

P251

**Applied Content Management
on the Macintosh**

A Case Study on Harvard University Press

Rosemary Tietge

Publishing Technology Manager

Harvard University Press

Agenda

- Who am I?
- Why content management (CM)?
- Do you need a content management system (CMS)?
- What is a CMS?
- Evolution of CM at Harvard University Press (HUP)

Agenda (cont.)

- CM: HUP's Problems
- CM: HUP's Solutions
 - ◆ 4 cases with demonstrations
- What about Enterprise Content Management (ECM)
- Conclusions
- Resources
- Q & A

Who am I?

- FileMaker user for 15 years
- Publishing industry professional for 20 years
- Publishing Technology Manager at Harvard University Press for 8 years
- Former independent FileMaker consultant
- NOT a programmer

Why content management?

- Are key knowledge assets located in documents on end user's hard drives?
- What if one of those hard drives fails?
- What if a key user is hit by the T?
- What if someone else needs an asset?
 - ◆ Recreate, Beg, Search
- How much time do employees lose every day because you have no content management system?
- How much money does your organization lose?

Do you need CM?

- Do you sell products?
- Do you produce a Web site and print catalog?
- Do you have a knowledgebase?

What is Content Management?

- Core components (per Gartner*)
 - ◆ Document management
 - ◆ Web content management
 - ◆ Record management
 - ◆ Document capture
 - ◆ Collaboration tools
 - ◆ Workflow

*November 2004, "What constitutes enterprise content management"
http://www.gartner.com/resources/124000/124033/what_constitute.pdf

Is this Content Management?



Is this Content Management?

The screenshot shows a web-based content management system interface. At the top, there's a red header with the title "Descriptive Copy" and a navigation bar with tabs for "Main", "Authors", "People", "Products", and "Reprints". Below this, there's a sub-header "Weber - The Success of Open Source" and a record number "Record Number 9 of 9". The main content area is divided into several sections: "Information", "Schedule", "Rights", and "People". Under "Information", there are tabs for "Summary", "Description", "Categories", and "Awards". The "Summary" tab is selected, showing a list of excerpts on the left and a full text view on the right. The full text view shows a "Web Short" excerpt about innovation and open source. Below the text view, there are fields for "Add To Project", "Author", "Source", "Pub Date", and "Format". On the right side, there's a vertical menu with buttons for "Menu", "List View", "Find", "New Entry", "Print Copy", "Copy for Diff Book", "All Changed", and "Changed This Week". At the bottom, there's a "Quick Finds" section with search fields for "Author Last Name" (containing "weber"), "Title Keyword", "BookCode", and "List".

Descriptive Copy

Weber - The Success of Open Source

Main Authors People Products Reprints

Information Schedule Rights People

Record Number 9 of 9

Summary Description Categories Awards

Weber - The Success of Open Source

Special Project

Catalog_Page 90

Click anywhere in a row to view or edit the full text of that excerpt.

Catalog Final—Paper	In spite of the conventional wisdom that innovation is driven by the promise of individual and corporate wealth, <author> Steven Weber</author> argues, ensuring the free distribution of code among computer programmers can create a more effective process for developing intellectual products. Weber argues that the success of open source is not a freakish exception to economic principles and explains the political and economic dynamics of this critical market development.
Blurb	
Blurb	
Blurb	
Web	
Web Short	
Awards	
Review	

Copy type Web Short 456 chars / 70 words

In spite of the conventional wisdom that innovation is driven by the promise of individual and corporate wealth, <author> Steven Weber</author> argues, ensuring the free distribution of code among computer programmers can create a more effective process for developing intellectual products. Weber argues that the success of open source is not a freakish exception to economic principles and explains the political and economic dynamics of this critical market development.

Add To Project

Author

Source

Pub Date

Format

Menu

List View

Find

New Entry

Print Copy

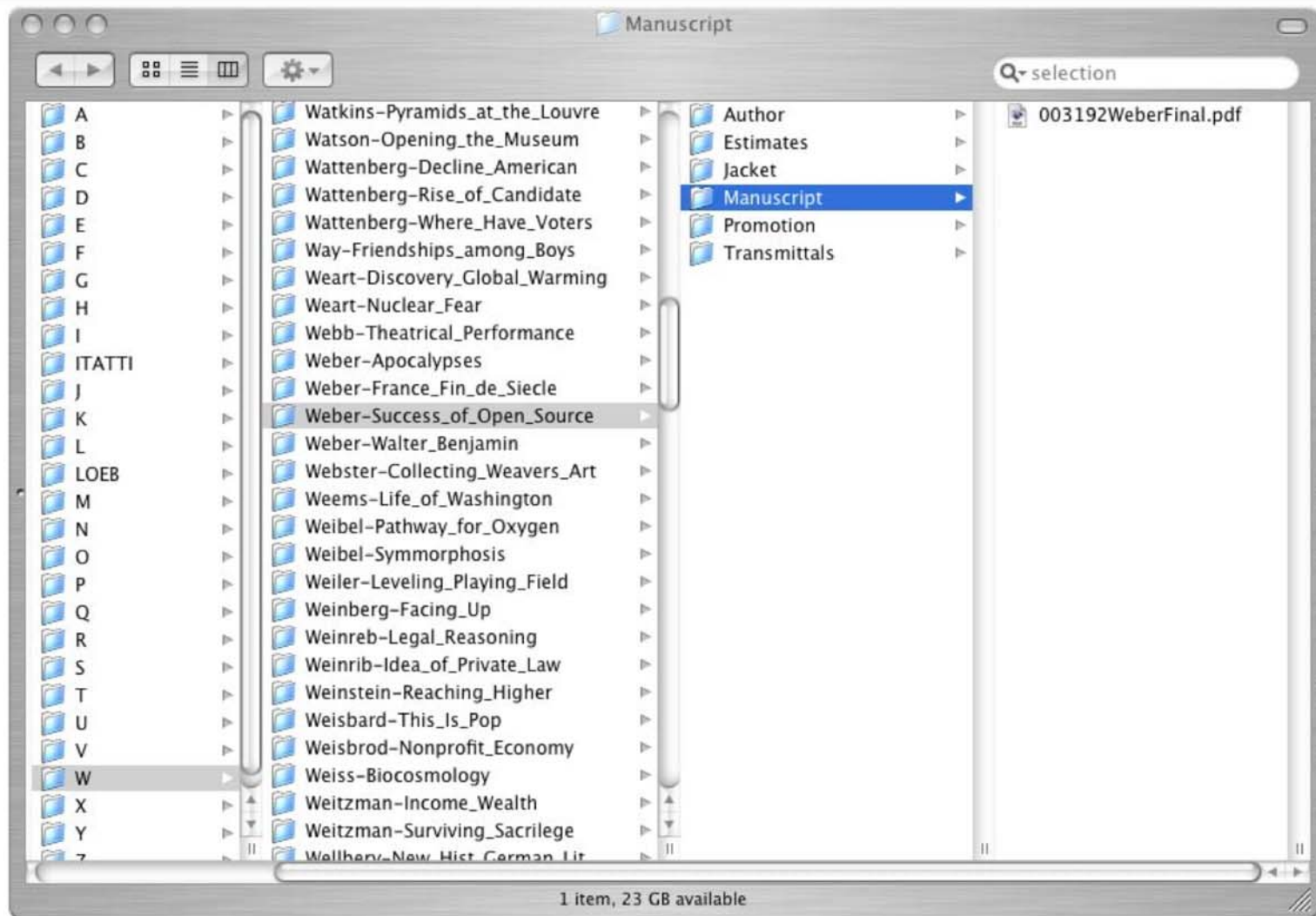
Copy for Diff Book

All Changed

Changed This Week

Quick Finds Author Last Name: weber go Title Keyword: go BookCode: go List: go

Is this Content Management?



Is this Content Management?



Cumulus®
the power
to manage
your digital assets

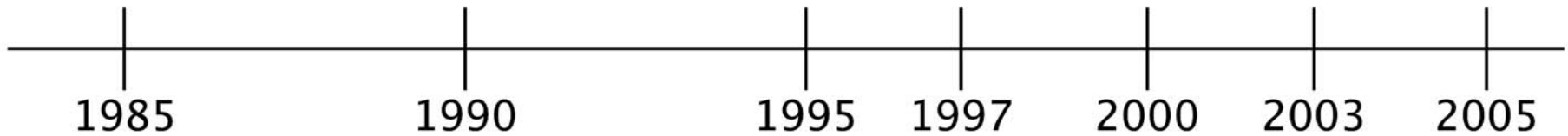
EMC² | documentum



Xythos®
software, Inc.

Essential document and file management

Evolution of CM at HUP



Evolution of CM at HUP

First computers used
in design department



1985

Accept
Manuscripts
on diskette

1990

1995

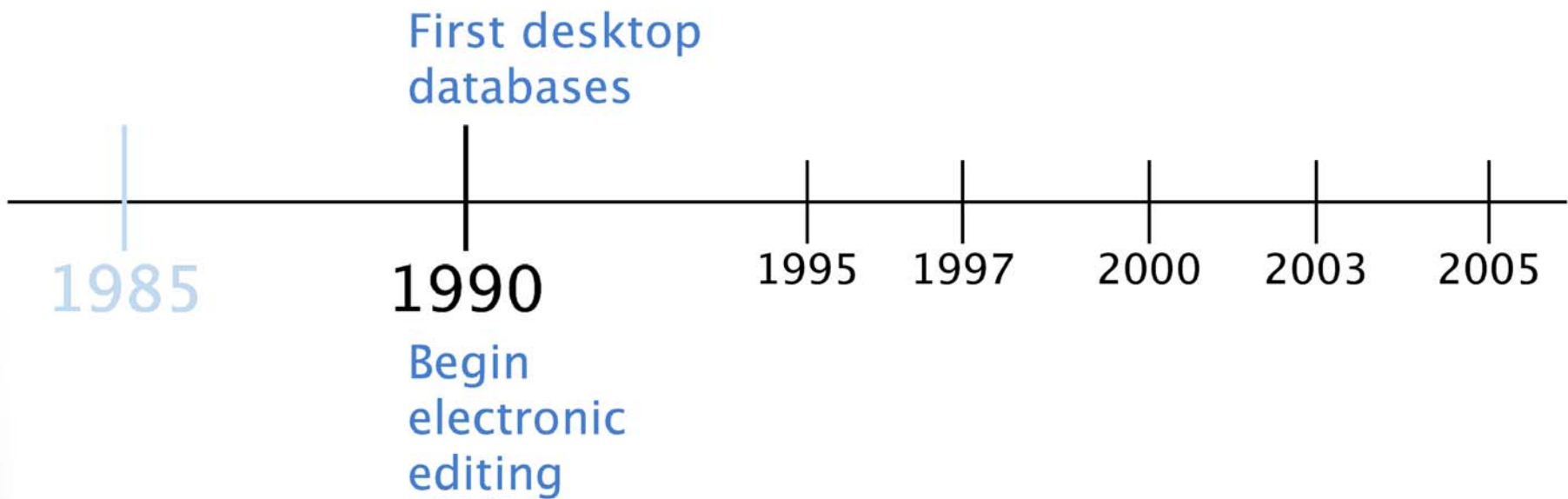
1997

2000

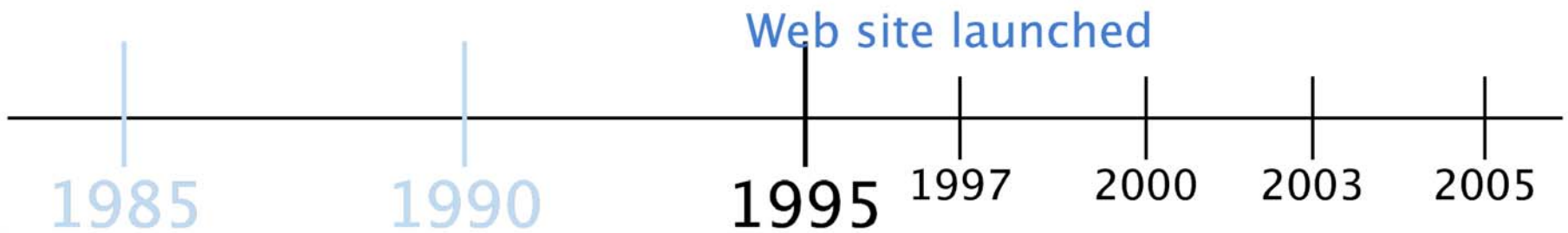
2003

2005

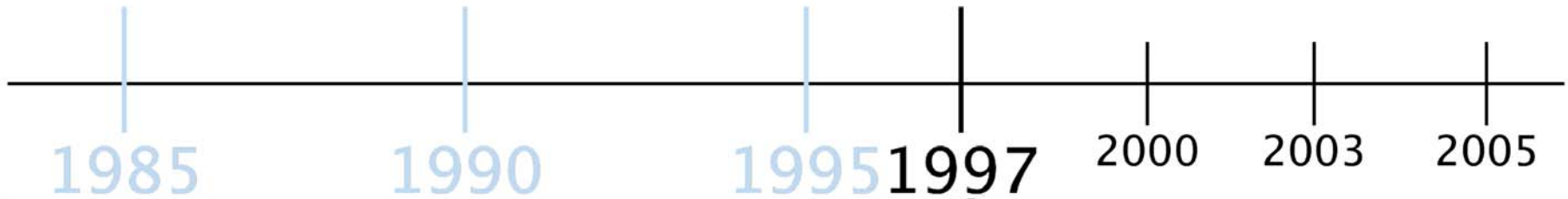
Evolution of CM at HUP



Evolution of CM at HUP

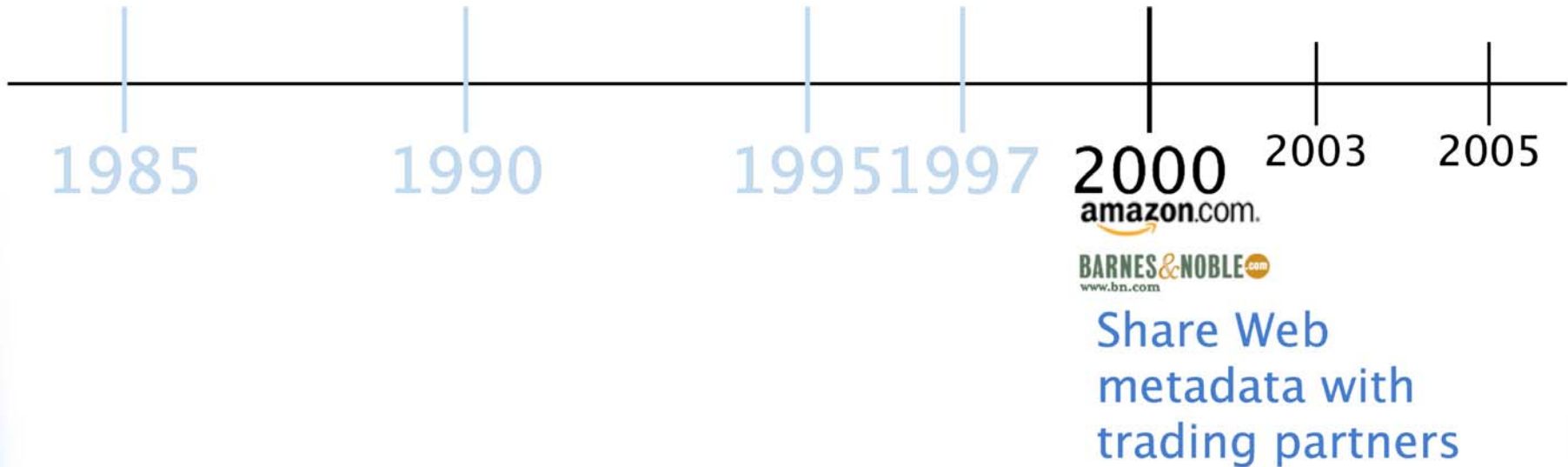


Evolution of CM at HUP

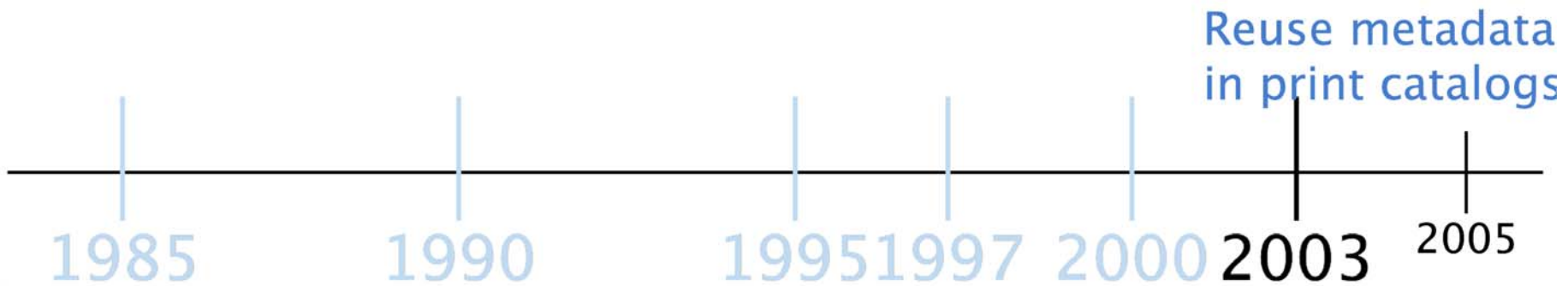


PressWide database

Evolution of CM at HUP

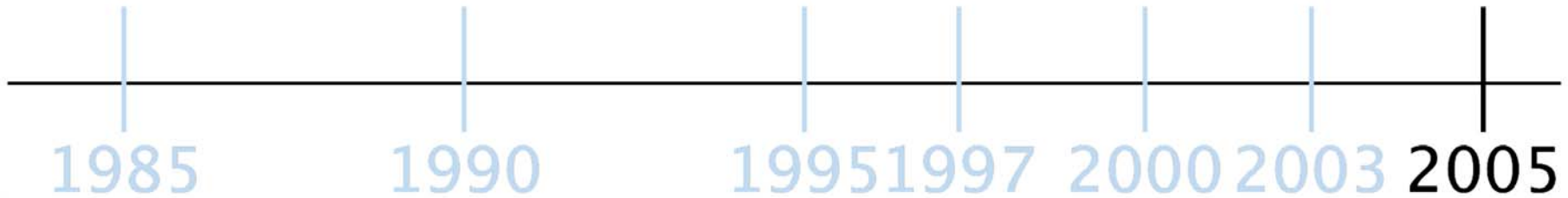


Evolution of CM at HUP



Evolution of CM at HUP

RSS Feeds
CSS Pages
ONIX via XSLT



CM: HUP's Problems

- Scattered valuable content
 - ◆ Quark documents
 - ◆ Static HTML pages
 - ◆ Spreadsheets and standalone databases
 - ◆ Vendors
- Resultant problems
 - ◆ Manual updates multiple times
 - ◆ Re-creation
 - ◆ Ads published with incorrect prices and catalogs mailed with misspelled author names

First Solution: Harpo

- Harpo = Harvard Press Online
- Launched in 1997
- FileMaker Pro 4.1
- Central database
- Final word on data



Welcome to Harpo

Rosemary Tietge

Browse

Title Information

Weber - The Success of Open Source

Main Authors Staff Products Printings

Layout:

Informati

Information Schedule Rights People

Record Number 1 of 1

Summary Description Categories Awards Matrix Info

Status 03/08/04 In Print go

- Menu
- List View
- Find
- Print Summary
- New Product

Primary Author Weber, Steven

Complete Title The Success of Open Source

Translated from Title

Language

Former Title

Acquisitions ed. MAA

List S04 Confirmed

Orig. Job Num. 10837N

Series 1 / Vol.

Series 2 / Vol.

Copub

Originating Pub

Length 320 actual pages 11/19/03

Illustrations 5 line illustrations

Simultaneous Ed Yes No Undecided

Brief Description This book is about the phenomenon of open source software--software where the source codes that construct it are not proprietary but are openly shared with the world community of programmers. What's fascinating is that

Key Dates

	Due	Done
Contract Date		01/21/2001
Approved by Syndics		02/10/2003
MS Due Contract	06/15/2002	

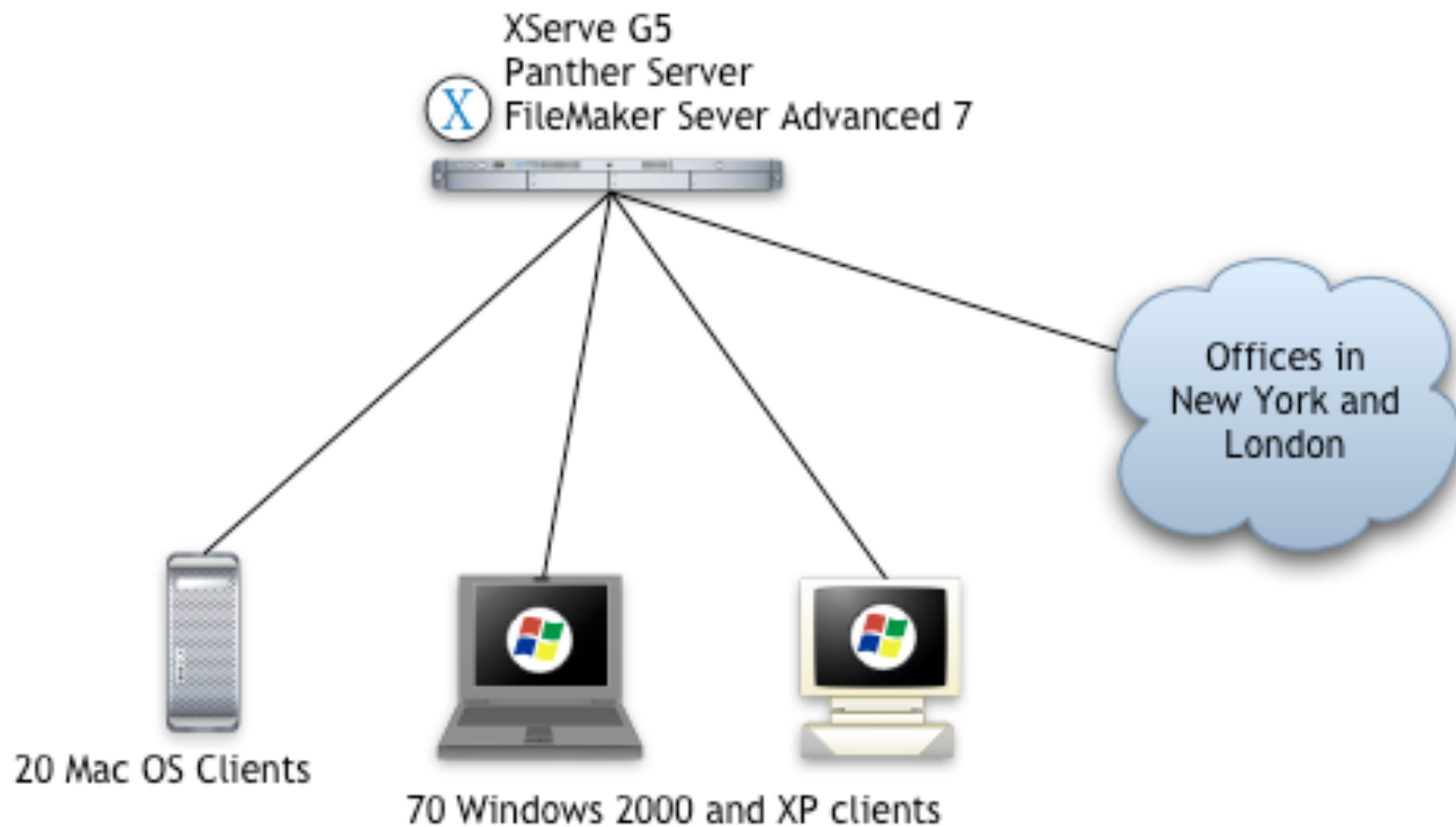
Products (Click on Product for complete information)

FS Cloth	S04	0-674-01292-5	WEBSUC	\$29.95	Acade	WO
FS Paper	F05	0-674-01858-3	WEBSUX	\$16.95	Trade	WO

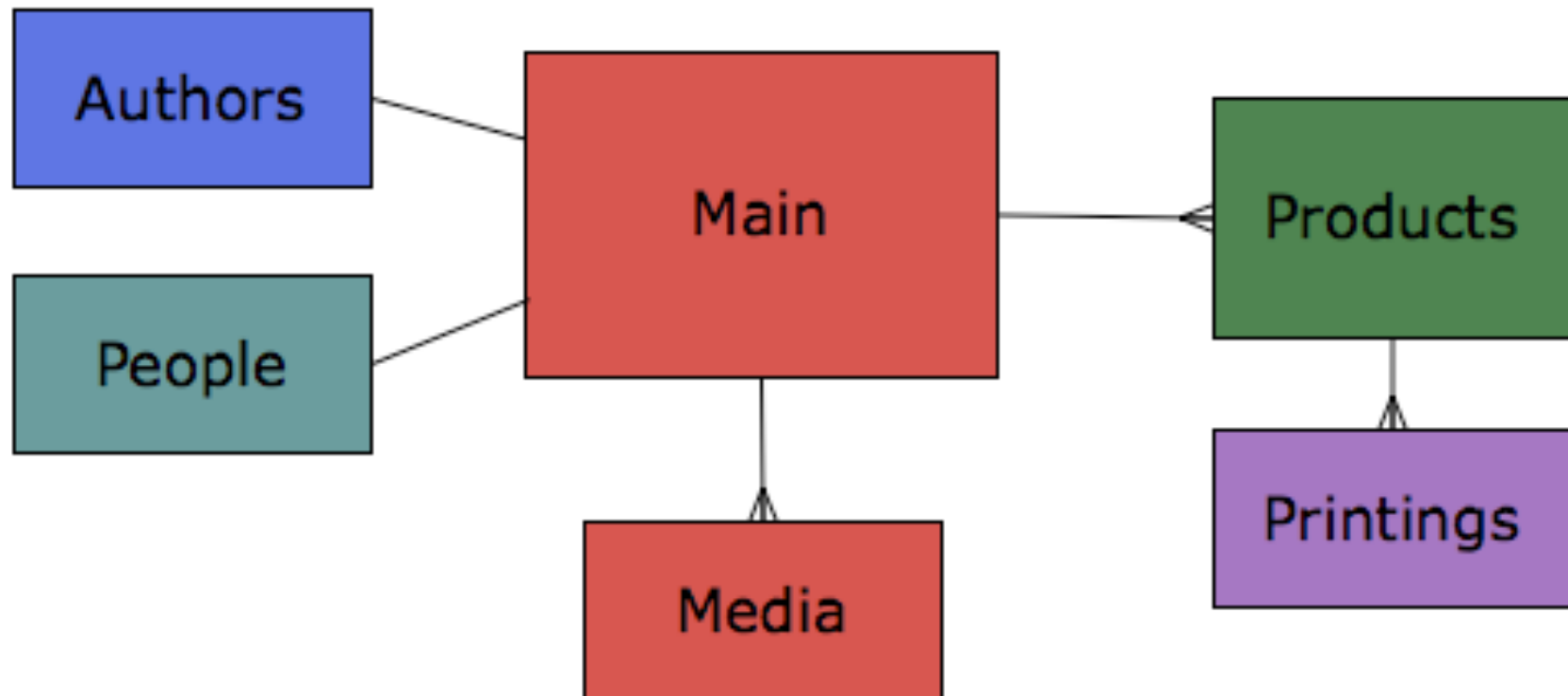
- All Changed
- Changed This Week

Quick Finds Author Last Name: go Title Keyword: open source go BookCode: go List: go

Harpo Infrastructure



Harpo ER Diagram



Harpo Entities

- **Main**
 - ◆ Intellectual material in the work
- **Media**
 - ◆ Text based marketing about the book
- **Products**
 - ◆ Details about specific instance of work (Cloth, paperback, electronic, audio)
- **Printings**
 - ◆ Details about specific printing of a product
- **Authors**
 - ◆ Details about people who write content of books (with whom we have a contract)
- **People**
 - ◆ Details about people who work on producing books

Next Solution: Basic CM

- Added descriptive copy to database
- FileMaker 5 and 6
- Developed easy to use tools for end users to reuse marketing data
 - ◆ Web catalog
 - ◆ Complete catalog / books in print
 - ◆ Subject catalogs
 - ◆ XML data exchange
- Focus on simple tools integrated with “the Macintosh way” and how designers—not techies—work and think

Media Database

Media

Harvard University Press **Descriptive Copy** ? Help

Weber, Steven, The Success of Open Source

ONIX Main Desc. 2000 characters / 350 for short desc.

Copy type Word Count Character Count

Copy

<p>
Much of the innovative programming that powers the Internet, creates operating systems, and produces software is the result of "open source" code, that is, code that is freely distributed--as opposed to being kept secret--by those who write it. Leaving source code open has generated some of the most sophisticated developments in computer technology, including, most notably, Linux and Apache, which pose a significant challenge to Microsoft in the marketplace. As <author>Steven Weber</author> discusses, open source's success in a highly competitive industry has subverted many assumptions about how businesses are run, and how intellectual products are created and protected.
</p><p>
Traditionally, intellectual property law has allowed companies to control knowledge and has guarded the rights of the innovator, at the expense of industry-wide cooperation. In turn, engineers of new software code are richly rewarded; but, as Weber shows, in spite of the conventional wisdom that innovation is driven by the promise of individual and corporate wealth, ensuring the free distribution of code among computer programmers can empower a more effective process for building intellectual products. In the case of Open Source, independent programmers--sometimes hundreds or thousands of them--make unpaid contributions to software that develops organically, through trial and error.
</p><p>
Weber argues that the success of open source is not a freakish exception to economic principles. The open source community is quided by standards, rules, decisionmaking procedures, and

Author

Source Date

Rank Used in Project

Last changed List--Original

150 Browse

MODIFIED THIS WEEK ALL MODIFIED

Media Fields

Define Database for "Media"

Tables Fields Relationships

Table: Media 24 fields defined View by: field name

Field Name	Type	Options / Comments (Click to toggle)
Asset_ID_pk	Text	Indexed, Auto-enter Serial
Asset type	Text	Indexed
Book ID	Number	Indexed
c_onixTextFormat	Calculation	Unstored, from Media, = // determine the text format for onix short tag <d103>, <TextFormat> // These values ...
c_onixTextPubD...	Calculation	Unstored, from Media, = // format text publication date for ONIX // required format = YYYYMMDD, e.g. 2005020...
Character count	Calculation	Unstored, from Media, = Length(Copy for web)
Constant	Calculation	Indexed, from Media, = 1
Copy	Text	
Copy for web	Calculation	Unstored, from Media, = Trim(Substitute(Substitute(Substitute(Substitute(Substitute(Substitute(Substitute(Sub...
Date modified	Date	Indexed, Modification Date
k_detail	Calculation	Indexed, from Media, = GetAsNumber(Book ID) & " - " & GetAsNumber(Asset_ID_pk)
k_MarketingProj...	Text	Indexed
OrderTemp	Number	
Rank	Number	Auto-enter Data
TextAuthor	Text	Indexed
TextFormat	Text	
TextPublication...	Date	Indexed
TextSourceTitle	Text	Indexed, Auto-enter Calculation replaces existing value, Evaluate Always
TextTypeCode	Calculation	Indexed, from Media, = Case(PatternCount(Asset type; "Catalog Final"); "01"; Asset type = "Web"; "01"; Asset type...
Type_Key	Calculation	Indexed, from Media, = GetAsNumber(Book ID) & " - " & TextTypeCode
Word Count	Calculation	from Media, = WordCount(Copy)
x_Layout	Number	Global
x_Num	Number	Global
x_Text	Text	Global

Field Name: Type: Text Options...

Comment:

Create Change Duplicate Delete

Print... Cancel OK

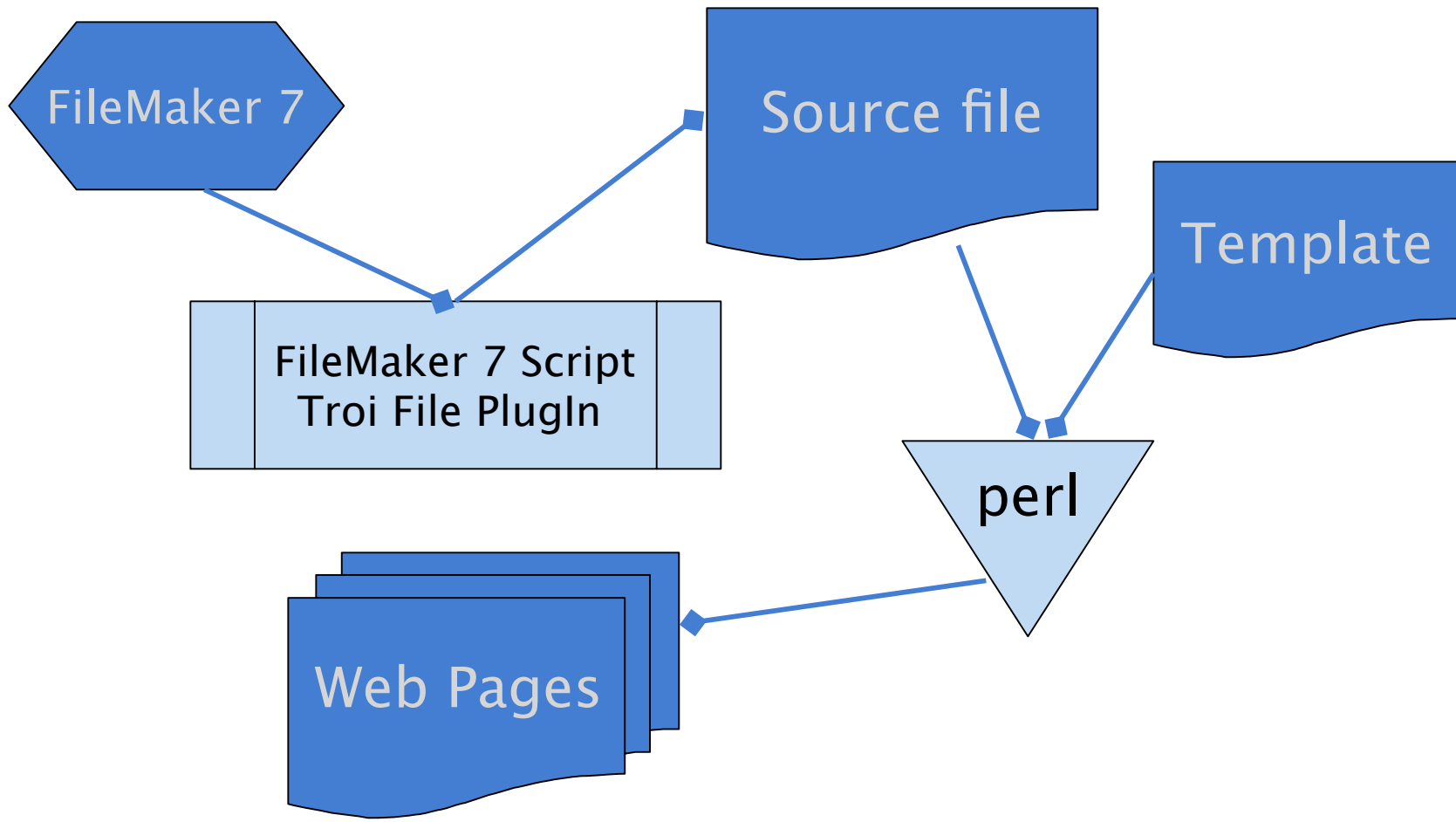
Demos

- 4 examples
 - ◆ Web catalog
 - ◆ Complete catalog
 - ◆ Business brochure (subject catalog)
 - ◆ ONIX (XML data exchange)
- Each example
 - ◆ Defines problem
 - ◆ Shows the workflow
 - ◆ Shows solution screenshots
 - ◆ Presents solution demonstration

Web catalog: Problem

- 5,200 titles in print
- Three Web pages per title
 - ◆ Main page, reviews, table of contents
- Require static pages
 - ◆ Search engines
- Make frequent updates to individual pages
- Two people maintain site

Web catalog: Workflow



Web catalog: Solution

View: Script Name:

Control

- Perform Script
- Pause/Resume Script
- Exit Script
- Halt Script
- If
- Else If
- Else
- End If
- Loop
- Exit Loop If
- End Loop
- Allow User Abort
- Set Error Capture

Navigation

- Go to Layout
- Go to Record/Request/Page
- Go to Related Record
- Go to Portal Row
- Go to Field
- Go to Next Field
- Go to Previous Field
- Enter Browse Mode
- Enter Find Mode
- Enter Preview Mode

Editing

- Undo
- Cut
- Copy
- Paste
- Clear
- Set Selection
- Select All
- Perform Find/Replace

Fields

- Set Field

Script Steps:

- Set Field [web_export::x_html; Main::distinctiveTitle & "¶" & If(not IsEmpty(Main::Subtitle); Main::Subtitle & "¶"; "") & If(not IsEmpty(Main::Editio
- Perform Script ["set up html--authors"]
- #Feature & PDFs
- Perform Script ["set up html--feature and pdfs"]
- #Copy
- Set Field [web_export::x_html; web_export::x_html & Case(Media::Asset type="Web"; "¶" & Media::Copy for web; Media::Asset type="Web Sho
- #Distributed books
- Set Field [web_export::x_html; web_export::x_html & If((PatternCount(Products_BookID::OwnerCode; "(D)") or PatternCount(Products_BookID::C
- #Awards
- Go to Layout ["Copy->Specific Types" (web_export)]
- Set Field [web_export::x_text; GetAsNumber(web_export::book id) & " - AW"]
- If [IsValid(Media Specific Type::Asset_ID_pk)]
- Set Field [web_export::x_html; web_export::x_html & "¶¶=a=¶"]
- Go to Portal Row [Select; First]
- Loop
- Set Field [web_export::x_html; web_export::x_html & Media Specific Type::Copy & "

"]
- Go to Portal Row [Select; Next; Exit after last]
- End Loop
- End If
- #Author Bios
- Perform Script ["set up html--author bios"]
- #Also by
- Perform Script ["set up html--also by"]
- #Reviews, etc.
- Perform Script ["set up html--reviews, blurbs, etc"]
- Perform Script ["set up specs no price / availability / dates"]
- Set Field [web_export::x_html; web_export::x_html & "=s=¶" & web_export::x_htmltemp]

Script Step Options

Indicate web compatibility Run script with full access privileges

Clear All Move Duplicate Cancel OK

Web catalog: Solution

The Success of Open Source

Steven Weber

<p>

Much of the innovative programming that powers the Internet, creates operating systems, and produces software is the result of "open source" code, that is, code that is freely distributed--as opposed to being kept secret--by those who write it. Leaving source code open has generated some of the most sophisticated developments in computer technology, including, most notably, Linux and Apache, which pose a significant challenge to Microsoft in the marketplace. As Steven Weber discusses, open source's success in a highly competitive industry has subverted many assumptions about how businesses are run, and how intellectual products are created and protected.

</p><p>

Traditionally, intellectual property law has allowed companies to control knowledge and has guarded the rights of the innovator, at the expense of industry-wide cooperation. In turn, engineers of new software code are richly rewarded; but, as Weber shows, in spite of the conventional wisdom that innovation is driven by the promise of individual and corporate wealth, ensuring the free distribution of code among computer programmers can empower a more effective process for building intellectual products. In the case of Open Source, independent programmers--sometimes hundreds or thousands of them--make unpaid contributions to software that develops organically, through trial and error.

</p>

=b=

Steven Weber is Professor of Political Science, University of California, Berkeley.

=r=

No reviews are available at this time.

=s=

5 line illustrations

320 pages

Hardcover edition

ISBN 0-674-01292-5

Current Events: Law / Computers: Operating Systems: General

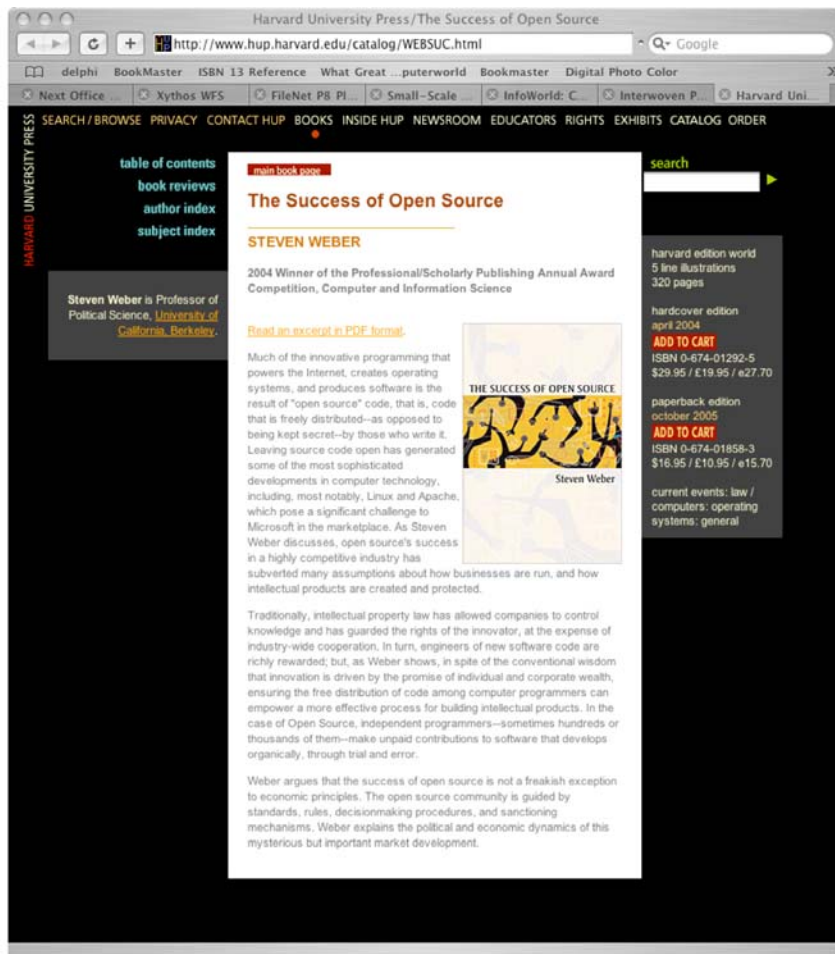
Web catalog: Solution

```
#!/usr/bin/perl
use strict;
use bytes;
#set variables for template and source locations, etc. Discover environment variables

.
.
.
foreach my $file (@files)
{
  chomp $file;
  if ($file =~ /^[0-9A-Za-z]*$/o) {
    print "\nReading \"$file\" .. ";
    my $file_path = $wd."/". $source_folder."/". $file;
    my @file = &open_file_read($file_path);

    #These next few block parse the book file into sections, in the
    #following manner:
    # --the file is iterated through to populate the %sections hash.
    # this process is described in that loop
    my %header_conv = (
      '=b=' => "bio",
      '=ab=' => "alsoby",
      '=s=' => "specs",
      '=c=' => "credits",
      '=a=' => "award",
      '=r=' => "reviews",
      '=toc=' => "contents",
      '=l=' => "links",
      '=d=' => "distributor",
    );
  }
}
```

Web catalog: Solution

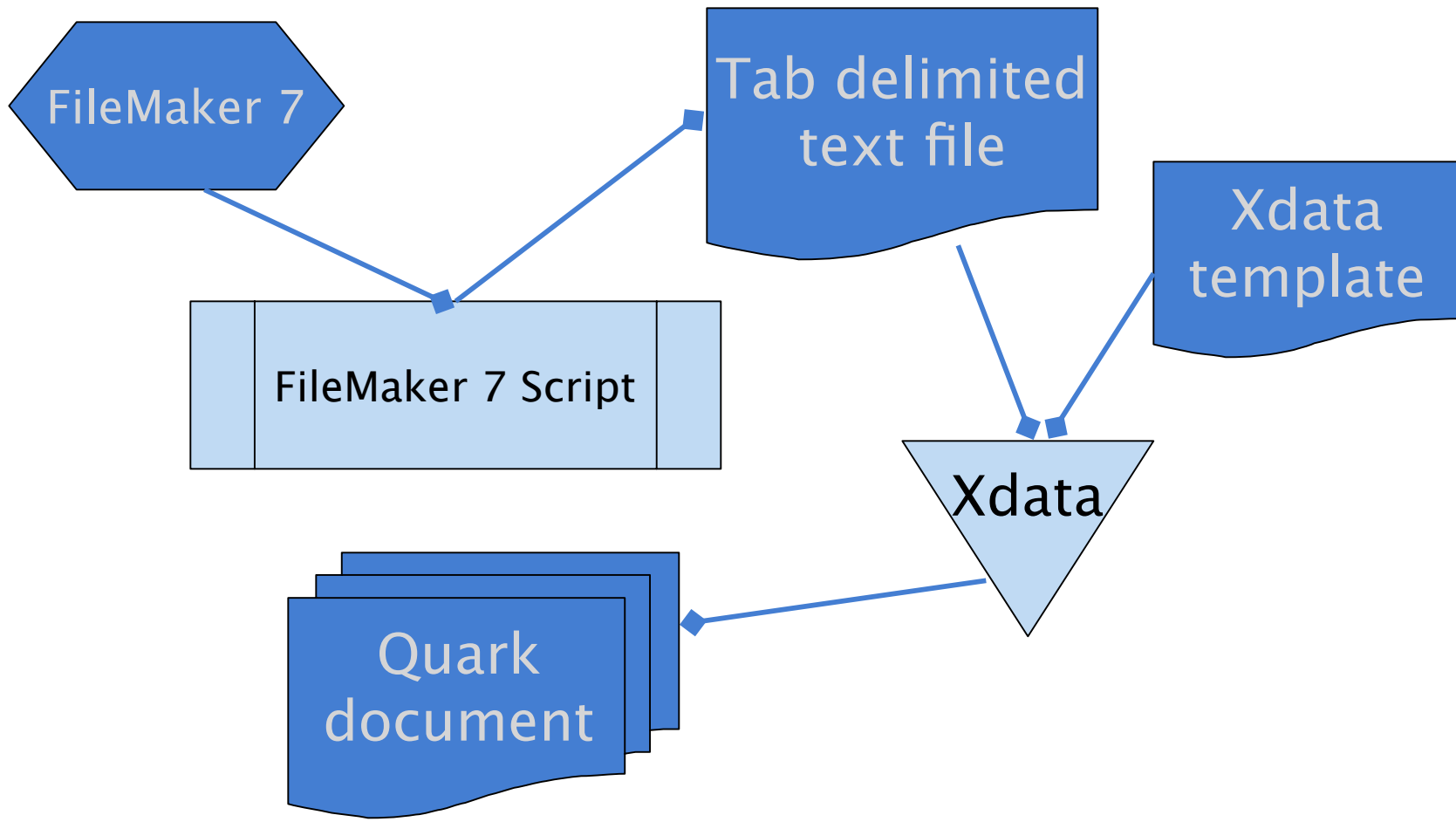


```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Harvard University Press/The Success of Open
Source</title>
<style type="text/css">
</style>
<meta name="DESCRIPTION" content="The Success of Open
Source: by Steven Weber, published by Harvard University
Press" />
<meta name="KEYWORDS" content="The Success of Open Source, ,
Steven Weber, Current Events: Law, Computers: Operating
Systems: General<br />" />
<meta name="ROBOTS" value="index,follow" />
<meta name="CHARSET" value="ISO-8859-1" />
<meta http-equiv="content-type"
content="text/html; charset=iso-8859-1" />
<link rel="stylesheet" href="/css/chapterpages.css"
type="text/css">
<link rel="stylesheet" href="/css/books_menu"
type="text/css">
</head>
<body bgcolor="#000000" text="#333399" link="#FF9900"
vlink="#FF6600"><table width="720" border="0" cellspacing="0"
cellpadding="0">
<table width="700" border="0" cellspacing="0" cellpadding="0"
class="books_text">
<tr><td width="12" valign="TOP" rowspan="2">
<a href="/index.html"></a>
</td><td colspan="5">
```

Complete Catalog: Problem

- \$12,000 / year to an outside vendor
- Difficult to keep data up to date
- Printed once a year
- Data stale as soon as catalogs were printed

Complete catalog: Workflow



Complete Catalog: Solution

2970	Weber, Eugen BP	France, Fin de Siècle BP SCH Paper 0-674-31813-7 WEBFRX 19.50	Cloth
2970	Weber, Eugen FS	Gaspard, Françoise A Small City in France FS Paper 1995 0-674-81097-X GASSMX 18.	
6294	Weber, Steven	The Success of Open Source FS	320 illus.
8991	Webster, Laurie D.	Collecting the Weaver's Art: The William Claflin Co	
4133	Wedell, George	Katz, Elihu Broadcasting in the Third World: Promis	
2972	Weems, Mason L.	The Life of Washington BP JHL	Pap
2973	Wei-Ming, Tu (ed.) FS	Confucian Traditions in East Asian Modernity: Moral Paper 1996 0-674-16087-8 TUCONX 25.	
2974	Weibel, Ewald R., M.D. FS	The Pathway for Oxygen FS Paper 0-674-65790-X WEIPAX 33.50	
2974	Weibel, Ewald R., M.D.	Symmorphosis: On Form and Function in Shaping L	

Complete Catalog: Solution

```
«fields AuthorID, Author, AdditionalAuthors, Reference, Title, Class, Series1, Vol1,
  Series2, Vol2, Pages, Art, Type, Description, Year, ISBN, Code, Price, Discount,
  Rights, status, list, NumProducts
«set defaultisstyled to true
«put 'F03' into currentlist
«put 'S04' into nextlist
«if recordnumber = 1»«put 1 into currentauthor»«put 1 into prevauthor»«endif
«if AuthorID ≠ currentauthor»«Author»«endif
«if Reference
«if AuthorID ≠ currentauthor» see «Reference»
  «else if AuthorID = currentauthor»See also «Reference»
«endif
  «if recordnumber > 1»«put currentauthor into prevauthor»«endif
  «put authorid into currentauthor
  «if numproducts > 1—pull second product for references»«read»«endif
  «if prev numproducts > 2—pull third product for references»«read»«endif
«else
«if AuthorID ≠ currentauthor
«if additionalauthors —concatenate to author and add spaces and commas
«if word 1 of additionalauthors = "and" «else», «endif»«additionalauthors»«endif»
  «Title».«if class = 'BP'» Belknap«endif
```

Complete Catalog: Solution

Wang, Hui and Theodore Huters (ed.) *China's New Order: Society, Politics, and Economy in Transition*. 256pp
Cloth 2003 0-674-00932-0 WANCHN \$22.95

Wang, Yeh-Chien *An Estimate of the Land Tax Collection in China, 1753 and 1908*. (HEAM52) 192pp
Cloth 1973 0-674-26825-3 WANEST \$21.00x (D)
Land Taxation in Imperial China, 1750-1911. (HEAS73) 192pp
Cloth 1974 0-674-50860-2 WANLAN \$35.00x

Wajnewski, Peter see **Muller, Ulrich**

Ward, David see **Easterlin, Richard A.**

Ward, Jamie see **Gilligan, Carol**

Ware, Susan *Beyond Suffrage: Women in the New Deal*.
Paper 0-674-06922-6 WARBEX \$17.95x
Letter to the World: Seven Women Who Shaped the American Century. 368pp
Paper 2000 0-674-52545-0 WARLEZ \$17.95

Warner, Michael *The Letters of the Republic: Publication and the Public Sphere in Eighteenth-Century America*.
Paper 0-674-52786-0 WARLEY \$20.50x
The Trouble with Normal: Sex, Politics, and the Ethics of Queer Life. 240pp
Paper 2000 0-674-00441-8 WARTRX \$17.95 COBE

Warner, Sam Bass, Jr. *Province of Reason*. *Belknap*
Paper 0-674-71958-1 WARPRX \$15.95x
Streetcar Suburbs: The Process of Growth in Boston, 1870-1900, 2nd ed.
Paper 0-674-84211-1 WARSTX \$18.95

Warnke, Martin *Political Landscape: The Art History of Nature*. (EAC)
Cloth 1995 0-674-68616-0 WARPOL \$46.50x NA
Paper 1996 0-674-68617-9 WARPOX \$27.50x NA

Washow, Robert *The Immediate Experience: Movies, Comics, Theatre, and Other Aspects of Popular Culture*. 320pp
Paper 2002 0-674-00726-3 WARIMX \$18.95

Wason, P. *Psychology of Reasoning: Structure and Content*.
Paper 0-674-72127-6 WASPSX \$18.95x

Wasserman, Jeffrey see **Manning, Willard**

Wasserstein, Bernard *Vanishing Diaspora: The Jews in Europe Since 1945*.
Cloth 1996 0-674-93196-3 WASVAN \$31.00 COBEE

Weber, Steven *The Success of Open Source*. 320pp illus.
Cloth 2004 0-674-01292-5 WEBSUC \$29.95

Wedell, George see **Katz, Elin**

Weems, Mason L. *The Life of Washington*. *Belknap* (JHL)
Paper 0-674-53251-1 WEELIX \$18.95x

Wei-Ming, Tu (ed.) *Confucian Traditions in East Asian Modernity: Moral Education and Economic Culture in Japan and the Four Mini-Dragons*.
Paper 1996 0-674-16087-8 TUCONX \$25.95x

Weibel, Ewald R., M.D. *The Pathway for Oxygen*.
Cloth 1984 0-674-65791-8 WEIPAT \$63.50x
Paper 0-674-65790-X WEIPAX \$33.00x
Symmorphosis: On Form and Function in Shaping Life. 280pp illus.
Cloth 2000 0-674-00068-4 WEISYM \$50.00x

Weiler, Paul C. *Governing the Workplace: The Future of Labor and Employment Law*.
Cloth 1990 0-674-35765-5 WEIGOV \$52.00x
Leveling the Playing Field: How the Law Can Make Sports Better for Fans. 368pp
Cloth 2000 0-674-00165-6 WEILEV \$33.00
Paper 2001 0-674-00687-9 WEILEX \$18.95x
Medical Malpractice on Trial. 240pp
Cloth 1991 0-674-56120-1 WEIMED \$44.00x

Howard Hintt, Joseph P. Newhouse, William G. Johnson, Troyen Brennan and Lucian Leape *A Measure of Malpractice: Medical Injury, Malpractice Litigation, and Patient Compensation*.
Cloth 0-674-55880-4 WEIMEA \$42.00x

Weinert, David L. see **Gormley, William T., Jr.**

Weinberg, Daniel see **Danziger, Sheldon H.**

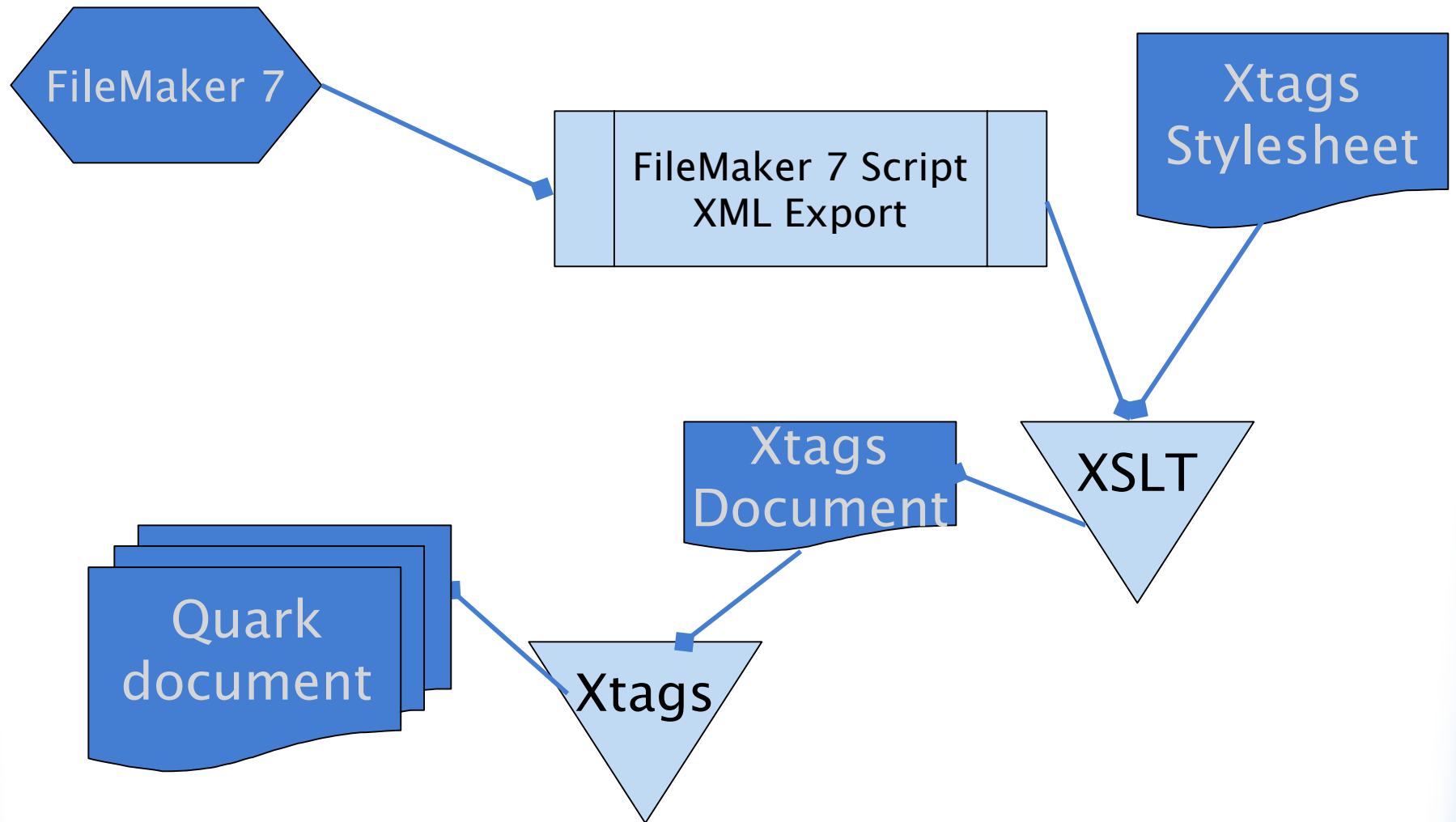
Weinberg, Steven *Facing Up: Science and Its Cultural Adversaries*. 300pp illus.
Cloth 2001 0-674-00647-X WEIFAC \$26.00x
Paper 2003 0-674-01120-1 WEIFAX \$16.95

Weinreb, Lloyd *Natural Law and Justice*.
Paper 1990 0-674-60426-1 WEINAX \$23.00x
Oedipus at Fenway Park: What Rights Are and Why There are Any.
Cloth 1998 0-674-63092-0 WEIOED \$41.50x

Direct Mail: Problem

- Minimum of 20 projects per year
- Gather data from many sources
- Re-key or copy and paste from past projects
- High error rate
- Three designers

Direct mail: Workflow



Direct Mail: Solution

The screenshot displays the MarketingPlan web application interface. The browser address bar shows 'MarketingPlan (harpo.hup.harvard.edu)'. The main heading is 'Direct Mail Projects' with a sub-heading 'Details for CourseBookProgram: World History, 2005'. A navigation bar includes 'List', 'Detail', 'Find', 'Show All', 'Print', and 'New Project'. A 'Complete?' checkbox is visible in the top right.

The form contains the following fields:

- Project: CourseBookProgram: World History
- Type: [Empty]
- Year: 2005
- Key Code: [Empty]
- Who?: Jennifer Harrington
- Deadline: [Empty]
- Color?:

On the right, a 'Notes' field contains: 'Neilberg's Fighting the Great War (cloth)--of special interest mention to say that the book is available in cloth--no discount!'.

The main content area is divided into four panes:

- Select Books:** A list of book titles including 'Gaddis, Surprise, Security, and the American Experience', 'Murray, The Iraq War', 'Fairbank, China', 'Barber, The Holy Grail', 'Changlin, Iron', 'Dubois, Avengers of the New World', 'Koenig, The Nazi Conscience', 'Bose, Kaphar', 'Friend, Indonesian Destinies', 'Singh, Black Is a Country', 'Shattuck, Freedom on Fire', 'Bryant, A Biography of No Place', 'Kortman, The Unfinished Revolution in Iran', 'King, What Is Gnosticism?', 'Hahn, A Nation under Our Feet', 'Service, A History of Modern Russia', 'Sart, Power and Protest', 'Chandler, Inventing the Economic Century', 'Mass, The Myth of the French Bourgeoisie', 'Fesser, Armed Servants', 'Kaplan, The Anarchy of Empire in the Making of U.S. Culture', 'Englund, Napoleon', 'Higsonnet, Paris', and 'Neilberg, Fighting the Great War'.
- Select Copy:** A sub-heading 'All Copy for Murray, The Iraq War'.
- Rating Lists:** Contains a 'Catalog Final--' section with a description of the book's expansion and a 'Web' section with a review snippet.
- Invoices:** A 'Project Details' section with a 'Web' section containing a review snippet.

Direct Mail: Solution

```
<v2.00><e0>
@Normal=<Ps100t0h100z10k0b0cKf"?>
@Normal=[S", "Normal", "Normal"]<L*h"Standard"*kn0*kt0*ra0*rb0*d0*p(0,0,0,0,0,0,g,"U.S. English")>
@title=[S", "author"]<L*h"Standard"*kn0*kt0*ra0*rb0*d0*p(0,0,0,0,9,3,g,"U.S. English")Ps100t0h100z12k0b0c"Web Green"f"?>
@subtitle=[S", "subtitle"]<L*h"Standard"*kn0*kt0*ra0*rb0*d0*p(0,0,0,11,0,4,g,"U.S. English")Ps100t0h100z8k0b0c"Web Green"f"?>
@author=[S", "author"]<L*h"Standard"*kn0*kt0*ra0*rb0*d0*p(0,0,0,0,0,5.976,g,"U.S. English")Ps100t0h100z10k0b0c"Web Green"f"?>
@subauthor=[S", "subauthor"]<L*h"Standard"*kn0*kt0*ra0*rb0*d0*p(0,0,0,0,0,6,g,"U.S. English")Ps100t0h100z8k0b0c"Web Green"f"?>
@datalines=[S", "datalines"]<L*h"Standard"*kn0*kt0*ra0*rb0*d0*p(0,0,0,0,0,0,g,"U.S. English")Ps100t0h100z8k0b0cKf"?>
@Copy=[S"Normal", "Copy", "Normal"]
@title:<cKf"?>The Success of Open Source
@author:<cKf"?>Steven Weber
@Copy:<f"?>As Weber shows, in spite of the conventional wisdom that innovation is driven by the promise of individual and corporate wealth, ensuring the free distribution of code among computer programmers can empower a more effective process for building intellectual products. In the case of Open Source, independent programmers make unpaid contributions to software that develops organically, through trial and error. Weber argues that the success of open source is not a freakish exception to economic principles and explains the political and economic dynamics of this mysterious but important market development.
In the world of open-source software, true believers can be a fervent bunch. Linux, for example, may act as a credo as well as an operating system. But there is much substance beyond zealotry, says Steven Weber, the author of <I>The Success of Open Source<I>...An open-source operating system offers its source code up to be played with, extended, debugged, and otherwise tweaked in an orgy of user collaboration. The author traces the roots of that ethos and process in the early years of computers...He also analyzes the interface between open source and the worlds of business and law, as well as wider issues in the clash between hierarchical structures and networks, a subject with relevance beyond the software industry to the war on terrorism.
<\m>Nina C. Ayoub, <I>Chronicle of Higher Education<I>
Steven Weber has produced a significant, insightful book that is both smart and important. The most impressive achievement of this volume is that Weber has spent the time to learn and think about the technological, sociological, business, and legal perspectives related to open source. <I>The Success of Open Source<I> is timely and more thought provoking than almost anything I've come across in the past several years. It deserves careful reading by a wide audience.
<\m>Jonathan Aronson, Annenberg School for Communication, University of Southern California
@datalines:<@$><t40z7f"?>2004 5 line illustrations 320 pp.
Cloth $29.95 £19.95
ISBN 0-674-01292-5 Book Code: WEBSUC
```

Direct Mail: Solution

sharing and pirating. This vexed ground, the realm of so-called "intellectual property," gives rise to a whole new kind of class conflict, one that pits the creators of information—the hacker class of researchers and authors, artists and biologists, chemists and musicians, philosophers and programmers—against a possessing class who would monopolize what the hacker produces. Drawing in equal measure on Guy Debord and Gilles Deleuze, *A Hacker Manifesto* offers a systematic restatement of Marxist thought for the age of cyberspace and globalization. In the widespread revolt against commodified information, McKenzie Wark sees a utopian promise, beyond the property form, and a new progressive class, the hacker class, who voice a shared interest in a new information commons.¶

What Ken Wark's book does is take us deep into the philosophy of hacking: it gives us a new way of seeing those irreverent folks who play for keeps with digital culture. Think of his book as a lexicon that says "play with digital culture like you would play with DNA—carefully." It's not every day that you get a book that takes you deep into the realm of practical analysis of the ways that we abstract thought and action in search for more kicks on-line, and for almost all aspects of control in digital culture from the top down "Hacker Manifesto" says—this is about exploration, this is about freedom. Inside out, upside down, information always wants to be free, and this is the book that shows us why. —Paul D. Miller a.k.a. Dj Spooky that Subliminal Kid author of *Rhythm Science*¶

Ours is once again an age of manifestos. Wark's book

The Success of Open Source¶

Steven Weber¶

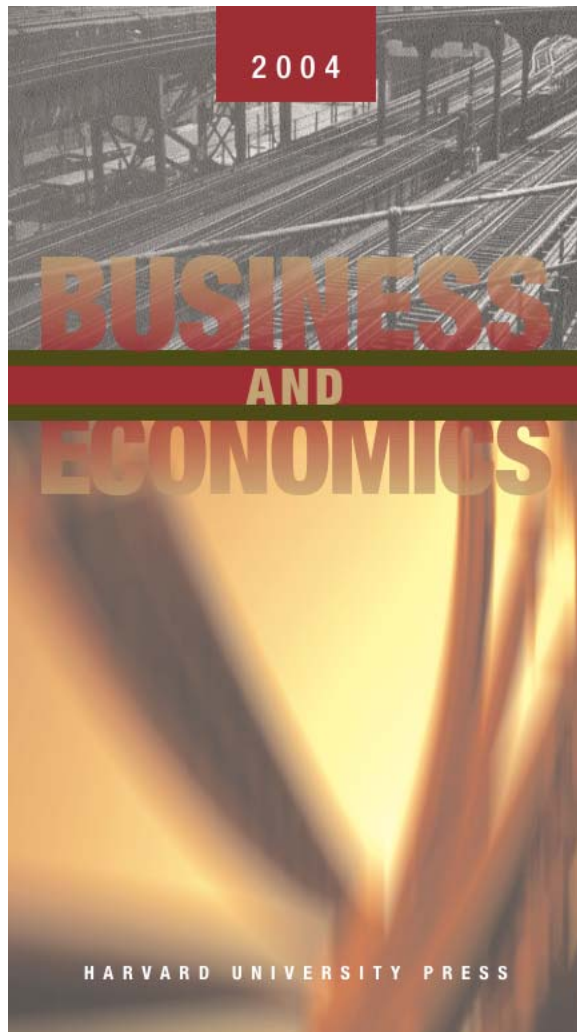
As Weber shows, in spite of the conventional wisdom that innovation is driven by the promise of individual and corporate wealth, ensuring the free distribution of code among computer programmers can empower a more effective process for building intellectual products. In the case of Open Source, independent programmers make unpaid contributions to software that develops organically, through trial and error. Weber argues that the success of open source is not a freakish exception to economic principles and explains the political and economic dynamics of this mysterious but important market development.¶

In the world of open-source software, true believers can be a fervent bunch. Linux, for example, may act as a credo as well as an operating system. But there is much substance beyond zealotry, says Steven Weber, the author of *The Success of Open Source*. An open-source operating system offers its source code up to be played with, extended, debugged, and otherwise tweaked in an orgy of user collaboration. The author traces the roots of that ethos and process in the early years of computers. He also analyzes the interface between open source and the worlds of business and law, as well as wider issues in the clash between hierarchical structures and networks, a subject with relevance beyond the software industry to the war on terrorism.¶

—Nina C. Ayoub, *Chronicle of Higher Education*¶

We can blindly continue to develop, reward, protect, and

Direct Mail: Solution

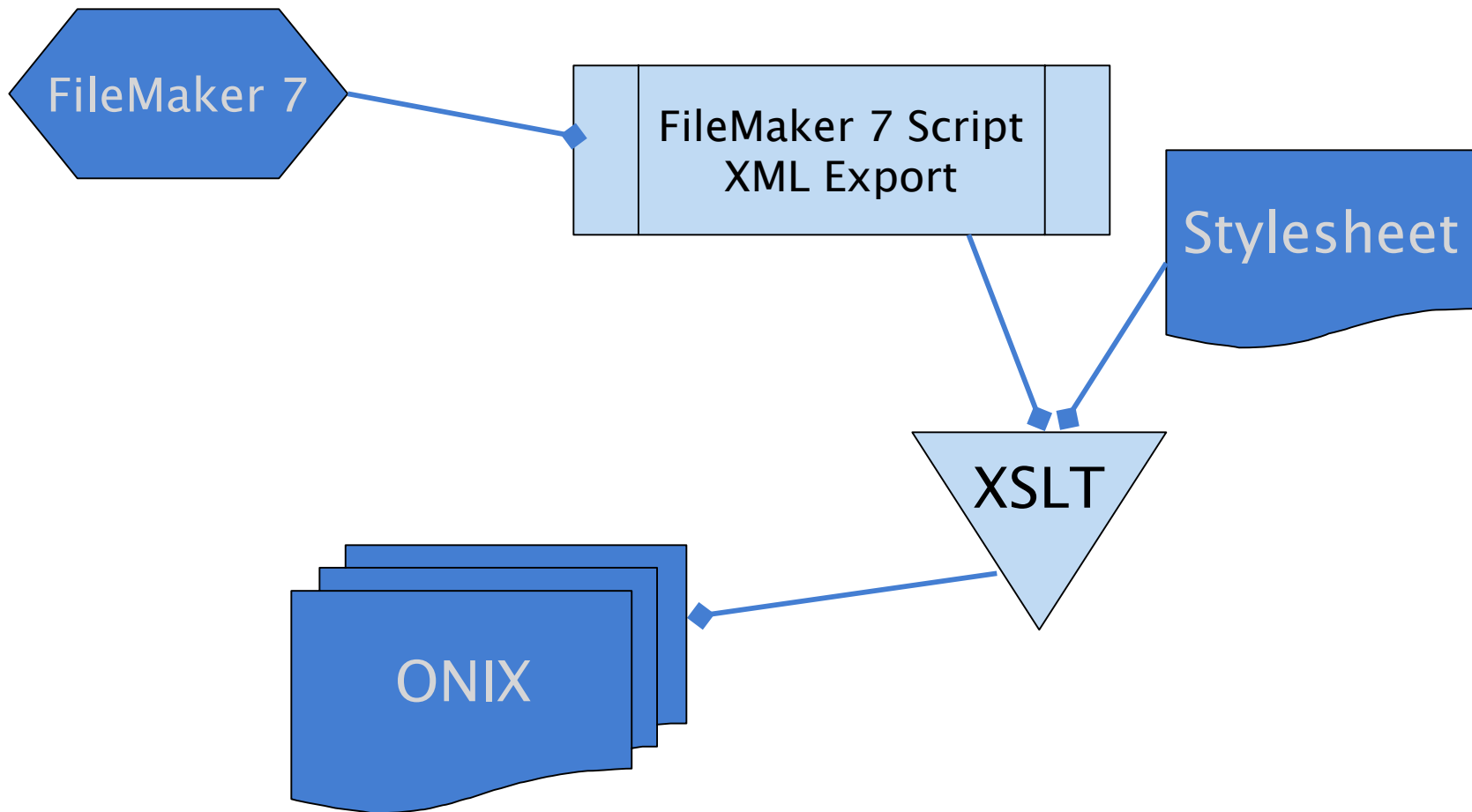


	<p>BUSINESS</p> <p>NEW</p> <p>INNOVATION THE MISSING DIMENSION</p> <p>RICHARD K. LESTER AND MICHAEL J. PIORO</p> <p>Richard K. Lester and Michael J. Pioro examine innovation strategies in one of the economy's most dynamic sectors. Through eye-opening case studies of new product development in fields such as cell phones, medical devices, and biotech, two fundamental processes emerge.</p> <p>Case studies processes, analysis rational problem solving dominates management and engineering practice. The other, interpretation, is not widely understood, or even recognized. Although, as the authors make clear, it is absolutely crucial to innovation. Unlike problem solving, interpretation embraces and exploits ambiguity, the welcoming of creativity in the economy. By emphasizing interpretation, and showing how these two radically different processes can be combined, Lester and Pioro look closer, manage and design the concrete and seek to keep new products flowing.</p> <p><i>Review</i>—<i>The Missing Dimension</i> does have a central focus, but it is such a broad-ranging coverage of the important subject of innovation that it actually adds many dimensions to the reader's thinking. A worthwhile experience. —ROBERT W. GALVIN, FORMER CEO, MOTOROLA</p> <p>Finally, a book that allows part the one-size-fits-all maverick of politicians and business pundits. <i>Review</i>—<i>The Missing Dimension</i> sets the standard for understanding how to compete in a global economy." —ROBERT BUDDE, EDITOR AT LARGE, TECHNOLOGY REVIEW AND A UTI OF OPENINGS OF TOMORROW</p> <p>It is pretty clear that the future of a leading-edge economy will rest on its capacity to innovate. It is not at all clear what institutions and processes, particularly those in education, building on a few already-mentioned ones, Lester and Pioro arrive at some interesting, plausible, and well-timed ideas about the way new products and processes come into existence and sometimes flourish. Their ideas have novel and significant implications for teaching, management and governance." —ROBERT M. SOLOW, NOBEL LAUREATE IN ECONOMICS</p> <p>2004 (line list) 240 pp., Cloth \$34.95 / \$16.95 ISBN 0 674 01317 9; ISBN Code LEB044</p>	
	<p>NEW</p> <p>THE SUCCESS OF OPEN SOURCE</p> <p>STEVEN WELLES</p> <p>As Welles shows, in spite of the conventional wisdom that innovation is driven by the promise of individual and corporate wealth, securing the free distribution of code among computer programmers can empower a more effective process for building, installing and producing. In the case of Open Source, independent programmers make unpaid contributions to software that develops organically through trial and error. Welles argues that the success of open source is not a fluke but a result of economic principles and explains the political and economic dynamics of this mysterious but important market development.</p> <p>In the world of open source software, one idea can be a force for good. Linux, for example, may act as a model as well as an operating system. Furthermore, it is much embraced by end users, says Steven Welles, the author of <i>The Success of Open Source</i>. An open source operating system offers its source code up to be played with, extended, debugged, and otherwise tweaked in an ongoing collaboration. The author traces the roots of Linux and processes in the early years of computers. He also analyzes the interface between open source and the worlds of business and law, as well as wider issues in the clash between hierarchical structures and networks, a subject with relevance beyond the software industry to the way we reason." —ANNA C. AVOUR, CHIEF OF KNOWLEDGE OFFICER, MOTOROLA AND UPI</p> <p>"We can blindly continue to develop, protect, and organize around knowledge assets on the comfortable assumption that their traditional property rights remain in place. Or we can listen to Steven Welles and begin to make our peace with the uncomfortable fact that the very foundations of our familiar knowledge as property works have essentially shifted." —ALAN KATZLOW, CHIEF KNOWLEDGE OFFICER, MOTOROLA AND UPI</p> <p><i>Read an excerpt of this book online:</i> www.up.harvard.edu/coding/WELLESUC.html</p> <p>2004 (line list) 200 pp., Cloth \$29.95 / \$10.95 ISBN 0 674 01292 3; ISBN Code WEL045</p>	
	<p>TWENTY-FIVE YEARS BEHIND BARS</p> <p><i>The Proceedings of the Twenty-fifth Anniversary of the U.F.C. at the Swarthmore Institution, September 30, 1998</i></p> <p>EDITED BY ALAN L. SHARFMANN</p> <p>The bar code is now at the core of commerce, transportation, warehousing, manufacturing, and retailing, and its influence has spread to virtually every industry in the industrialized world. When this voluntary product code was first introduced in 1974, it led to the world</p>	

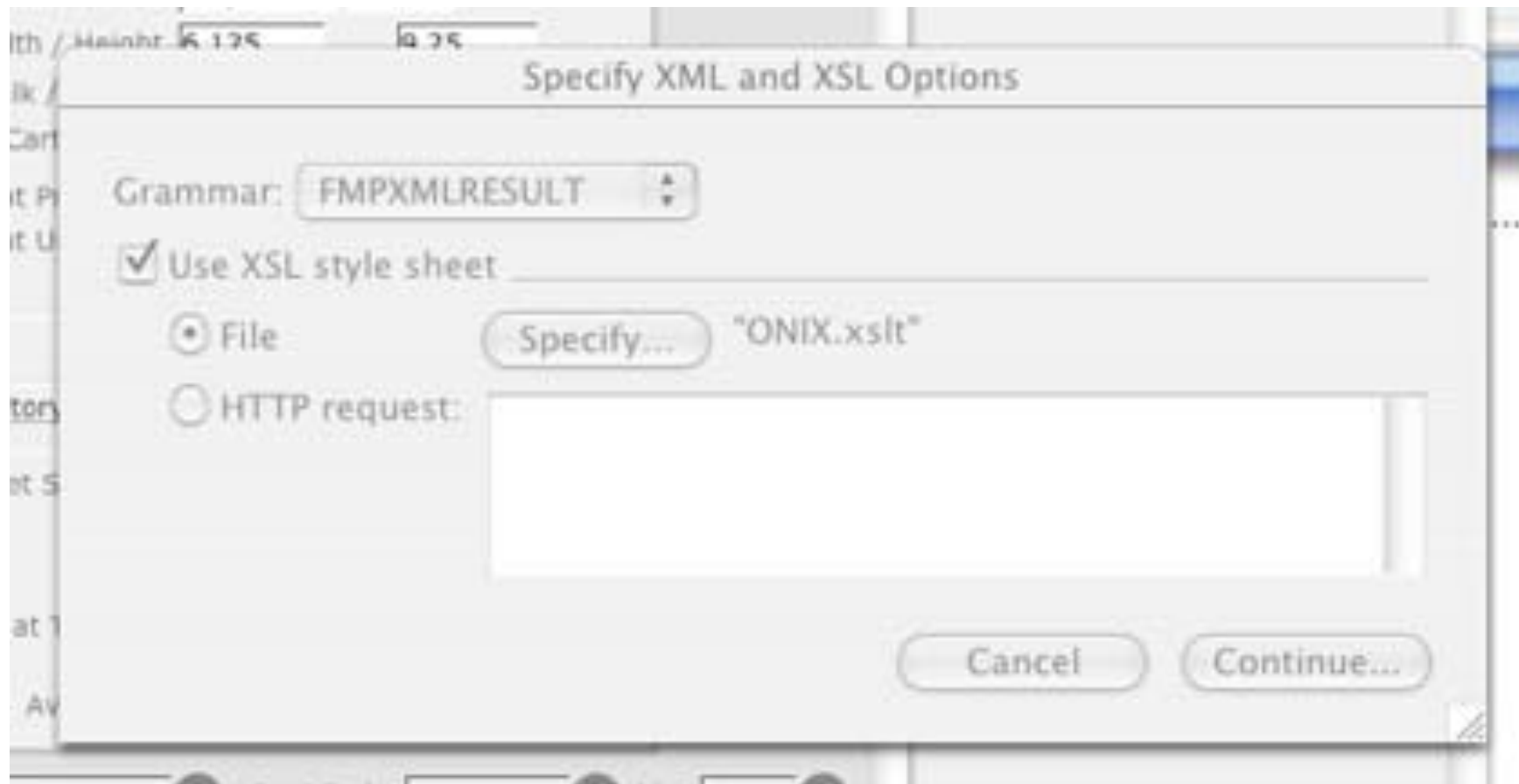
ONIX: Problem

- Replaced vendor specific formats
- Remains difficult to pull all the data together
- Non-technical staff person responsible for creating and distributing

ONIX: Workflow



ONIX: Solution



ONIX: Solution

```
543 <xsl:template match="fmp:ROW">
544   <product>
545     <xsl:call-template name="PR1_RecordReference"/>
546     <xsl:call-template name="PR2_ProductIdentifier"/>
547     <xsl:call-template name="PR3_ProductFormCode"/>
548     <xsl:call-template name="PR3_BookFormDetail"/>
549     <xsl:call-template name="PR5_Series"/>
550     <xsl:call-template name="PR6_Set"/>
551     <xsl:call-template name="PR7_Title"/>
552     <xsl:call-template name="PR8_Contributor"/>
553     <xsl:call-template name="PR10_Edition"/>
554     <xsl:call-template name="PR11_Language"/>
555     <xsl:call-template name="PR12_Extents"/>
556     <xsl:call-template name="PR13_Subject"/>
557     <xsl:call-template name="PR14_Audience"/>
558     <xsl:call-template name="PR15_OtherText"/>
559     <xsl:call-template name="PR16_ImageLinks"/>
560     <xsl:call-template name="PR17_Prizes"/>
561     <xsl:call-template name="PR19_Publisher"/>
562     <xsl:call-template name="PR20_PubStatus"/>
563     <xsl:call-template name="PR21_TerritorialRights"/>
564     <xsl:call-template name="PR22_Dimensions"/>
565     <xsl:call-template name="PR23_RelatedProducts"/>
566     <xsl:call-template name="PR24_SupplierAndPrices"/>
567   </product>
568 </xsl:template>
569
570 <xsl:template match="fmp:FMPXMLRESULT">
571   <!-- PROCESS EACH RECORD -->
572   <ONIXmessage release="2.1">
573     <xsl:call-template name="Header"/>
574     <xsl:apply-templates select="fmp:RESULTSET/fmp:ROW"/>
575   </ONIXmessage>
576 </xsl:template>
577 </xsl:stylesheet>
```

What's Next: ECM

- Enterprise content management
- Expand beyond marketing data
 - ◆ Add images to database
 - ◆ Link Harpo to Zeppo
 - ◆ Store documents in FileMaker
- Use XML export for other cases
 - ◆ Web: XML export with CSS
 - ◆ Catalogs: XML export to InDesign

Conclusions

- Why content management (CM)?
- Do you need a content management system (CMS)?
- What is a CMS?
- Four examples of how a simple CMS works at HUP

Resources

- Tools
 - ◆ www.filemaker.com/xml
 - ◆ www.editeur.org for information about ONIX
 - ◆ www.troi.com
 - ◆ www.emsoftware.com
- Books
 - ◆ *XML in a Nutshell*, Harold and Means, O'Reilly
 - ◆ *Special Edition Using FileMaker Pro 7*, Lane, Bowers, Love and Moyer, Que
- rosemary_tietge@harvard.edu