



## **A Compendium of Formalised Development Methods and Techniques for Web and Hypermedia Systems Design.**

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# A Compendium of Formalised Development Methods and Techniques for Web and Hypermedia Systems Design

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Some of the following methods and techniques have not been given names by their authors. All such cases are marked with an asterisk (\*) and a selection of keywords from the paper title is used here in place of a name. Where a method has been extended, its successors are shown by means of an inheritance arrow (→).

<b>Method</b>	<b>Method Developers</b>
Agile Web Engineering (AWE) process	(McDonald & Welland, 2005)
* Analysis and design of Web-based information systems	(Takahashi & Liang, 1997)
Araneus	(Atzeni, 1998; Mecca et al., 1999; Atzeni et al., 2001)
Ariadne / Labyrinth	(Díaz et al., 1997; Díaz et al., 2001; Díaz et al., 2001; Montero et al., 2004)
* Authoring methodology for large-scale hypermedia applications	(Heath et al., 2000)
AutoWeb / HDM-Lite / Visual HDM	(Fraternali & Paolini, 1998, 2000)
* Component-based methodology for Web application development	(Lee & Shirani, 2004)
* Conceptual design of WWW-based information systems	(Becker et al., 2003)
* Conceptual modeling of large Web sites	(Strauch & Winter, 2000, 2001)

<b>Method</b>	<b>Method Developers</b>
Dreher Hypertext Development Methodology	(Dreher, 2003)
e-Prototyping	(Bleek et al., 2004)
Enhanced Object-Relationship Model (EORM)	(Lange, 1993, 1994, 1996)
Fusebox / Flip	(Nelson et al., 2000; Peters & Papovich, 2003; Peters, 2004, 2005; Quarto-vonTivadar et al., 2005)
HANDIE	(Apperley & Hunt, 1998)
Hera	(Houben et al., 2003; Vdovjak et al., 2003)
* Human Factors methodology for designing Web sites	(Vora, 1998)
HyDev	(Pauen et al., 1998)
* Hypermedia design methodology for Web applications	(Moreno-Muñoz et al., 2002)
Hypermedia Flexible Process Modeling (HFPM)	(Olsina, 1998; Olsina, 1998)
Hypermedia Modeling Technique (HMT)	(Zoller, 2001)
* Hypertext design method	(Morris & Finkelstein, 1992)
Hypertext Design Method (HDM) → HDM2 → HDM2000 / W2000 (see also AutoWeb and WebML)	(Garzotto & Paolini, 1991; Schwabe et al., 1992; Garzotto et al., 1993; Garzotto et al., 1994; Bochicchio et al., 1999; Baresi et al., 2000, 2001; Baresi et al., 2002)
* Hypertext design methodology	(Kemp & Buckner, 1999)
* Hypertext development methodology	(van Vliet & Wilson, 1993)
Index-driven Hypermedia Design Methodology (IHDM)	(Suh & Lee, 2001)
* Integrated design methodology for Internet-based information systems	(de Lima & Price, 1998)
Intranet Design Methodology (IDM)	(Lee, 1998)
Internet Commerce Development Methodology (ICDM)	(Standing, 1999, 2002)
Maintainable, End user friendly, Structured Hypermedia (MESH)	(Lemahieu, 2002, 2003)
* Methodology for building corporate Web applications	(Artz, 1996)
Mockup-driven Fast Prototyping Methodology (MODFM)	(Zhang et al., 2003; Zhang & Chung, 2003)
Navigational Development Technique (NDT)	(Escalona et al., 2003, 2003, 2004)
Object-Oriented Hypermedia Design Methodology (OOHDM)	(Rossi et al., 1995; Schwabe & Rossi, 1995; Schwabe et al., 1996; Schwabe & Rossi, 1998; Lyardet et al., 1999; Rossi & Schwabe, 2001; Schwabe et al., 2002; de Moura & Schwabe, 2004)
Object-oriented Process, Environment and Notation (OPEN)	(Henderson-Sellers et al., 1997; Haire et al., 2002; Henderson-Sellers et al., 2002)

<b>Method</b>	<b>Method Developers</b>
Object-Oriented-Hypermedia Method (OO- <i>H</i> Method)	(Cachero et al., 2000; Gómez et al., 2000, 2001)
Object-Process Methodology (OPM/Web)	(Reinhartz-Berger et al., 2002; Reinhartz-Berger & Dori, 2005)
Parallel	(Howell, 1992)
Parallel Framework	(Rodriguez-Garcia, 2002)
PlumbingXJ	(Navarro et al., 2004)
Relationship Management Methodology (RMM) → Extended RMM	(Díaz & Isakowitz, 1995; Isakowitz et al., 1995; Isakowitz et al., 1997, 1998; Balasubramanian et al., 2001)
RMM-based Methods	(Poncia & Pernici, 1997; Busatto & Hoen, 2000; Frasinca et al., 2001)
Relationship-Navigation Analysis (R-N A)	(Bieber, 1998; Yoo & Bieber, 2000, 2001; Yoo et al., 2004)
Role-driven Component-Oriented Methodology (RCOM)	(Park et al., 2004)
Scenario-based Object-Oriented Hypermedia Design Methodology (SOHDM)	(Lee et al., 1998, 1999; Lee et al., 2004)
Simple Web Method (SWM)	(Griffiths et al., 2002; Griffiths et al., 2003)
UML-based hypermedia modelling methods (see also WebML and HDM extensions)	(Červenka, 1998; Baumeister et al., 1999; Conallen, 1999; Mandel et al., 1999; Sauer & Engels, 1999; Hennicker & Koch, 2000; Kappel et al., 2001; Conallen, 2002; Larsen & Conallen, 2002; Schattkowsky & Lohmann, 2002)
UML-based Web Engineering (UWE)	(Koch & Wirsing, 2002; Koch & Kraus, 2003)
Unified Process-based Hypermedia Systems Development (UPHD)	(Koch, 2000)
* User-based design process for Web sites	(Abels et al., 1998)
* User Goal-centered Web Engineering approach	(Gnaho, 2001)
View-Based Hypermedia Design Methodology (VHDM)	(Lee et al., 1999)
Web Information System Development Methodology (WISDM)	(Vidgen, 2002; Vidgen et al., 2002)
Web Site Design Method (WSDM)	(De Troyer & Leune, 1998; De Troyer, 2001; De Troyer & Casteleyn, 2003)
Web-based Information Systems Development with a cOmprehensive Methodology (WISDOM)	(Castona et al., 2000)
WebComposition / WCML	(Gellersen et al., 1997; Gellersen & Gaedke, 1999; Gaedke et al., 2000; Gaedke & Gräf, 2001)
WebML	(Ceri et al., 2000; Ceri et al., 2002; Ceri et al., 2003)

Method	Method Developers
WebML+ / Web Information Exchange Diagram (WIED)	(Tongrunrojana & Lowe, 2003, 2004)
Workflow-Based Hypermedia Development Methodology (WHDM)	(Lee & Suh, 2001)
World Wide Web / Structured Hypermedia Design Technique (W3DT / SHDT) → eW3DT	(Bichler & Nusser, 1996, 1996; Scharl, 1998, 1999; Bauer & Scharl, 2000)

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