



ACGIL


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Staring down the devastation of a natural disaster, Chilean developers and IT project managers use an agile hybrid to bring their fractured country back together.

e Rescue



On 27 February 2010, an earthquake measuring 8.8 on the Richter scale slammed Chile, killing 700 and leaving 1.5 million people displaced. Hours after the disaster, a software developer sent out a single tweet on Twitter, pleading for volunteers to put their IT skills to use. Hundreds responded—and later that day 60 IT professionals hunkered down in a tiny office in Mapocho Valley to launch a website development project. Called Chile Ayuda (*ayuda* means “help” in Spanish), the site aimed to aid users in finding lost family members and friends, and allow people to donate money and direct disaster relief to where it was needed most.

Over the next two weeks, the total number of volunteers, which included software developers, journalists and web designers, had shot up to more than 300.

“It was very chaotic,” says Agustín Villena, a project volunteer, founder of the agile network ChileÁgil and CEO of LeanSight Consulting, an agile and lean thinking consultancy in Santiago, Chile. “People were coming and going, and at any given time there were 100 volunteers working together in an office that typically is only occupied by 20.”

But the growing group of volunteers was unified under a common goal: create a single source of information as quickly as possible.

To make the most of its resources, the team relied on a hybrid recipe that included:

- **Self-organized multidisciplinary teams** focused on specific deliverables
- **Agile-like small releases** to deliver rapid iterative deliverables of the site and applications
- **Kanban to create workflow boards** that allowed some teams to visualize their work and choose tasks without waiting for assignments
- **Holacracy**—an organizational operating system centered on adaptability—to harness self-organizing teams through rapid decision-making techniques

The results were phenomenal: The team launched the first iteration on Day 1, and in less than a week the site was fully functional.

CIRCLE OF LIFE

The project called for multiple features, including:

- Creating the website interface
- Integrating Google’s Person Finder app with a Twitter stream to help users track people
- Integrating an interactive map donated by Ushahidi, a Kenyan not-for-profit tech company, that allowed users to mark locations with tags such as “bridge destroyed” and “town without help”
- Creating a Facebook app to help people search for missing family and friends



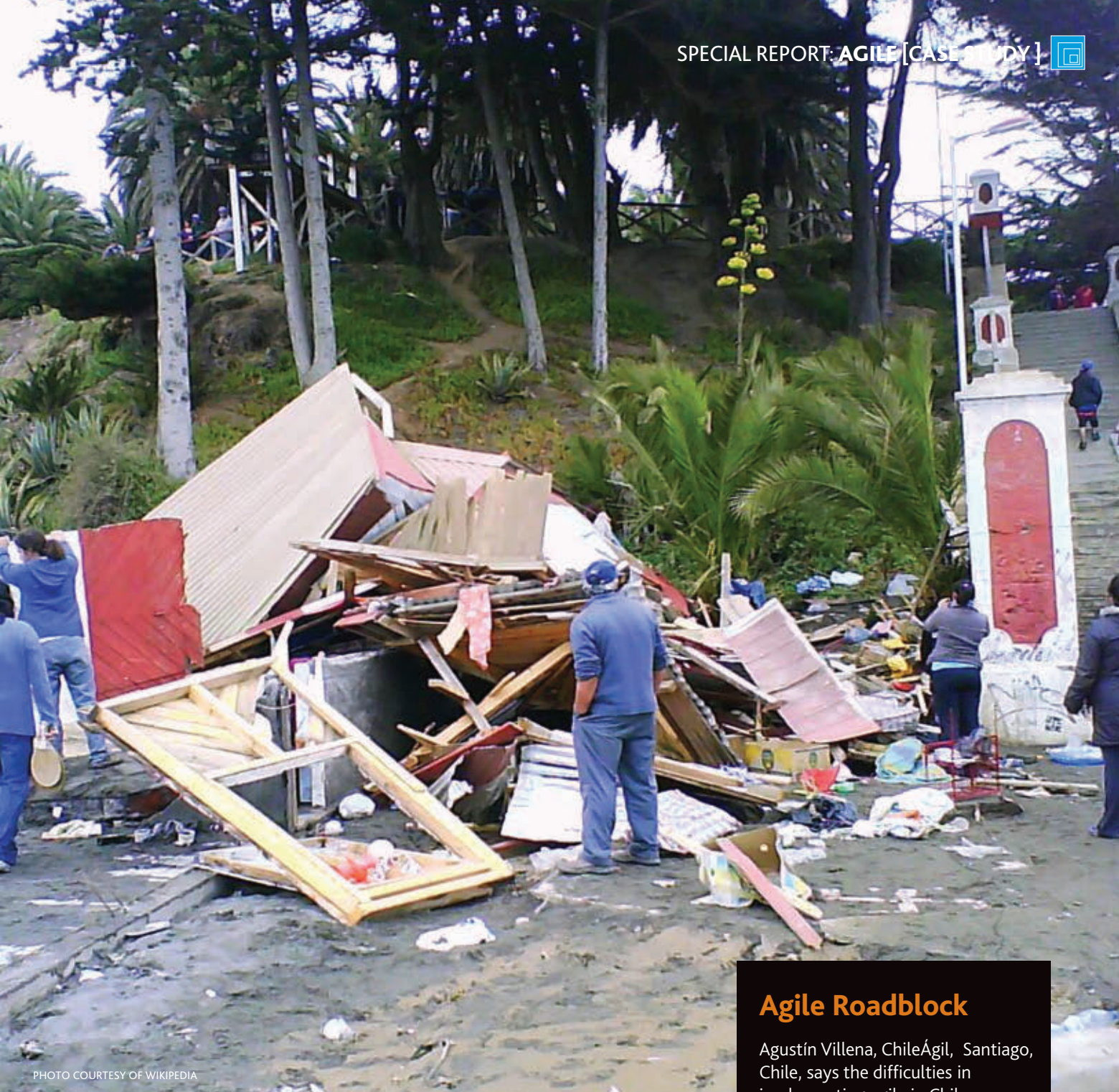


PHOTO COURTESY OF WIKIPEDIA

Agile Roadblock

Agustín Villena, ChileÁgil, Santiago, Chile, says the difficulties in implementing agile in Chile are:

1. Low national priority on innovation (less than 1 percent of the gross national product comes from research and development).
2. Software developers tend to be protective of their codes.
3. A tendency to view testing disparagingly.



PHOTO BY JOSÉ LUIS STEPHENS

When an earthquake rocked Chile, Agustín Villena (left) and a team of more than 300 volunteers crammed into an office and used agile techniques to deliver a website in less than a week.

Rapid Response

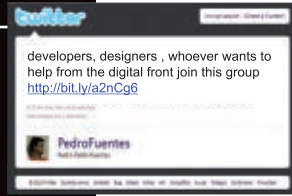
27 February 2010:

An 8.8-magnitude earthquake strikes Chile, killing 700, leaving 1.5 million people displaced and causing an estimated US\$15 billion to US\$30 billion in damages.



28 February:

Software developers and IT project professionals launch a project to create a website to help users track people affected by the disaster and to send relief efforts to the hardest-hit communities.



1 March:

Teams organize by goals and begin integrating Google's Person Finder app. A rough version of the site is completed.



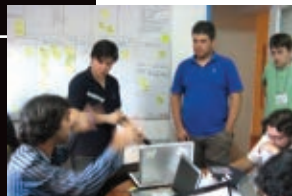
2 March:

The site is overloaded with traffic and crashes. After the site is running again, coaches reorganize the volunteers into new goal-oriented teams.



3-5 March:

Volunteer teams work around the clock to improve the site, integrate applications, and design an interface and brand for an upcoming telethon.



6 March:

The final site is up, and the Person Finder app is integrated between Google and Twitter—in time for the telethon, which exceeds fundraising goals.



It was an ambitious project, but a hybrid agile approach eliminated the need for a single leader, Mr. Villena says. Each team of developers had its own Kanban board that let the volunteers choose the tasks that best fit their skills and schedule. And volunteers used the Holacracy framework to organize themselves into teams and make decisions.

"If no one had a good argument against a decision, we implemented it, which is a much faster process than requiring everyone to agree," Mr. Villena says. "This model allowed us to give a voice to everyone within the group without endless meetings."

The project was organized so that each team worked on a multidisciplinary task and synchronized with a computer coordinator using a double-linking approach from Holacracy. Decision-making was structured in circles, with a lower-level circle always connected to a higher-level one via the functional leader and a representative. The two individuals took part in the decision-making process of both circles.

"It was a very confusing situation, and it was important that we gave everyone a way to manage their workflow without the need for leaders telling them what they must do," Mr. Villena says.



PHOTO COURTESY OF WIKIPEDIA

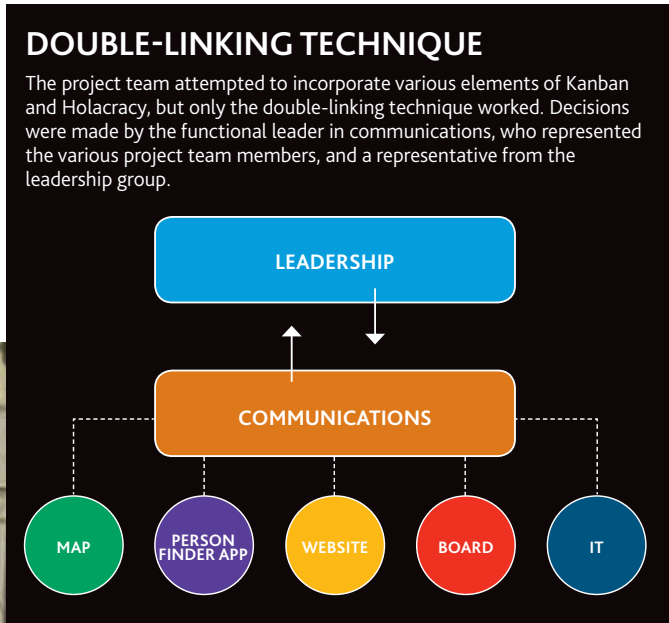
LIGHTNING-FAST LAUNCH

Sprints lasted 24 hours, with a new version of the site or tool up and running by day's end.

"Instead of iterations, we used a continuous flow of value," he says. The teams delivered a constant stream of tasks, then dissolved, moving on to the next task and a new work group.

To make sure everyone was headed in the same direction, a few dedicated agile coaches (led by Mr. Villena) and project leaders:

- Oversaw quality-assurance testing
- Evaluated the state of the task board



- Provided mentoring and training

The team held stand-up sessions three times a day to report on progress and establish priority goals for the next eight hours. "This was important because we never had a broad planning meeting," Mr. Villena says.

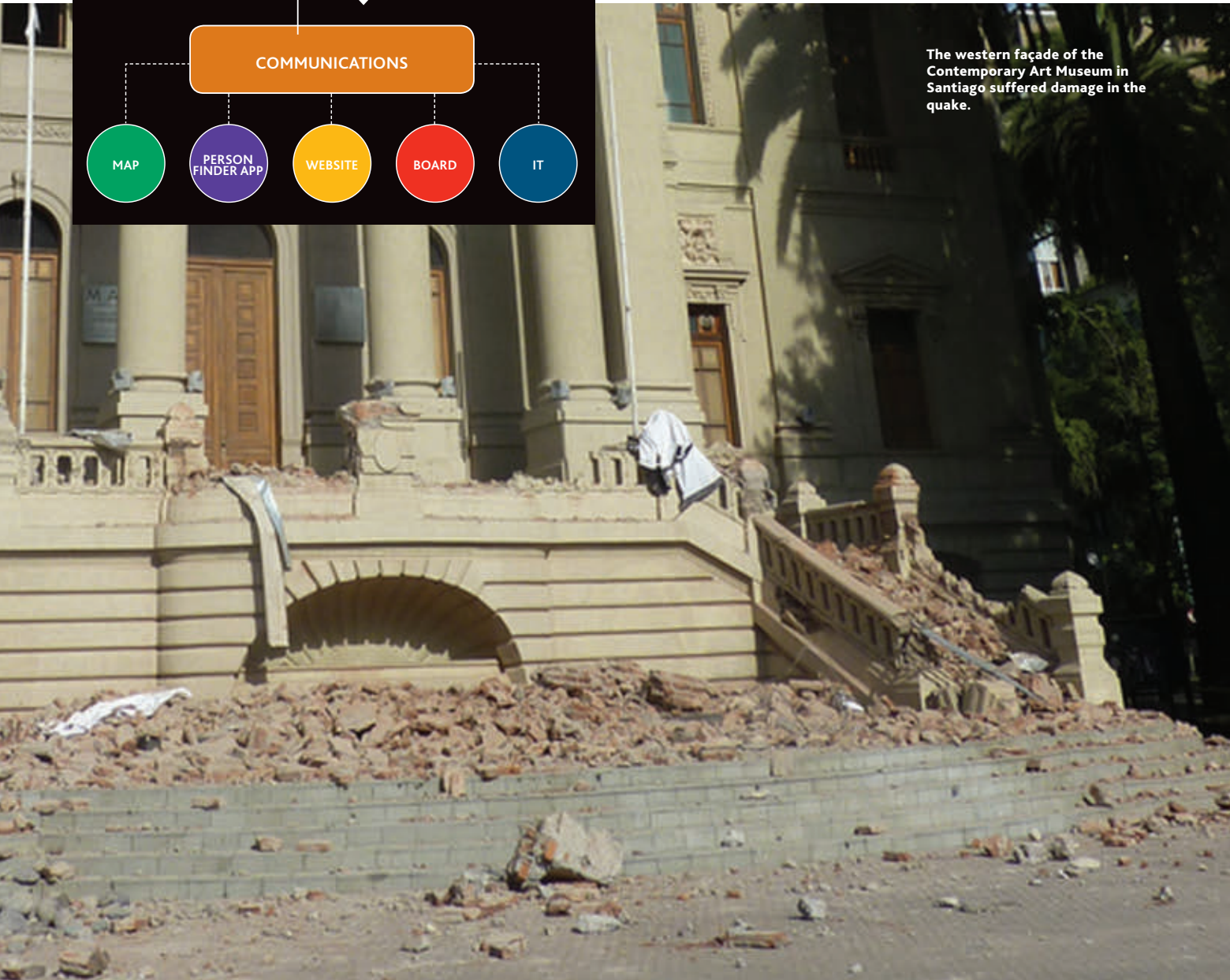
The day after launch, a technological failure disheartened the team: The server overloaded, causing the site to crash.

"When that occurred, teams couldn't follow our original goals and dissolved into panic," he says.

The focus quickly shifted to getting the site running again, and leaders reorganized the group into goal-oriented teams.

On 6 March, seven days into the project, the team deployed the final integration of the Person Finder app between Twitter and Google, connecting 3,500 people with their loved ones. The project's Facebook page also reached 150,000 fans.

"The reason it worked was because everyone involved was talented and had a desire to help," Mr. Villena says. "They didn't need to ask, 'What should I do now?' They were motivated to take on whatever needed to be done." —Sarah Fister Gale



The western façade of the Contemporary Art Museum in Santiago suffered damage in the quake.

CHAIN REACTIONS



Critical chain methodology eliminates multitasking to help a construction company deliver projects faster.

The Scenario

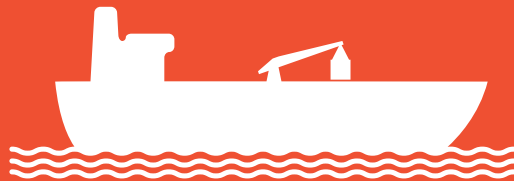
To stay on top of a competitive market, homebuilder **Shea Homes** wanted to build more houses in less time—without spending additional money.



When a pharmaceutical company launched two document management systems simultaneously, critical chain sped up the process.

The Scenario

Pharmaceutical giant **Lilly** launched a project to develop two document management systems (DMS) for medical documents provided to physicians and medical sales representatives. The project team created one system for internally produced documentation, and the other for published articles and statements.



An engineering firm implemented critical chain methodology to prioritize resources and improve its bottom line.