

# NCSHA 2016 Annual Awards Entry Form

(Complete one form for each entry)

**Deadline: Wednesday, June 15, 2016**

Visit [ncsha.org/awards](http://ncsha.org/awards) to view the Annual Awards Call for Entries.

**Instructions:** Type entry information into the form and save it as a PDF. Do not write on or scan the form. If you have any questions contact [awards@ncsha.org](mailto:awards@ncsha.org) or 202-624-7710.

Fill out the entry name *exactly* as you want it listed in the program.

**Entry Name:**

\_\_\_\_\_

**HFA:**

\_\_\_\_\_

**Submission Contact:** (Must be HFA Staff Member) \_\_\_\_\_

**Email:**

\_\_\_\_\_

Please provide a 15-word (maximum) description of your nomination to appear on the NCSHA website.

\_\_\_\_\_

Use this header on the upper right corner of each page:

**HFA:**

\_\_\_\_\_

**Entry Name:**

\_\_\_\_\_

**Select the appropriate subcategory of your entry and indicate if you are providing visual aids.**

Communications	Homeownership	Legislative Advocacy	Management Innovation
Annual Report	Empowering New Buyers	Federal Advocacy	Financial
Creative Media	Encouraging New Production	State Advocacy	Human Resources
Promotional Materials and Newsletters	Home Improvement and Rehabilitation		Operations
			Technology
Rental Housing	Special Needs Housing	Special Achievement	Are you providing visual aids?
Encouraging New Production	Combating Homelessness	Special Achievement	Yes, in entry
Multifamily Management	Housing for Persons with Special Needs		No
Preservation and Rehabilitation			

Tennessee Housing Development Agency  
Management Innovation – Technology  
Visualizing Work Flow with Kanban

Technology has an answer to the old adage of Plan Your Work and Work Your Plan. It's the Kanban board.

THDA recently took up the challenge of replacing our loan origination and servicing application, a system that had been in use for over 20 years. Rather than continuing with the existing vendor, or purchasing an off-the-shelf system with an initial estimated cost of \$750,000, it was determined in Fiscal Year 2014 that the agency would develop a replacement system in house, using a phased approach, with the Loan Origination component at the top of the list. Considerable preparatory work for this system was completed in 2014.

But, as happens with the best-laid plan, the risks that can happen will happen. Early in 2015, as planning and business requirements gathering were well underway, both the principal Business Analyst and Lead Developer on this project left THDA within a 60-day period. Our small shop was left at a considerable disadvantage.

We did, however, have solid requirements documented for the first phase and so did the only thing we knew to do to keep the project moving forward - we engaged a vendor to provide contract services for development. Early in this engagement they introduced a utility that had been on our radar, The Kanban Board. Kanban, as applied to software development, is a method for managing work with an emphasis on just-in-time delivery – a scheduling system that adheres to the Lean Software Development approach – allowing complete transparency for team members and stakeholders. This approach presents all participants with a full view of the process from task definition to delivery. It helps create a visualization of work, the flow within the process, and allows for the identification and management of the individual tasks, within the framework of the ‘big-picture.’ (*Kanban is available through Agile development software, we recommend everyone review their “also included” utility list.*)

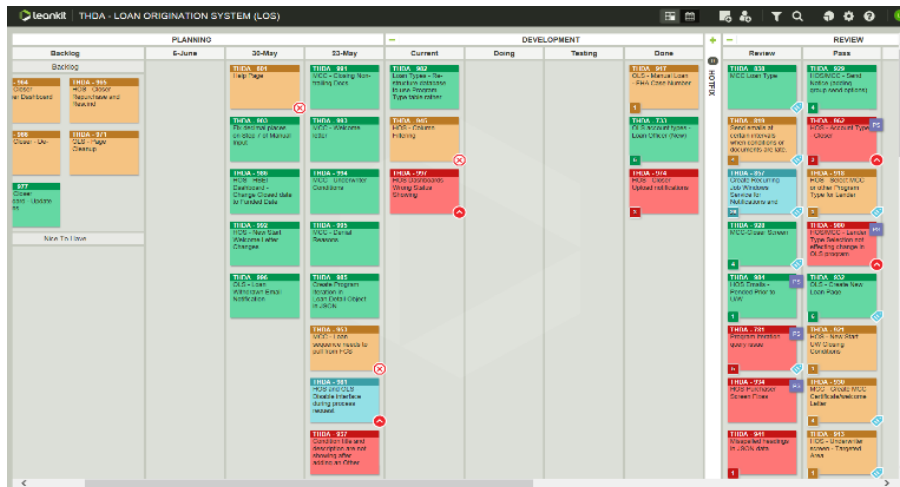
Our initial meetings with the development contractor centered on broad expectations for the end-to-end Loan Origination component of our system, but we were quickly able to begin visualizing and identifying our existing processes and work. We started at a very high level, and over time, broke each of those work packages down to activities and tasks (cards) that could be estimated for scheduling and assignment. Our initial Kanban board was relatively simple, and evolved over time to accommodate an exponentially growing number of cards. Each task was described, estimated, prioritized and assigned. Comments and attachments were included where appropriate, and all activity was tracked in the history of each card.

The screenshot displays the Kanban Board interface. On the left, a sidebar lists navigation options: Details, Tasks, Connections, Assigned Users, Comments, Attachments, and History. The main area shows a card titled "Send emails at certain intervals when conditions or documents are late." The card is of type "Story" and has a size of 4. The description field contains the text: "If we can have the system generate the closing conditions and automatically sent in the following intervals: 60 days after closing, 90 days after closing, 100 days after closing, then weekly until file is marked complete." The card is assigned to "THDA - 819" and has a tag "03\_14\_16". The right sidebar contains fields for Planned Start, Planned Finish, Card ID (819), Priority (Normal), Lane (Review:Review), and Add External Link. At the bottom, there are buttons for Save & Close, Save Changes, Cancel, and Delete. A footer bar includes a checkbox for "Subscribe to Card Events by Email" and a URL: "https://fireflylogic.leankit.com/Boards/View/196625941/307230923".

## Tennessee Housing Development Agency Management Innovation – Technology Visualizing Work Flow with Kanban

Once the project was loaded into the board, the work items moved across, from left to right, as progress occurred, in order of priority. Items were ordered in “lanes” by deliverable date and priority, with a limit on the number of cards that could be accomplished during any set period. These items could be tasks,

bugs, defects, documentation, or whatever else the team determined would help clarify the requirements. Our board also included Change Requests and Infrastructure. As work continued, team members ‘pulled’ a new work item into the appropriate column on the board. If an item needed further clarification, or if it was determined that it should be broken down to more targeted tasks, new cards were created. For our



purposes, since we were all relatively new to this process, we held weekly, then bi-weekly review meetings.

You’ve heard the saying that bad luck comes in threes? Despite losing our lead business analyst and the developer, we’d pulled off a pretty decent save in locating and engaging a contractor with the skillset and availability to immediately begin work . . . But three months into our collaboration, our vendor informed us that they had sold their company, and would be disbanding within six weeks! They did, however, recommend another firm, but the single most significant key to the eventual success of this project was our insistence in holding on to our Kanban board through the transition.

A monumental schedule challenge in switching resources in the middle of a project is knowledge transfer. The Kanban board gave us the means to clearly (and visually) explain the details and expectations of the project requirements. The ‘new’ Project Team spent the first several weeks heavily focused on the project content and prioritization of the Kanban board, fleshing out the work deliverables and schedule. Interestingly, not only were we able to manage the work of our on-site contractor, we also collaborated with overseas resources, all working from the same set of information and structure, with immediate traceability.

Over the weekend of February 13-15, 2016, THDA went live with THELMA (Tennessee Housing’s Electronic Loan Management Application), a fully-functional end-to-end loan origination system that includes an external-facing secured on-line loan application submission portal, an internal loan origination, closing and purchasing system, and a Fund Management System, which seamlessly interface with a vendor-based master servicing component. This project was delivered on time, adhering to the original target date. We continue to make enhancements to our system, including the addition of new features and tweaking of existing ones. Currently, our THELMA Kanban board has in excess of 900 cards describing all elements of its build and maintenance.

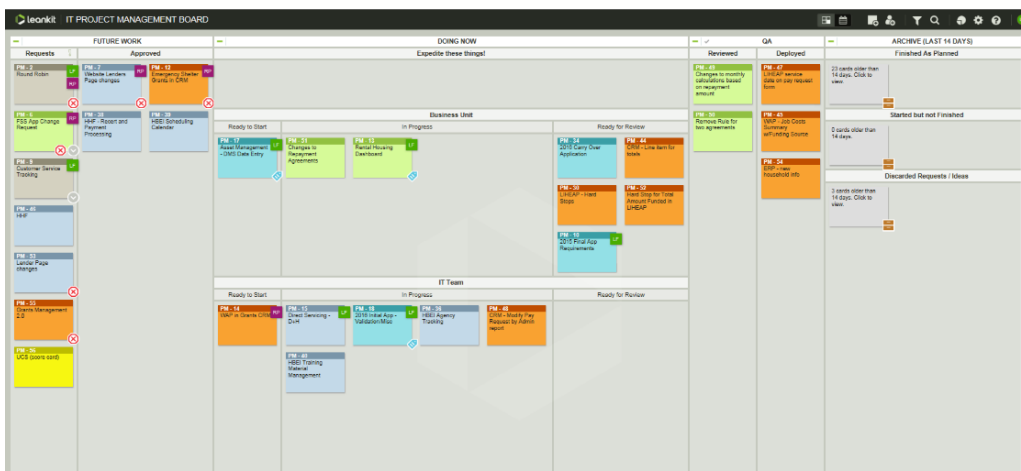
## Tennessee Housing Development Agency Management Innovation – Technology Visualizing Work Flow with Kanban

The ‘bad luck’ that brought Kanban into our processes arguably saved this project from considerable overruns in both schedule and overall costs, with the bonus of a clearly documented historical archive of procedures and documents, and lessons learned - invaluable tools for future development. This trial by fire turned out to be an incredible opportunity that has allowed us to change our structure and our approach to software development. Since that beginning, the IT department has enthusiastically adopted the board as a key tool in the management of each project. We have already expanded this process to other areas of IT, including homebuyer education agency and materials tracking, Multi-Family Housing Tax-Credit Management, Program Compliance, and as an umbrella view of our overall IT activity.

We expect to introduce this methodology to other departments for planning and deliverable opportunities throughout THDA. We have found that regardless of the type of project, it offers structure for collaboration and adaptability. The visibility and transparency of the Kanban board allows for all

members of the team and stakeholders to follow and track progress and participate on a real-time, active level.

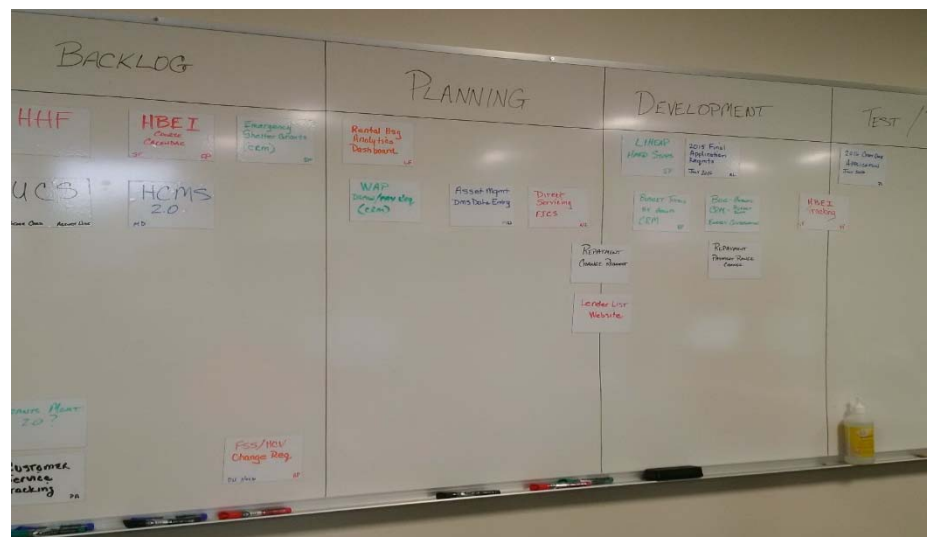
Communication is open, meetings are shorter and more task-focused, and customers are more involved.



THDA currently subscribes to an online Kanban board through LeanKit, which costs less than \$20 per named user, per month. However, we started out with a whiteboard broken into lanes (see below).

Additionally, certain SDLC and code-management software, such as Team Foundation Server, include variations of the Kanban Board, so cost is in no way a limiting factor on being able to replicate this innovative and collaborative work-management tool.

A tech writer presented a column in Nashville's newspaper June 5, 2016 touting the benefits. The headline is a clear message: *Kanban boards convert projects from circus to symphony!*



2D SUNDAY, JUNE 5, 2016

## Kanban boards convert projects from circus to symphony



**software**  
Julie May

Trying to manage a big project with a team can feel like running a circus. It's hard to tame the tigers and herd the elephants while simultaneously balancing budgets and priorities on the high wire.

It would be better if your team could work in concert, like the musicians in a symphony—but how do you communicate changing priorities and urgent tasks without turning into a ringmaster who directs each person's every move? You need a score your team can all read at the same time, each playing their part while staying up to date on everyone else's work and seeing overall priorities.

A Kanban board can do that. Developed from lean manufacturing principles, Kanban (pronounced: con-bon) translates to billboard in Japanese. The Kanban methodology evaluates work priorities, establishes pace for the work and allows assignments to the team—so everyone can be more effective.

Have you used sticky notes to help itemize your thoughts or plan the steps needed for a project? A Kanban board uses this same idea, dividing work into categories, like To-Do (a repository for things that could be done), Doing (often called work-in-progress) and Done. You could create a manual Kanban board with sticky notes and a wall, but you can also use one of the many software tools that incorporate Kanban principles. With an internet connection, your whole team can stay up to speed, no matter where they are.

### Benefits of Kanban boards

Because Kanban boards are digital, they are an efficient yet dynamic tool. Tasks and priorities can be moved around easily, and the board shows your whole team the visual scope of the project at a glance.

Kanban boards communicate goals and help your team define what success looks like. Just like the score in a symphony, they keep everyone on the same page, even when members of your team may be working on different tasks. This alignment makes the team leader's job easier—more like a conductor than a micromanaging taskmaster while also holding the team members accountable for their part.

This flexible project management tool allows the company to rapidly adapt to changing conditions, and it can be used to manage hard targets like metrics and budgets.

### Questions Kanban can help you answer

A Kanban board can answer the infamous 5 W's and the H for everyone who needs to be in the know: Who, what, when, where, why and how.

**Why:** In any project, it's easy to lose focus on the end goal. A Kanban board gives the team a central location to refresh themselves on the overarching goal and how subprojects align with that goal.

**What:** When you break a big project into small, sequential chunks to divide and assign to team members, your Kanban board helps you organize tasks and team members, and it makes it easy to shift responsibilities when things change.

**Who:** You can assign each task or group of tasks to a person or a team on the Kanban board. Using the board, you can encourage an environment of mutual accountability for all team members, as well as make it easy to keep track of who's doing what.

**When:** Keep your project on track when you manage your timeline on the Kanban board, too. You can show sequential phases of a project, and use definite or loose timelines. The whole team sees where any given task is, giving you realistic expectations for progress. Just think of the emails, calls and texts you'll prevent!

**Where:** Most Kanban boards allow you to link to or attach project documents, like content, files, agendas and budgets.

**How:** Use your Kanban board to document a process, show the steps involved or to share approvals and forms with the team.

Lots of project management software now incorporates Kanban principles, and all kinds of organizations and projects use it: nonprofits and charities, marketing, technology, strategic and operational projects and, well, you name it. Check out LeanKit, Projectplace, Trello or Kanbanchi for examples of Kanban apps, and give this great tool the ability to make your team an orchestra to make beautiful music (and money) together!

Julie May is CEO and founder of Bytes of Knowledge, a provider of software development, network infrastructure and marketing technology solutions. Please visit [bytesofknowledge.com](http://bytesofknowledge.com).