

Institution: University of Strathclyde
Unit of Assessment: 11
Title of case study: Widening public access to judicial decision making through information systems.
<p>1. Summary of the impact (indicative maximum 100 words) Research in organisational decision making has led to the establishment of a Sentencing Information System for the Republic of Ireland (ISIS) which enables judges, lawyers and the public to access information on sentencing patterns within the Republic of Ireland. "ISIS enables Judges and others engaged in the sentencing process... to develop their knowledge and understanding of sentencing practices. This ...benefits the understanding of defendants and witnesses, including victims of the entire process. All of this is being done without jeopardizing judicial independence and impartiality" (Source 9). With 7000 user visits annually from 84 different countries, ISIS has international impact on increasing the transparency of judicial decision-making, is widely regarded as a particularly significant development in legal processes, has stimulated public discussion on sentencing patterns and is informing public policy in the management of the criminal justice system.</p>
<p>2. Underpinning research (indicative maximum 500 words) Context: The initial research between 1993 and 1995 by John Wilson focused on the development of decision support systems in the context of management level decisions. In many cases, reasons for the failure of such systems to be accepted may be found in the bounded rationality caused by limitations of both technology and system designer understanding, which generates a mismatch between the designer's aspirations and users' requirements. Systems based on a single designer-led view of organisational reality are rarely satisfactory since opinions of the truth within an organisation will always be open to challenge. A restrictive domain of discourse will also contribute to the problem by imposing a top down definition of the solution that does not reflect the real needs of organisational requirements. A clearer understanding of these limitations in system design leads to a number of principles that can be applied to facilitate decision support at the executive organisational level. The institutional structure needs to be clearly understood. Within this it is important that the concept of multiple perspectives of the organisational actors are represented. These perspectives may be incorporated through double loop, reflexive design methodologies.</p> <p>Key research findings: These insights led to the specification of a framework for guiding information systems design, which was one of the novel findings from the research. From 1995 to 2002 this theoretical background was then applied in the development of a prototype Sentencing Information System for High Court judges in Scotland. The aim of the system was to help judges during the process of sentencing. Aware of the potential pitfalls of organisational decision support systems, the initial steps involved participatory design of a taxonomy of criminal offences.</p> <p>The validity of this approach was ensured by its emergence from debate with the user participants. The small number of participants allowed for extended debate and discussion within the entire group. Using this approach, issues such as the semantic content of concepts represented in the system were debated and a consensus view was formed. The need for users to be able to question system output was also addressed by providing detailed information that would support the explanation of outlying or unconventional decisions.</p> <p>The main outcomes of the research programme were:</p> <ol style="list-style-type: none"> 1) The multiple perspective based framework developed in the underlying research work is effective in guiding the design of organisational decision support systems. The design approach focused on the incorporation of diverse opinions and as such, led to successful system implementation [1,2]. 2) The prototype sentencing information system showed that it is possible to deliver appropriate information to a judge in a way that is accessible and appropriate to the judicial working pattern [3,4].

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Key researchers: The theoretical work was carried out by John Wilson (Lecturer 01/02/1986 - present) in the Department of Computer Science at the University of Strathclyde in collaboration with staff at UMIST and Manchester Metropolitan University. The Manchester group contributed ideas focused on organisational aspects of the design process while work at Strathclyde concentrated on establishing a route to agreed semantics. The subsequent Scottish prototype development was carried out by John Wilson in the Department of Computer Science with Cyrus Tata (Lecturer), Neil Hutton (Senior Lecturer) and Alan Paterson (Professor) in the Law School at Strathclyde.

3. References to the research (indicative maximum of six references)

References 1-3 best indicate the quality of this research.

1. F. A. Wilson and J.N. Wilson. (1994). The role of computer systems in organizational decision making. *The Information Society*, 10 (3): 173–180, doi: 10.1080/01972243.1994.9960167.

Notes on quality: The Information Society has an impact factor of 1.235 and ranks 26/83 in Information Science & Library Science journals (Thomson Scientific, Journal Citation Reports 2012). On Microsoft Academic Search it ranks 256/1339 for all computer science journals

2. F.A. Wilson, J.N. Wilson, and A.M. Smith. (1993). Computer-based systems: a discussion of their application to managerial decision-support. In *Proceedings SIGCPR '93*, pp76–87, doi: 10.1145/158011.158124.

Notes on quality: SIGCPR/SIGMIS is a fully refereed ACM Special Interest Group conference and ranks in the top 25% of all computer science conferences listed in Microsoft Academic Search.

3. N. Hutton, A. Patterson, C. Tata and J. Wilson (1995). Decision support for sentencing in a common law jurisdiction. In *Proceedings ICAIL '95*, pp89–95, doi: 10.1145/222092.222145.

Notes on quality: ICAIL is a fully refereed conference in the top 10% of computer sciences conferences rated by Microsoft Academic Search.

4. N. Hutton, C. Tata and J.N. Wilson (1994). Sentencing and Information Technology: Incidental Reform? *International Journal of Law and Information Technology* 2(3): 255-286. doi: 10.1093/ijlit/2.3.255.

Notes on quality: The International Journal of Law and Information Technology is peer reviewed journal and is ranked in the top 40% of cognate journals in the Microsoft Academic Search index.

Other evidence for quality of research: The research into the Scottish system was supported by funding from the Scottish Courts Administration.

A. Patterson, N. Hutton, C. Tata, and J. Wilson. Sentencing Information System for the High Court of Justiciary First Phase of Implementation. 1996-1997. £125,000.

A. Patterson, N. Hutton, C. Tata, and J. Wilson. Sentencing Information System for the High Court of Justiciary, Second Phase of Implementation & Enhancement. 2000-2002. £210,000.

4. Details of the impact (indicative maximum 750 words)

Process from research to impact: The Irish Sentencing Information System (ISIS) project aimed “to develop a computerised information system, including sentences and other penalties imposed for offences in criminal proceedings, which may inform judges when considering the sentence to be imposed in an individual case. The sentencing information system enables a judge, by entering relevant criteria, to access information on the range of sentences and other penalties which have been imposed for particular types of offence in previous cases.” [Source A]. The project was overseen by a Steering Committee of judges, who conducted a survey of similar systems in other countries and found those in New South Wales and Scotland to be most relevant. A study was then undertaken of the Scottish system [Source B], which had been developed by researchers at the University of Strathclyde. John Wilson was the computer scientist involved in the design and construction of the Scottish system and Cyrus Tata (UoA 20) contributed to the underpinning legal research.

Tata was research adviser to the ISIS project from 2005. He addressed the senior judiciary, met with the chair of the Steering Committee for the project (Justice Denham, now Chief Justice) and the Irish Court Service, and held informal discussions with members of the ISIS committee [Source

C]. Chief Justice Denham has stated that “ISIS has proven to be a significant improvement over previous paper based record systems in Ireland, and was developed with the helpful advice of Professor Cyrus Tata based on his prior research and development of the Scottish system”. Chief Justice Denham also states that knowledge of the Scottish system was used as the basis for the design of ISIS [Source C]. Key issues on which Tata advised were public access and institutionalisation, data quality and recording, case taxonomy, politics of sentencing reform, and accordingly the Irish approach differs from that of Scotland. The Irish system is publicly available and data recording is done by legal research assistants specially trained for this task (e.g. trainee barristers) and not delegated to clerks.

The data collection phase of the project occurred between 2007-9 in Dublin, Cork and Limerick Circuit Criminal Courts, Dublin District Court and the Court of Criminal Appeal. The ISIS website was launched in 2010. In January 2013 funding was secured to enable further expansion and development of ISIS [A]. Announcing this development, the Chief Justice of Ireland said ISIS “...gives a practical overview and a snapshot in time of how our courts treat various offences, who committed them and the circumstances in which they took place. It is also a hub for keeping up with the latest judgments and academic thoughts on various crimes and sentencing” [C]. ISIS was designed in the period 2006-2009 following principles established by UoA 11 research at Strathclyde between 1993 and 2005. The implementation has been open to the public since 2010.

Types of impact

Introduction of new technology to aid awareness of sentencing: Influenced by research carried out at Strathclyde, the legal sector in Ireland has now adopted new technology. Prior to ISIS, public access to legal records was virtually non-existent. Although paper records were sometimes available, they provided no opportunities for forming a meaningful picture of sentencing practices. New technology in the form of a Web-enabled database provides for indexed access using a variety of criteria. Expressions that were used to search the ISIS in 2011 include general phrases such as ‘district court and sentencing’ and more specific phrases such as ‘contrary to section 49(2) and (6)(a) of the road traffic act’. In neither of these cases (and other similar searches) would it be possible to retrieve details from paper records of court activity since no index is provided that uses such terms. The construction of a Web-based system has allowed easy public access to sentencing information as well as providing retrieval capabilities for legal personnel. ISIS has international impact. The 7000 user visits in 2011 originated in 50 different countries with the bulk coming from Ireland, the USA, the UK and the Netherlands. In 2012 a similar number of visits originated from 84 countries [Source D]. The first quarter of 2013 showed 4000 visits, an increase prompted by greater public awareness of the system.

Stimulation of Public Discourse: A wide range of Irish media have welcomed the public accessibility of ISIS as an act of transparency in the exercise of justice [Source E&F]. In making the ISIS publicly accessible, the Irish approach contrasts favourably with that of Scotland where the refusal to make the SIS Scotland publicly accessible was felt to be one of the key reasons why it lost momentum shortly after full implementation. Public access helps to embed the system into everyday practices, as well as assist the public understanding of sentencing and contributing to confidence in the justice system. In late January 2013, data in ISIS began to be mined to produce occasional reports which have been prominently reported in the media, thus contributing to public knowledge and understanding [Source G&H]. ISIS has also been referred to in public discussion and debate about sentencing practices sparked by high profile and controversial cases including sentencing on rape cases [Source I].

Practitioner Decision-Making: ISIS enables judges, defence and prosecution lawyers, and others (e.g. pre-sentencing report writers) to enrich their understanding of sentencing practices, so enhancing the pursuit of fairness and consistency in sentencing. This not only assists sentencing practitioners, but also benefits those brought before the courts (e.g. defendants, witnesses including victims), as well as the wider public. As well as being a point-of-sentence tool, the ISIS project has contributed to occasional reports about matters of particular legal and public interest. These reports are published on the ISIS website, and together with a regular series of sentencing seminars run by the ISIS steering committee, help to inform practitioners. The ability of ISIS to assist the pursuit of fairness and consistency in sentencing and public knowledge without

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threatening judicial independence and impartiality is widely regarded as a particularly significant development. For example, The Irish Justice and Equality Minister said in the Irish Penal Reform Trust Annual Lecture 16th September 2011 that “The system [ISIS] informs judges - it does not interfere with judicial independence in sentencing. . . As Minister, I believe the website to be of great assistance in ensuring greater uniformity of sentencing.” [Source J]. The publicly accessible system currently contains information on over 1000 representative cases [A]. These aid knowledge of and understanding about sentencing and the legal system [C] in a criminal justice process which handles about 10000 such cases each year.

ISIS enables greater predictability in the planning of policy and management of criminal justice services: Greater knowledge and understanding of sentencing, its dynamics, and the drivers of sentencing trends enhances the ability to plan the provision of services (and the more efficient expenditure of resources) and provide a more informed basis for the development of criminal justice policy. For example, a recent White Paper on Crime issued by the Department of Justice and Equality commented: “A development of some significance is the Irish Sentencing Information System (ISIS) website This publicly accessible resource includes statistics on sentencing, synopses of relevant court judgments and a database on sentences imposed in various crimes and cases.... a valuable tool not only for legal practitioners and researchers but also for those concerned with the needs of victims and their families.”[Source K]. Beneficiaries also include criminal justice managers and policy-makers including court service managers dealing with the flows of first instance and appeal cases, prosecution, prisons and community justice sectors.

5. Sources to corroborate the impact (indicative maximum of 10 references)

- A. <http://www.irishsentencing.ie/> ISIS homepage includes reference to studying the Scotland SIS and relevant publications.
- B. <http://www.scotland.gov.uk/Publications/2004/03/19042/34205> information on the Scottish system on which the Irish system was based.
- C. Letter from Chief Justice Denham (Chair of the SIS Republic of Ireland) supporting claims that knowledge of the Scottish SIS influenced the organisation of sentencing data in ISIS and that ISIS brings benefits to the judiciary in sentencing; and to public knowledge.
- D. WebTrends Marketing Lab. Reports on ISIS usage statistics.
- E. Irish Examiner Newspaper report <http://www.irishexaminer.com/ireland/website-to-give-overview-of-criminal-sentencing-126823.html> . The launch of ISIS was publicly discussed and favourably reported in the media.
- F. <http://www.humanrights.ie/index.php/2010/08/03/sentencing-information-website/> shows positive discussion of the availability of the sentencing data on Human Rights in Ireland.
- G. Irish Times 21st May 2013 <http://www.irishtimes.com/news/sentencing-in-robbery-cases-relatively-consistent-new-report-by-irish-sentencing-information-system-finds-1.1400615> shows ISIS informs public discourse.
- H. <http://www.thejournal.ie/irish-sentencing-information-online-771983-Jan2013/> shows new initiatives to publish reports.
- I. "Rape Case Plea has Little Bearing on Sentence" Irish Examiner 28 January 2013 <http://www.irishexaminer.com/ireland/rape-case-plea-has-little-bearing-on-sentence-220874.html> will support the claim that ISIS data informs media debate
- J. <http://www.justice.ie/en/JELR/Pages/SP11000177> Irish Penal Reform Trust Annual Lecture 16th September 2011 referring to ISIS in respect of uniformity of sentencing.
- K. http://www.justice.ie/en/JELR/Pages/White_Paper_on_Crime White Paper on Crime: *The Community and the Criminal Justice System*, Department of Justice and Equality, Government of the Republic of Ireland, June 2011.