Initial Slideshow

See also Initial Interview

Tiki Suite

Going beyond
Tiki Wiki CMS Groupware

An integrated suite of open source collaboration & publishing tools for small & medium-sized organizations, featuring Wiki + CMS + Groupware + Commerce + Document Management + CRM + Web conferencing + Video editing + E-learning, etc.

by Marc Laporte, Project Admin
Confoo2011, Canada

Intro

- Think of an organization you know of with a staff of 10 to 100

- When will 80% of them be using just Web Applications 80% of the time? (the unit becomes a web page instead of a file)

- Now? 1 year? 2 years? 5 years 10 years? Never?

  - "**Skate to where the puck will be**" *--Wayne Gretzky*

- It's a suite of applications around Tiki

- Suite means "next step" in French, so "next step for Tiki"

- But what is Tiki?

Tiki Wiki CMS Groupware

- **T**ightly **I**ntegrated **K**nowledge **I**nfrastructure
- Combination CMS + Wiki + Groupware +++
- Open Source (LGPL)
- 225 code committers since 2002. "This is one of the largest open-source teams in the world, and is in the top 2% of all project teams on Ohloh." source: http://www.ohloh.net/p/tikiwiki/factoids/
- 4x faster release schedule (every 6 months) than comparable apps (Drupal, Joomla!, Plone)

- 900 000+ downloads so far
- Translated into 40+ languages
- 1000+ pages of documentation
- Runs on standard PHP/MySQL making web hosting **easy and inexpensive**
- Over a **million** lines of code (including 3rd party libraries such as jQuery, Smarty and Zend Framework)
- A new code commit **every two hours**
- **But mostly…**

Hundreds of built-in features

Action log Alert Articles & Submissions Backlinks Backup Banner Blog Bookmark Browser Compatibility Cache Calendar Category Charts Chat Comment Communication Center Compression (gzip) Contact Address book Contact us Content template Contribution Cookie Copyright Custom Home (and Group Home Page) Date and Time Debugger Console Directory (of hyperlinks) Documentation (Help System) DogFood Drawing Dynamic Content Dynamic Variable External Authentication FAQ Featured links File Gallery Forum Friendship Network (Community) Game Gmap Google maps Group Help System Hotword HTML Page i18n (Multilingual, l10n, Babelfish) Image Gallery Install Integrator Interaction Inter-User Messages InterTiki JS Calendar Karma Live Support Login Lost edit protection Mail-in Map with Mapserver Menu Meta Tag Mini-Calendar Mobile Tiki and Voice Tiki Mods Module Mootools Multimedia MultiTiki MyTiki Newsletter Newsreader Notepad OS independence (Non-Linux, Windows/IIS, Mac, BSD) PDF Performance Speed / Load Permission Poll Profile Manager Quicktags Quiz Rating Registration RSS Score Search Engine Friendly Search Security Semantic links Shadowbox Shoutbox Site Identity Slideshow Smarty Template Smiley Spam protection (Anti-bot CATPCHA) Spellcheck Spreadsheet Stats Survey System log Tags Task Tell a Friend + Social Bookmarking TikiTests Theme Trackers TRIM User Administration User Files User Menu Watch WebHelp Webmail Wiki 3D Wiki History, page rename, etc Wiki plugins extends basic syntax Wiki syntax text area, parser, etc Wiki structure (book and table of content) Workflow (Galaxia Workflow engine) WYSIWYCA WYSIWYG XMLRPC

•Over 1000 settings/options in the admin panel!

The Open Source Web application with the most built-in features. There are so many, we had to add a search engine!

Other popular apps have a different model: small core + loads of functionality in 3rd party add-ons.

But...

- **No hunting** around to find the best 3rd party module

- No needing to **re-install 3rd party modules** at every upgrade, *hoping* they all still work!

- Because, in Tiki, everything is built-in and developers **collaborate** on and **extend** features, instead of just *cooperating* around a core (when they are not just outright *competing...*). And ***upgrades are easy***!

- Do you have two wiki pages for the same thing?
  No. Why would it be so for features?

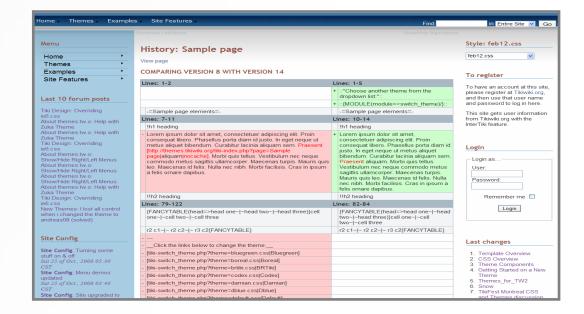- More later about the model, let's describe some features!

Permissions & groups

- **Users can be in any number of groups**

- **Groups can be included in groups**

- **Registration system**

- **Over 200 permissions, which can be:**

  - **System-wide (global)**

  - **by item (object)**

  - **by category (workspaces)**

☐ tiki_p_forums_report	forums	Can report msgs to moderator	
☑ tiki_p_forum_post	forums	Can post in forums	inherited inherited from Registered
☑ tiki_p_forum_read	forums	Can read forums	inherited from Anonymous
☐ tiki_p_forum_vote	forums	Can vote comments in forums	
☑ tiki_p_forum_post_topic	forums	Can start threads in forums	inherited inherited from Registered
☐ tiki_forum_edit_own_posts	forums	Can edit own forum posts	
☑ tiki_p_view_freetags	freetags	Can browse freetags	inherited from Anonymous
☑ tiki_p_freetags_tag	freetags	Can tag objects	inherited from Anonymous
☐ tiki_p_admin_freetags	freetags	Can admin freetags	
☐ tiki_p_unassign_freetags	freetags	Can unassign tags from an object	
☐ tiki_p_admin_games	games	Can admin games	
☐ tiki_p_play_games	games	Can play games	
☐ tiki_p_hw_teacher	homework	Can create new homework assignments, see student names and grade assignments	
☐ tiki_p_hw_student	homework	Can do homework assignments	
☐ tiki_p_hw_grader	homework	Can grade homework assignments	
☐ tiki_p_hw_admin	homework	Can adminsiter homework	
☐ tiki_p_edit_html_pages	html pages	Can edit HTML pages	
☐ tiki_p_view_html_pages	html pages	Can view HTML pages	
☐ tiki_p_admin_galleries	image galleries	Can admin Image Galleries	

Wiki engine

- **Powerful wiki syntax**

- **Powerful version history and diff engine**

- **Book and table of content**

- **Email notification of changes**

- **Advanced plugins**

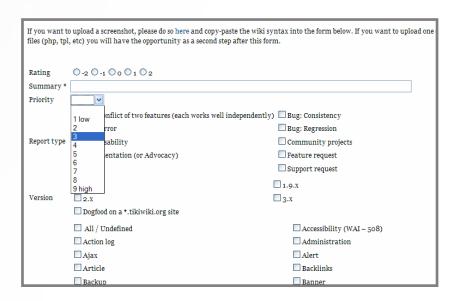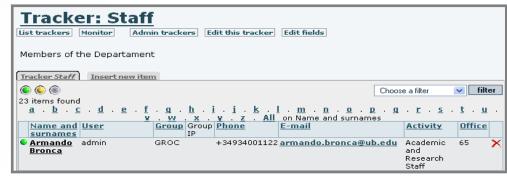- **Advanced translation synchronization**

Tracker & form generator & reports

- **Create custom application**

- **Bug tracker, application forms, contact forms, etc.**

- **Can create reports in wiki pages**

- **Multilingual**

- **Can link to other trackers**

- **20+ field types:**
  text field, text area, checkbox, numeric field, drop down, radio buttons, user selector, date and time, image, category, email, auto-increment, Google Maps, computed field, attachment, etc.
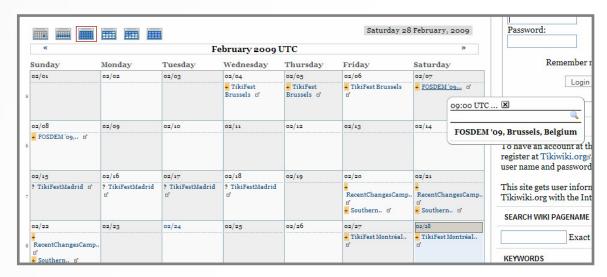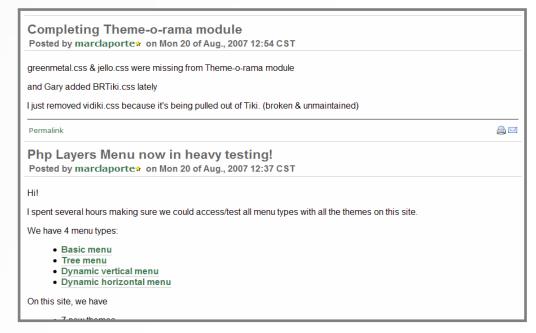
Calendar

- **Several calendars**

- **iCal**

- **Recurring events**

- **RSS feeds**

- **Distinct permissions**

Blog & news articles

- **Several blogs**

- **Topics**

- **Tags & categories**

- **RSS feeds**

- **Permissions**

- **Can use wiki syntax**

Completing Theme-o-rama module
Posted by **marclaporte**☆ on Mon 20 of Aug., 2007 12:54 CST

greenmetal.css & jello.css were missing from Theme-o-rama module

and Gary added BRTiki.css lately

I just removed vidiki.css because it's being pulled out of Tiki. (broken & unmaintained)

Permalink

Php Layers Menu now in heavy testing!
Posted by **marclaporte**☆ on Mon 20 of Aug., 2007 12:37 CST

Hi!

I spent several hours making sure we could access/test all menu types with all the themes on this site.

We have 4 menu types:

- **Basic menu**
- **Tree menu**
- **Dynamic vertical menu**
- **Dynamic horizontal menu**
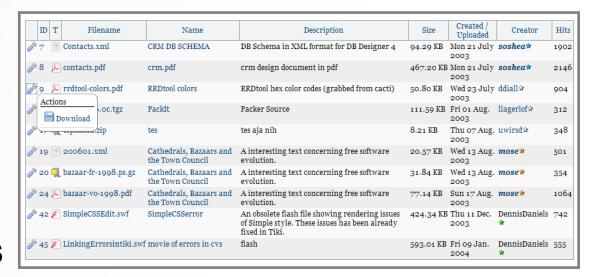
On this site, we have

Discussion forums

- **Threaded or flat forums**

- **Mailing list integration**

- **Can use wiki syntax**

- **File Attachment**

- **Email notification of replies**

File & image galleries

- **Hierarchical galleries**

- **Check-in/ Check-out/lock**

- **Categories for files**

- **Permissions**

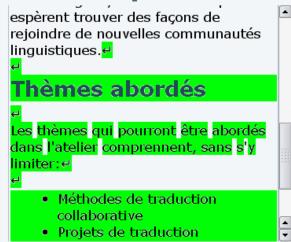- **Watch (notification of change by email)**

- **WebDAV support**

ID	T	Filename	Name	Description	Size	Created / Uploaded	Creator	Hits
7		Contacts.xml	CRM DB SCHEMA	DB Schema in XML format for DB Designer 4	94.29 KB	Mon 21 July 2003	*soshea*★	1902
8		contacts.pdf	crm.pdf	crm design document in pdf	467.20 KB	Mon 21 July 2003	*soshea*★	2146
9		rrdtool-colors.pdf	RRDtool colors	RRDtool hex color codes (grabbed from cacti)	50.80 KB	Wed 23 July 2003	ddiall☆	904
		.oc.tgz	PackIt	Packer Source	111.59 KB	Fri 01 Aug. 2003	llagerlof☆	312
		Actions Download						
17		topitem2.zip	tes	tes aja nih	8.21 KB	Thu 07 Aug. 2003	uwirsd☆	348
19		200601.xml	Cathedrals, Bazaars and the Town Council	A interesting text concerning free software evolution.	20.57 KB	Wed 13 Aug. 2003	*mose*★	501
20		bazaar-fr-1998.ps.gz	Cathedrals, Bazaars and the Town Council	A interesting text concerning free software evolution.	31.84 KB	Wed 13 Aug. 2003	*mose*★	354
24		bazaar-vo-1998.pdf	Cathedrals, Bazaars and the Town Council	A interesting text concerning free software evolution.	77.14 KB	Sun 17 Aug. 2003	*mose*★	1064
42		SimpleCSSEdit.swf	SimpleCSSerror	An obsolete flash file showing rendering issues of Simple style. These issues has been already fixed in Tiki.	424.34 KB	Thu 11 Dec. 2003	DennisDaniels ★	742
45		LinkingErrorsintiki.swf	movie of errors in cvs	flash	593.01 KB	Fri 09 Jan. 2004	DennisDaniels ★	555

Multilingual

- **Translated to 35+ languages**

- **Wiki has awesome i18n change tracking**

- **Wiki-translation.com**

The Tiki model

- Wiki community
- Wiki way participation to the code
- All-in-one codebase
  - Inherent synchronized releases
- Lots of features, but no duplication
- Dogfood
- Scheduled releases (twice per year)
  - LTS every 3-4 releases

- tiki.org/Model

- Offers **benefits**
  - Tons of features, without duplication, excellent code re-use and code review, more collaboration, tight integration, easy upgrades, excellent interaction between features, etc.
  - Permits huge changes between versions **because** we don't have to worry about breaking 3rd party extensions.

- But does bring **challenges**
  - Huge code base to maintain.
  - Admin panels
    - hundreds of features
    - with a total of over 1000 settings/options! (we had to add a search!)
  - Learning curve: 1000+ pages of documentation
  - What should be sensible defaults?

Why this evolution?

- Tiki: the Open Source Web App with most built-in features

- Tiki is PHP / MySQL / Zend Framework / Smarty / jQuery

- But starting to be limited by its technology (PHP/MySQL/JavaScript on **shared hosting)** to address all the needs. Some functionality, like video editing, doesn't make sense in PHP/MySQL.

Use case

- 2 to 100 employees

- External consultants, partners & volunteers

- Multilingual, distributed & mobile work force

- Knowledge workers

- This represents **millions** of organizations

Diverse needs

- CMS / Portal / Blog / Publishing
- Intranet / Extranet / Collaboration / Document Management / Wiki / Groupware / Project Management / Forms / Framework
- CRM / Customer support / Social Networking
- E-Commerce / ERP / Accounting
- Online training / tech support / Issue tracker
- Web conferencing / chat / telephony
- Etc.

Challenges

- Multiple systems

- Diverse needs

- Desktop centric

- Difficult to do tech support

- Interoperability is very difficult

Zawinski's Law

- Zawinski's Law of Software Envelopment (also known as Zawinski's Law) relates the pressure of popularity to the phenomenon of software bloat.

- "Every program attempts to expand until it can read mail. Those programs which cannot so expand are replaced by ones which can."

Coping with Zawinski's Law

- When planes crash, do we blame gravity? We must cope with this!

- 37 signals in the book "Getting Real" : *"Goodbye to bloat. Simple, focused software that does just what you need and nothing you don't"*

- In an Community Open Source project, it'll be difficult to get consensus on what is **"needed"** and what is **"bloat"**

Intertwingularity

- EVERYTHING IS DEEPLY INTERTWINGLED. In an important sense there are no "subjects" at all; there is only all knowledge, since the cross-connections among the myriad topics of this world simply cannot be divided up neatly.

- Hierarchical and sequential structures, especially popular since Gutenberg, are usually forced and artificial. Intertwingularity is not generally acknowledged—people keep pretending they can make things hierarchical, categorizable and sequential when they can't.

- **Best of breed** vs. **suites** vs. **feature bloat**

- While Ted Nelson coined "Intertwingularity" to express the "complexity of interrelations in human knowledge", it's the same problem for software. There will always be overlap.

- Apple controls both the hardware and the software which make it much simpler (drivers, UI, etc.)

- Every app claims interoperability

  - It's very hard! Even within apps of a same software maker!

Trend to suites

- Because of Zawinksi's law, intertwingularity and the progressive move to Web Applications, more & more apps and SaaS will offer "everything".

- **"It's best to do one thing really, really well."** –Google

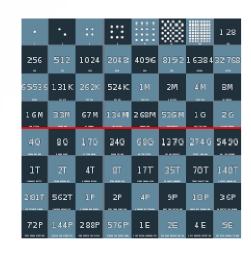- Google started just with search. And now? :-)

SaaS

- A number of companies are offering (or will one day offer) "manage your organization in the cloud"

- Google Apps, Zoho, NetSuite, Salesforce, Microsoft, SAP, IBM, Apple, Facebook, Oracle, Yahoo!, etc.

- Interoperability will remain a challenge.

Second half of the Chessboard

- The more features / systems there are, the more interoperability is desired / needed and the complexity increases faster and faster.

- How can we keep the complexity level on first half of chessboard?

- http://en.wikipedia.org/wiki/Combinatorial_explosion

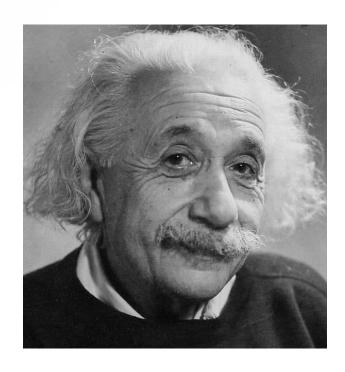- http://en.wikipedia.org/wiki/Wheat_and_chessboard_problem#Second_half_of_the_chessboard

The delicate balance

- "Make things as simple as possible, but not simpler"

  - *--Albert Einstein*

- Use as **few apps** as possible, but as many as needed. Bonus points to **all-in-one apps and libs** that maintain the interoperability of their components (ex.: BigBlueButton, Zend Framework)

- As technology evolves, push things to the browser (ex.: spellchecker, HTML5, jQuery)

Linux Kernel

- "In later discussions Torvalds explained the reasons for its choice: a fully modular architecture, like the one adopted for HURD, would have posed problems to a degree of complexity that it could have compromised the accomplishment of the project. To avoid such risks and keep the degree of complexity of the project as low as possible, Torvalds decided to design a monolith and he actually wrote all the architectural specs himself, avoiding all the problems related to collective projects (e.g. division of labor, coordination, communication). On the other hand, the HURD micro–kernel, a project in direct competition with the Linux kernel, has paid for the choice of pursuing a fully modular approach from the beginning in terms of the continuous delays that have plagued its development. Nowadays, it is still under active development and still lacks the stability and performance assured by the Linux kernel."

Source: Modular Design and the Development of Complex Artifacts: Lessons from Free/Open Source Software by A. Narduzzo & A. Rossi

CMF approach

- Some content management frameworks offer a common platform with thousands of extensions, which you pick & tailor to your needs.

- Better than "best of breed approach", but still suffers from "Combinatorial explosion" for interoperability. Drupal: 7500 modules Joomla!: 7000 extensions Almost each install with have a different combination of modules and versions. In Tiki, the code base is identical, and only the preferences configuration differs.

- Distributions are helpful here. However, "Paradox of choice" for extensions (compatibility and abandoned modules, upgrade difficulties, etc) leads to a 2-3 year release cycle for the core, which is too slow.

Tiki NIH Syndrome?

- **Tiki bundles a lot of outside code!**

- Zend Framework, including Zend_Search_Lucene

- jQuery & jQuery UI javascript library

- jQuery Mobile

- Smarty template engine

- CKEditor WYSIWYG

- Simile widgets (timeline)

- SWF upload

- HTML Purifier

- SVG-edit drawings

- jquery.sheet spreadsheet

- jquery.s5 slideshow

- Raphaël graphics & charts

- Mobile ESP (mobile device detection)

- OpenLayers maps

- CodeMirror Syntax highlighting

- Minify library

- NuSOAP

- Some Pear and Zeta libs (Pear-Auth, XML-RPC, Net_LDAP2, WebDAV, etc.)

- phpCAS

- Many more…

Tiki interoperability

- BigBlueButton Web conferencing

- XCache, Memcached and APC

- R (statistics & maths for any science)

- GD & ImageMagick

- Zotero (references)

- OpenStreetMaps, MapServer and GoogleMaps

- Cclite (community currency)

- Various authentication (phpBB, LDAP, Shibboleth, CAS, OpenID, etc.)

- Subversion

- Kaltura video platform

- 40+ examples at http://doc.tiki.org/Interoperability

Is Tiki Suite vaporware?

- Uh…   Yes and no :-)

- The good: Tiki already integrates with several major components (BigBlueButton, Kaltura, etc.)

- The bad: It's still a manual process to assemble all the parts of the Suite

- The ugly: Some parts of the Suite have yet to be decided on.

How to pick apps?

- This is a long-term strategic decision
- Sound architecture/technology?
- Compatible license?
- Compatible community model?
- Active community?
- Same programming languages as us?
- Is SaaS available?

There are risks

- SalesForce bought DimDim web conferencing, and ceased open source version

- Google Wave shut down because "Wave has not seen the user adoption we would have liked"

Ohloh.net

- Best place to discover & analyze open source software

- Compare software by tag, check activity level, number of contributors, recent commits, code analysis

- Users add software to their "stacks"

BigBlueButton

- Audio-Video-Chat-Screensharing-Whiteboard

- Flash front end. Composed of a dozen Open Source components (Asterisk/Freeswitch, Red5, Java, Tomcat, etc.). Android client (only chat for now)

- Deployed as an Ubuntu Server appliance. License: [LGPL]

Kaltura video platform

- Full-featured platform

- Recording from webcam

- Handles transcoding

- Flash editor permits collaborative video editing (awesome!)

- HTML5 player

- Ubuntu Server Appliance

- License: AGPL SaaS available.

ISPConfig

- Web interface to manage a server (mail accounts/anti-spam/DBs/etc.)

- Reselling hosting / multi-server

- Works with many OSs including Ubuntu

- PHP/MySQL [License: BSD]

- Alternative to Webmin (Perl)

Operating System

- Since Kaltura & BigBlueButton are both on Ubuntu Server, it's an obvious choice.

- However, Kaltura and BigBlueButton will run on distinct (v)servers to facilitate upgrades.

Clipperz

- HTML & JavaScript password management

- One click-login

- Offline version (one HTML/JS file!)

- All encryption is done client-side

- **zero-knowledge** web application

- Free SaaS or self-hosted

- PHP / JavaScript / MySQL [AGPL]

Piwik

- PHP/MySQL Web analytics [GPL]
- Easy to integrate, nice feature set, nice UI.
- There is a mobile client

- Open Web Analytics is an alternative (PHP/MySQL) [GPL]

LDAP

- OpenDJ or OpenLDAP or ?

Others

- Seo Panel: Keyword Position Checker, Sitemap Generator, Backlinks Checker, Directory Submission Tool, etc (PHP/MySQL) [GPL]

- Zotero to collect, manage, and cite research sources.

- StatusNet micro-blogging

zotero
Research, not re-search

Client software

- Any modern Web browser

- WebDAV client for double-click access to files stored in Tiki -> Cyberduck: FTP, SFTP, WebDAV for Mac & Windows [GPL]

- System tray notifier (auto-join of chat room, receive alerts, etc.)

  - This has to be picked or built

Mobile

- Support for mobile browsers (via jQuery Mobile for Tiki features)

- BigBlueButton client for Android

  - http://bigbluebutton-blog.blogspot.com/2011/02/bigbluebutton-on-android-phone.html

- Piwik client for Android and iOs

  - http://piwik.org/mobile/

RoadMap

- Tiki7 (April 2011)

  - All major components are picked. Get communities collaborating.

- Tiki8 (October 2011)

  - Compatibility challenges are discovered (workaround, fix, etc.). Ex.: Piwik & Clipperz conflict!

- Tiki9LTS (April 2012)

  - Create a Tiki Suite Appliance (replace our current live Tiki CD)

Questions?

- Tiki Suite: dev.tiki.org/Suite
- The Tiki model: tiki.org/Model
- marclaporte@tiki.org

?

Thank you

- Bonus slides below…

Tiki Use Cases

- Online community / association / club / special interest group / NGO (A)
- International, multilingual project (A)
- Advanced portal / news site (A)
- Corporate web site (A)
- Groupware Wiki / Corporate Wiki / Corporate Intranet / Team project (A)
- Public Wiki (A)
- Group knowledge base / Knowledge Management (KM) / institutional memory (A)
- Product or software documentation and support (A)
- Customer extranet (A)
- Multilingual wiki (A)

- *A is better, Ratings factoring in the necessary effort to configure.*

- Personal site / family site (B)
- Simple portal / news site (B)
- Writing a book (B)
- Personal knowledge base / manage my life (B)
- Wiki-based Project Management (PM) (B)
- Glossary / Dictionary / Encyclopedia (B)
- Framework / Activity Workflow / Specialized web Application (B)
- Document Workflow (B)
- Bug or Issue tracker (B)
- Collaborative research (B)
- Voice-enabled wiki and mobile applications (B)
- Geo CMS (B)
- Blog (several authors) (B)

- ***A is better, Ratings factoring in the necessary effort to configure.***

- Event Management, Conference Management & planning (C)
- Blog (one author) (C)
- Document Management System (DMS) (C)
- SourceForge / Gforge type site (C)
- E-commerce / Shopping cart (C)
- E-democracy (C)
- E-learning / Learning Management System (LMS) / classroom / course management system (CMS) (D)
- Customer / Contact / Constituent relationship management (CRM) (C)
- Bibliography (C)
- Traditional Project Management (PM) with Gantt charts, etc (D)
- Social networking / Job board / Dating site / hospitality exchange / Car Pooling (D)
- Enterprise resource planning (ERP) / Accounting (D)

- ***E is worst, Ratings factoring in the necessary effort to configure.***

Major enhancements in 3

- Webservices
- Semantic wiki links and mind mapping
- Tiki Remote Instance Manager (TRIM)
  (for wikifarms)
- Revamp of install and upgrade scripts
- Profiles for easy configuration
- JQuery added as experimental
- Zend Framework
- Has been picked as Long Term Support (LTS)

- Release date: May 2009 http://doc.tiki.org/Tiki3

Major enhancements in 4

- Google Summer of Code 2009
  - Workspaces & Perspectives
  - Kaltura integration (Collaborative video editing)
  - MediaWiki convertor
- JQuery added as default
- Revamp of edit interface
- PDO as default
- GroupMail
- Memcached
- Multi-domain support

- Release date: November 2009 http://doc.tiki.org/Tiki4

Major enhancements in 5

- Integration with BigBlueButton (Chat/Voice/video/screensharing)
- Shopping Cart & payments, incl. group subscriptions
- WebDAV support
- Spreadsheet upgraded to jQuery and jQueryS5 Slideshow
- Searchable admin panels (!)
- Token Access
- MySQL replication
- Advanced Rating & Metrics Dashboard
- Performance enhancements (front & back-end) including CDN support
- RSS to native articles (planet-type sites)

Release date: June 2010 http://doc.tiki.org/Tiki5

Major enhancements in 6

- Improved Shopping Cart (started in Tiki5)
- Improved UTF-8 support
- Community Currencies with CCLite
- Blog revamp and New CAPTCHAs using Zend_Captcha.
- Contribution: Who wrote What in any wiki page version
- Mass search and replace tool for wiki admins
- Performance admin panel : APC and XCache monitor
- Connect to Source control (ex.: SVN)
- Ustream Watershed integration

Release date: November 2010 http://doc.tiki.org/Tiki6

Major enhancements in 7

- HTML5 (Canvas, etc) (dropped support for IE6)
- Accounting (double-entry bookkeeping system)
- Draw with SVG-edit
- Mobile with jQuery Mobile and MobileESP device detection.
- OpenStreetMap and OpenLayers
- SEO: Canonical URLs
- CodeMirror Syntax Highlighter
- WordPress importer
- Zotero integration
- TimeLine viewer (Simile widgets)
- Zend Framework 1.11 and Unified Search via Zend_Search_Lucene
- Theme generator and header/footer/modules revamp

Planned release date: April 2011 http://doc.tiki.org/Tiki7

- Smarty 3
- Trackers revamp
- Distributed Timesheet
- Tiki Suite
- Print revamp
- What do **you** want to see?

- http://dev.tiki.org/Roadmap
- Planned release date: October 2011 http://doc.tiki.org/Tiki8