable extent, depending on the user situation and the working tasks to be performed. Another important observation was that differences in expectations can be related to all aspects of technology, e.g. computers, communication facilities, software performance, etc. The analysis furthermore indicates that the IT maturity of the users (or the potential users) is an important aspect that must be included in any evaluation of system performance in this area.

Rapid development is a factor which complicates proper evaluation of technical methods. It is evident that, apart from more or less obvious conclusions concerning such things as access to high-speed communication facilities, graphical interfaces, cut and paste standards, hypertext and clickable buttons, etc., it is useless to be more specific about technical standards. In this respect the pace of change is simply too fast and unpredictable.

In an investigation of methods one must also take into consideration the fact that at present several different technical standards may provide satisfactory solutions. It is, for instance, obvious that CD-ROM products and on-line databases can both provide feasible storing and retrieval tools for professional lawyers, which is even more apparent when different software products are investigated. In the process of evaluation, however, it is not possible to foresee which standards will survive, and which will be replaced by new techniques and new technical solutions.

When technical aspects are scrutinised, it is nevertheless noticeable that a number of jurisprudential and practical presuppositions must be taken into consideration besides pure technical components. The complexity of legal information, for instance, may make it necessary to prioritise functions that may facilitate overviews. For similar reasons simplicity and focus on introduction facilities will always be crucial when a certain system is being evaluated. Likewise, for on-line applications 24-hour access, continuous assistance, e.g. in the form of a help desk, frequent updating of the content, print-out facilities and similar aspects are likely to be requested by a large majority of professional users in this area. These details suggest in turn that it is realistic to predict further development of computer-based legal networks, and that communication facilities and interoperability of systems are important components of investigation when various legal information systems are compared.

In a survey of technical aspects it is also relevant to remember that the analysis of legal requirements indicates that advanced legal information systems should be able to handle not only legal documents and legal texts, but also smaller components, such as legal rules, rule systems, and legal concepts of various kinds. This also makes it obvious that legal information applications will develop from pure IR-systems and simple administrative systems towards applications with much more integrated functions.

An additional factor to be considered is the fact that all lawyers will differ to some extent in their opinions about the law. This in turn makes it possible to predict that most users will be likely to appreciate customised systems rather than general-purpose systems, which is why in an evaluation of various suggested solutions priority should be given to applications that are open to such solutions.

### 2.4 *Organisation*

The third aspect of legal information systems included in the model of evaluation – *the organisational component* – focuses attention on several fundamental, but perhaps less

frequently observed, aspects that may be relevant to look into when a legal information system is to be investigated.

The factors that can be related to organisational components are numerous, but in the completed analysis two aspects appeared to be more important than others, *viz.* stability and competence. Stability is necessary, since all professional use of a legal information system is likely to presuppose investments in terms of time, money, and education. From this it obviously also follows that it is desirable for the service to be of a permanent character.

The stability of a certain organisation, e.g. a publisher or a database provider, is, nevertheless, difficult to measure and predict, especially in a long-term perspective, but it can be estimated to some extent by means of studying components such as the future plans, the size, and the economy of the organisation.

Competence, in turn, is a generic concept covering a number of aspects ranging from legal proficiency, technical competence, and combined skills concerning all aspects of legal information systems. Competence thus perceived is not only of the utmost importance when legal information systems are to be designed, but is also a crucial element when a legal information system is to be integrated into the work process and, of course, when a system is to be managed over a longer period of time.

Competence being such a broad concept, its evaluation may sometimes be quite difficult and time-consuming. Then again, various aspects are of such a kind that their evaluation is only possible over a certain period of time. When this aspect is investigated, it may, nevertheless, be relevant to try to investigate components such as flexibility, service, etc.

Finally, the analysis of factors relevant to legal information systems shows that the investigation combining information content, technical aspects and organisational issues illustrates how a feasible model for the evaluation of legal information systems, IT products and services can be developed. It should also be noticed that the model of evaluation outlined in this study can be used not only when various legal information services are to be scrutinised and compared from the user's point of view, but that it can also be used by the legal information system designer, as well as the legal information manager.

### 3 Conclusions and future work

In this study some approaches have been described that may be utilised in order to evaluate legal IT-systems. The focus of attention has been on system components (content, technical aspects, organisation), user requirements and various external factors. The objective has been to provide the means for the critical and consistent scrutiny of the products and services that are being developed.

In this respect the model of evaluation based on information content, technical aspects and organisational aspects can be characterised as exhibiting an *overall structure* facilitating more systematic investigations. It is also noticeable that the model is *general* in the sense that it can be used for evaluation of legal information systems of various kinds, and that it reflects components that can be accepted by scholars of different traditions.

In addition, it may be suggested that the model is *transparent* in the sense that the components can be described in a non-technical way, and that all legal and technical terms can be explained as they appear. It may furthermore be claimed that the model is *explicit* and *particular* by means of providing a basis for the elaboration of more or less stepwise specifications. It is also apparent that the model is *flexible* since it can be modularised in such a way that one or more components can be changed, elaborated upon, omitted, etc. without disturbing the overall structure of the model.

For the future, however, it is important to take into consideration the fact that the rapid development of IT and telecommunications, as well as the increasing internationalisation of law, necessitate revision and adjustment of many of the more detailed aspects of the employed method. Likewise, it may be concluded that this must be done more or less continuously. Additional factors to be considered in this context are the growing competitiveness and increased commercialisation of the legal information market.

Another, obvious, conclusion from the above is that enhanced and up-to-date knowledge of IT-components and various types of user requirements will continue to be important when various products and services are to be evaluated .

In the long-term perspective, however, it may be argued that one should be even more ambitious, trying to utilise the results of the analyses and evaluations in a broader sense. Most important in this respect appears to be that it is desirable that the analyses include *development methods* for legal IT-systems, as well as *long term effects*.

The need to include development methods in the discussion is motivated by the obvious fact that there exists a close relationship between the characteristics of legal IT-systems and the various strategies and methods that are employed in order to design and develop them. This is just another way of saying that it should be important to scrutinise, among other things, the ways in which preliminary studies are completed, organisational analyses carried out, and legal sources selected, adjusted and transformed. Likewise implementation strategies and educational activities are relevant to scrutinise in order to minimise problems with user acceptance.

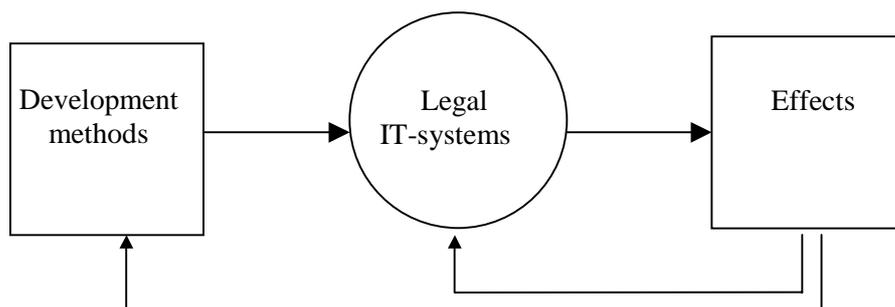


Figure 2: An evaluation of legal IT systems with any practical ambitions should include not only system components of a tangible nature but also system development methods and effects.

Similarly, the necessity of aggregating and systematising knowledge about the effects of legal information systems follows from the fact that it is important to understand the ways in which various legal IT-systems affect the legal community. In many situations it is quite clear that legal IT-systems are likely to have a considerable impact on the way legal work is carried out. Likewise, the ways in which the systems are designed and utilised may affect the substantial aspects of law, and for obvious reasons it is also interesting to understand and try to manage these consequences. In this wider perspective, the nature of investigations that have to be completed differs depending on the situation. When a legal IT-system is implemented in a teaching organisation, for instance, it is natural to investigate whether the system has had a positive effect on the actual learning, how the course administration and the teachers' resources have been affected, and so forth. Likewise, it is relevant to scrutinise the economic consequences, the emerging legal problems, the effect of IT investments on the future plans and flexibility of the organisations.

Another reason why the study of effects appears to be a crucial issue is the obvious fact that in many situations it may be necessary to regulate the consequences of legal IT-systems in order to vindicate various kinds of legal quality aspects.

A final insight from this study is that legal sources via IT constitute very complex phenomena with far reaching consequences. It is thus obvious that IT is having, and will continue to have a profound impact on the legal profession, revolutionising the quest for law. It should be underlined, however, that this development will not result automatically in enhanced quality and better efficiency in the legal sector. An increased complexity, which the subject matters addressed in this study doubtlessly represent, is also something that is likely to be reflected in the number of things that may create problems. From this in turn follows that all lawyers must be prepared to elaborate their critical attitude, and be able to actively evaluate legal information in a very cautious way as the development continues.