

## CONNECTING A NATION IN CRISIS

### CRISIS COMMUNICATION DURING THE SL DITHWA DISASTER - MR. CHAMINDRA ATTANAYAKE

digital age, disaster management extends beyond physical rescue operations. It increasingly relies on robust networks, timely data, coordinated action, and public trust in technology.

This issue of the Oracle Monthly Bulletin explores the role of technology-driven disaster communication management through the insights of Mr. Chamindra Attanayake, Senior Lecturer in Software Engineering and Computer Security at NSBM Green University and with his appointment as the Additional Commissioner to the Essential Services during the Dithwa Disaster last November. During the disaster, he played a critical role in facilitating communication and coordinating essential service operations despite extreme national constraints.

In this interview, Mr. Attanayake shares his unique perspective at the intersection of academia and national service, shedding light on the technical, human, and institutional challenges of crisis communication. He discusses how



In times of crisis, information is as vital as food, water, and shelter. When disasters strike, the speed, accuracy, and reliability of communication determine connecting a nation in crisis. Crisis Communication during a disaster not only determines how effectively a nation responds but also ensures the safety of the people. The recent Dithwa Disaster highlighted that in the



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emerging technologies including AI and smart networks can enhance Sri Lanka's disaster preparedness and response. The conversation highlights how technical expertise, leadership, and social responsibility can come together when the nation faces its greatest challenges.

### 1. What was your role and involvement in disaster communication during the recent disaster?

During the recent disaster, my primary role was not within the conventional disaster management structure, but under the Essential Services framework. My responsibility was mainly facilitative rather than command-based. I focused on rapidly restoring broken communication links, re-establishing connectivity, and ensuring coordination among critical service providers. Additionally, since the Essential Services office was created overnight, there was no existing physical or digital infrastructure. I led the rapid setup of IT systems, internal communication platforms, and connectivity so that operational work could begin immediately. In essence, my involvement centered on enabling communication, coordination, and continuity of operations under severe constraints.

### 2. How did your academic and professional background support your contribution during the crisis?

Communication is very important even during a crisis. Crisis communication relies heavily on both technical expertise and interpersonal coordination. While formal procedures are important, during emergencies, direct human communication often proves faster and more effective than written correspondence. My prior experience working with universities, government institutions, and emergency response systems allowed me to quickly obtain critical information through established professional networks.

Also, my previous experience working in emergency communication systems during the 2004 Tsunami was particularly helpful in this situation. The technological solutions and emergency communication mechanisms deployed at that time provided practical lessons that could be adapted and reactivated quickly. The combination of technical knowledge, professional relationships, and prior disaster-response experience significantly enhanced my ability to contribute effectively during this crisis.

### 3. How important are network reliability and cybersecurity during crisis communication?

Communication in a crisis is the most important part to respond properly. You need to have the current data and facts with you. If the data is wrong, then you're responding to something completely different. Network reliability and cybersecurity play a critical role in ensuring that the right information reaches the right people when it matters most.

Let me explain this with a very simple example. During the landslide situation, everybody was talking about the damage in the hill country due to landslides. We were getting certain information from there, and people realized that we needed to establish communication. So, we airlifted around 30 satellite communication units into those areas. But when we checked the statistics, we realized that the major infrastructure damage had happened in the Ampara and Puttalam areas. We proceeded to verify the situation, as these facts were critical for informed decision-making. When we reviewed the data, it became clear that people in those areas were unable to make even basic phone calls, which explained why we were receiving no responses. Therefore, we decided to redeploy several satellite communication units to those regions. That is why accuracy is so important. It shows us what is really happening. Security also plays a major role. If our data is not properly secured, it will not reach us in a reliable form, and then we end up making decisions based on incorrect information. Not only in disaster response, but in any system, if your decisions are based on data, that data must be accurate. Otherwise, from a technological point of view, the decisions we make will be flawed.



#### 4. What technologies and tools played the most significant role in coordinating information during the disaster?

When we talk about technological tools, collaboration platforms are the most important part of this kind of operation. In an emergency, you are not working in a normal, structured way. You have to bring together information from many different sources and make decisions very quickly.

In our case, we were not working in separate cubicles. Everything happened in one shared space because everyone needed to see the same information at the same time. Constant communication, one-to-one discussions, and rapid problem-solving were essential. Maintaining continuous connectivity across the team was critical. This is where software tools became essential. Cloud-based solutions allowed us to stay connected without building an entire system from scratch. We could immediately rely on existing platforms to coordinate our work.

Basic communication and collaboration tools played a key role. Platforms like Google Workspace and Microsoft Teams supported messaging, file sharing, and real-time coordination. Geographic Information Systems (GIS) helped us understand what was happening across different areas. Crowdsourcing applications allowed us to identify where people needed support and what kind of assistance they required. In the early stages, many of these crowdsourcing tools were developed very quickly. People used them to report needs from the ground, and we monitored this information closely to build a clear and accurate picture of how the situation was evolving.

#### 5. What were the major technical and human challenges faced during the disaster response?

On the technical side, our infrastructure was not ready for a situation of this scale. Restoring network communication was extremely time-consuming because we depended on other services such as electricity and road access. When roads were blocked by debris and landslides, it became very difficult to send technical teams to the affected areas. Many of our communication towers are located in remote, hilly regions rather than urban centers. In several cases, entire roads were blocked, and there were active landslides, which posed serious risks to anyone traveling in those directions. We had to ensure that our teams were safe before sending them in. You cannot respond to a crisis by putting your own people in danger.

Technically, the ground-level recovery process was very challenging. In the past, we relied more on tower-to-tower radio links, but this time we were using fiber-optic communication between towers. When those fiber links were damaged, restoring them became a major technical operation. When an entire city is in blackout and you have limited resources, deciding what to fix first becomes extremely complex. You want to restore services to the town as quickly as possible, but without the core network and towers, people cannot communicate at all. Balancing those priorities on the ground was one of the hardest parts.

On the human side, there were also significant challenges. We had to work through and sometimes around government procedures and bureaucracy to move faster. Although we had the authority to override certain processes, some things simply did not move at the speed required in an emergency. That created frustration when people were suffering and immediate action was needed. It is not that we had no systems or protocols. We did. We experienced specific disaster scenarios, such as tsunamis, and we had experience evacuating coastal areas. But this situation was very different. It was not one single disaster. It was multiple, overlapping catastrophes happening at the same time.

For example, electricity was down across large areas. Without power, there is no communication. Without power, you cannot pump water. Without water, people cannot survive. Even though there was heavy rainfall, that water was not safe for drinking. Providing clean, drinkable water became a major challenge. At the same time, roads were destroyed, making it difficult to send rescue teams or deliver supplies. So, it was not just one problem. It was a chain of interconnected failures happening at a very high level of disruption.

We were not fully prepared for a situation with this level of complexity. As a result, we sometimes had to cut through formal channels and take extraordinary steps to make sure people received the support they needed to get through the crisis.



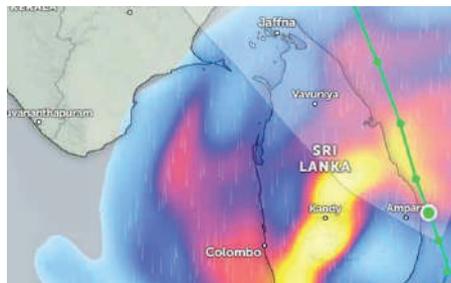
## 6. How can emerging technologies such as AI and data analytics improve disaster response in the future?

There are other areas where new technologies are needed. For instance, when there is heavy rainfall, we need to anticipate and predict water levels in low-lying areas. That information is essential for planning evacuations. To do that, we also need accurate data about how many people live in flood-prone zones and where they are located.

Some of this data is held by different organisations. In an emergency, we need mechanisms to access it quickly. At times, we had to issue formal instructions to ensure that data was shared, because without it, we simply could not operate effectively.

At the moment, we do not yet have a fully functioning national data exchange system. It is still at the proposal stage. In an emergency, data must flow between agencies quickly and smoothly. Our legal framework for disaster management is actually very strong. It clearly states that, in emergency response situations, both government and private institutions are required to release relevant data. In such situations, public safety comes first. People's lives are the top priority. Issues of privacy and ownership become secondary when immediate protection of life is at stake. Legally, that position is very clear.

However, while the legal foundation is strong, the technical arrangements are still developing. For example, satellite images need to be accessible to disaster management authorities and other agencies so that responses can be coordinated. When there is no proper technical mechanism for sharing this data, the entire response process slows down.



That is why we need a solid technical framework for data exchange. We also need AI and other emerging technologies to make our systems faster, more efficient, and more accurate. Technology has to be at the center of how we respond to future crises.

## 7. What role should universities and academic institutions play in disaster preparedness and response?

From an academic point of view, disaster management has three main stages: preparedness, response, and recovery. We prepare before a disaster, we act during the disaster, and after that we focus on recovery.

When it comes to universities and the IT sector, we have done some positive things. But unfortunately, we have not done enough in the area of preparedness. Many people tend to focus only on responding after something has already happened. In an emergency, you will always find volunteers coming forward to help. We saw that clearly, even from the IT industry, where many professionals stepped in to support the response.

But preparation cannot wait until a crisis begins. In normal times, we must actively work on systems, training, and planning. We cannot remain passive and only think about disasters after they happen. As a country, we have not done disaster preparedness as well as we should have.

We have carried out studies and introduced some infrastructure measures. We have even developed

strong disaster management systems in the past. In fact, after 2004, we created one of the most important disaster management systems, and it was adopted by several major countries, including the United States. However, when the recent crisis occurred, we did not have a fully functional version of that system installed and ready to use within the country. That is a serious gap.

We should not wait for a disaster to happen before acting. We must prepare in advance. If we are properly prepared, then when a disaster occurs, all we need to do is take action. We should not waste time thinking about what to do in the middle of a crisis. The steps should already be clear.

Time is the most valuable resource in a disaster. If we spend it trying to figure things out, we lose the opportunity to save lives. Preparation ensures that, when the moment comes, we can move immediately and effectively.

## 8. How can universities prepare themselves for internal crises such as fires or campus emergencies?

Universities must treat internal crises with the same seriousness as national disasters. Clear evacuation protocols, accountability mechanisms, and regular drills are essential. Staff should know how many people are present in buildings at any given time, and emergency coordinators must be assigned specific responsibilities.

Countries such as Japan provide a strong example, where mandatory drills are conducted regularly from early education onward. Preparedness ensures that during emergencies, individuals act rationally rather than panicking. Without preparation, decision-making deteriorates rapidly, increasing risk and confusion.

## 9. How should Sri Lanka prepare for future disasters at the national level?

Sri Lanka must align with globally accepted disaster response frameworks while adapting them to local realities. International initiatives such as “Early Warning for All” provide a strong foundation, but national-level customization is essential due to unique geographical, social, and cultural conditions.

Sri Lanka has demonstrated strong community-based resilience and rapid recovery capabilities compared to many developed nations. However, future preparedness requires continuous investment in research and development, early warning systems, data interoperability, and inclusive governance models that integrate government, academia, industry, and civil society.

## 10. What responsibilities do students and citizens have in disaster preparedness and national resilience?

Disaster resilience is a collective responsibility. Students must actively develop leadership skills, participate in institutional activities, and engage in public consultations on national policies and technical standards.

Responsibility means using your skills and expertise for the greater national good. That is the foundation of disaster preparedness and resilience.

At the same time, we also have to understand that each generation responds differently. The way today's students think, communicate, and act is very different from how we were trained. I grew up in a system that taught us the country comes before the individual. That value was cultivated in us from a very young age.

Now, the new generation works with

different technologies and interacts in very different ways. We need to accept that reality. When I was working, I had to engage with multiple generations — from senior officials at the top to young people on the ground. Many of the younger people came with excellent technological solutions for immediate problems. They were creative and fast. But sometimes, they were not fully aware of the systems that already existed. That creates challenges. You have to manage new ideas without hurting people's motivation, while also ensuring coordination with existing structures. That balance is important. For university students, one key responsibility is leadership. Leadership does not come automatically — it has to be built and practiced. Students need to take opportunities to engage in societies, projects, and community work. Unfortunately, we often see the same small group of students doing everything, while the majority stay passive. That prevents many from developing leadership skills.

Students must actively take part, build their confidence, and shape their personalities. We talk about this in lecture halls, but what really matters is action.

Another responsibility is understanding one's role in society. With all the technology and gadgets we use, many people forget a basic question: What is my contribution to society? Rights come with responsibilities. When citizens understand this, things start to



move more smoothly.

We also see a shift away from civic responsibility. Many young people are not aware that they have a role to play in national decision-making. For example, government institutions regularly publish documents and invite public responses. How many people actually read them or give feedback?

There are opportunities to submit proposals for the national budget. I have personally submitted detailed proposals. Even if they are not implemented immediately, they are often taken up later. That is how citizen input shapes policy over time.

As citizens, we also have an obligation to respond to requests from regulatory and public bodies. For example, in technology and communications, organizations publish draft standards and invite public comments. If we do not respond, decisions are made without our input. And then we complain later.

Participation is a responsibility. Students and citizens must engage, give feedback, contribute ideas, and take part in discussions. When public consultations happen, everyone has the right and the duty to exercise that right.

National resilience is not built only by institutions. It is built by people who are aware, active, responsible, and willing to contribute. That is the role students and citizens must play.

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# A CRISIS THAT CHANGED EVERYTHING

## EDU SATHKARA: WHEN CODE BECAME A BRIDGE BACK TO LEARNING



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When Cyclone Ditwah struck Sri Lanka, it arrived with a force that shattered the normal rhythm of life across multiple regions. Heavy rains transformed roads into rivers, landslides buried homes, and entire communities found themselves struggling with a reality they had never imagined facing. I was there when it happened, present in those early hours when the full scale of the disaster was still unfolding, and what I witnessed during those days fundamentally changed how I understood both crisis response and my own role as a software engineering student.

The atmosphere in the aftermath was heavy with an almost palpable silence. Not the peaceful kind of silence, but the silence of shock, of families standing among the remains of their homes unsure of what to do next, of children clinging to their parents trying to make sense of a world that had suddenly turned upside down. People moved through flooded streets with vacant expressions, their minds still processing the magnitude of what had just happened to them. In those moments, education was not even a distant thought in anyone's mind, and understandably so. When your home is underwater and you are uncertain where your next meal will come from, textbooks feel like a luxury from another lifetime.

In the immediate aftermath, survival became the singular focus. Lives mattered more than anything else. Families searched desperately for loved ones, communities worked together to secure clean water and food, and emergency services mobilized with whatever resources they could gather. Relief organizations and volunteer groups responded rapidly, and I became part of that collective effort. I spent my days volunteering on the ground, helping distribute aid, assisting with first aid, and doing whatever small tasks could make a difference alongside countless others who had selflessly given their time and energy to support those affected.

Volunteering during those early days created a strange mixture of emotions that I still struggle to fully articulate. On one hand, it was profoundly inspiring to witness the sheer humanity on display. People from every background, every profession, every walk of life came together with a single unified purpose: to help. Strangers worked side by side for hours without rest, driven purely by compassion for fellow human beings in distress. On the other hand, it was heartbreaking in ways I had not anticipated. Every day brought new images that burned themselves into my memory. Families who had lost everything standing silently with nowhere to go. Elderly people sitting on the remnants of their destroyed homes, too exhausted even to cry. Children confused and frightened, trying to understand why their world had changed so drastically overnight.

But amid all these scenes of devastation, one image kept repeating itself, and it was this image that would eventually lead to the birth of Edu Sathkara. As I moved through the affected areas helping with relief efforts, I kept seeing the same thing scattered across floors, roads, and muddy ground: soaked textbooks with



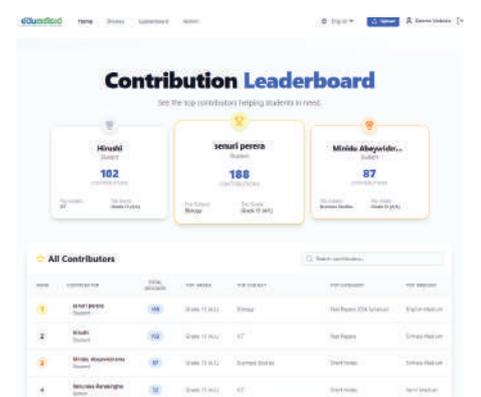
pages falling apart, torn exercise books with months of handwritten notes reduced to illegible smudges, and past papers that students had carefully collected and organized now lying destroyed in the debris. These were not just pieces of paper. For the students who owned them, these represented years of effort, countless late nights of studying, the discipline of consistent learning, and perhaps most importantly, their hopes and dreams for a better future through education.

The weight of that realization was crushing. I noticed students standing around aimlessly, their usual routines completely shattered overnight. Schools were closed indefinitely. Their study materials were gone. Exam dates still loomed somewhere in the uncertain future, but there was no clear path forward anymore. In Sri Lanka, education carries enormous significance beyond simple academics. It represents one of the most powerful and reliable tools for social mobility, for breaking cycles of poverty, for creating opportunities that might otherwise never exist. Losing access to education, even temporarily, does not just create a gap in knowledge. It can alter the entire trajectory of a young person's life, and for those preparing for their O/L or A/L examinations, the timing could not have been worse. These students were in the peak of their study period, A/Ls had already begun when disaster struck while exams like O/Ls were just months away set to happen in February, examinations that would determine their academic and professional futures.

## The Questions That Would Not Stop

While my body was present in the moment, distributing aid and helping wherever I could, my mind was constantly racing with questions I could not ignore. What happens after the immediate relief phase ends? Food supplies and temporary shelter would eventually return to some form of normalcy, but what about learning? What about students who had subjects left in their AIs and those students who have been preparing intensively for their O/Ls scheduled for February? What about children whose entire academic progress depended on physical books and handwritten notes that were now completely destroyed?

As a software engineering undergraduate and an active member and President of the Association of Software Engineering at NSBM Green University, these questions felt intensely personal. I could not separate myself from the responsibility that came with the technical skills and knowledge I had been accumulating. Every lesson learned in class, every line of code I had ever written, every system I had studied suddenly felt inadequate if it could not be applied when society needed it most. I kept thinking about the disconnect between what we learn in university and the real problems unfolding right in front of me. What is the purpose of spending years studying technology if we cannot deploy it meaningfully in moments of genuine crisis?



That internal conflict grew stronger with each passing day of volunteering. I realized that while many people and organizations were doing essential work providing first aid, dry rations, clean water, and temporary shelter, very few were thinking about the inevitable aftermath that would follow once the immediate emergency subsided. Education would become the next crisis, perhaps less visible but equally destructive in its long-term impact. Students had not only lost their homes and their sense of security. They had lost their education too. And unlike physical infrastructure that can be rebuilt with time and resources, educational disruption creates gaps that compound over time, making it increasingly difficult for students to catch up even when normalcy eventually returns.

This realization marked the conceptual beginning of what would become Edu Sathkara. The idea did not emerge from a formal planning meeting or a carefully organized brainstorming session. It was born organically in the middle of chaos, exhaustion, and deep reflection about what technology could genuinely contribute in this moment. I saw a gap that urgently needed to be filled, a problem that matched exactly with the skills that students like myself were developing. If physical learning materials could be destroyed by floods, then education needed to exist somewhere that water could never reach again. It needed to be rebuilt digitally, and it needed to happen immediately, not months or years down the road when students had already fallen too far behind.

### ***From Idea to Action: Building in the Middle of Crisis***

Edu Sathkara was envisioned as a centralized, crowdsourced educational resource platform. The concept was straightforward but powerful in its



simplicity: create a single digital space where students, teachers, and volunteers from across Sri Lanka could come together to rebuild what the cyclone had washed away. Notes, past papers, textbooks, worksheets, marking schemes, presentations, model papers, provincial papers, and term test papers could all be uploaded to a central repository and accessed freely by anyone who needed them. The platform needed to support all grade levels from primary school through A/L, cover all subjects across the curriculum, and accommodate all three mediums of instruction to ensure true inclusivity and equity of access.

The goal from the very beginning was never perfection or elegance. The goal was continuity. Students could not afford to wait while we built the perfect system with every possible feature and the most polished user interface. They needed access to learning materials immediately, and every day of delay meant another day of lost learning that would be difficult to recover.

Time became the most critical constraint of the entire project. This was not a situation that could afford lengthy design phases, extensive documentation, multiple rounds of user testing, or careful feature planning.

Students were already falling behind with every passing day. Edu Sathkara needed to exist as soon as possible. The decision was made to build fast, knowing fully that improvements, refinements, and additional features could always come later once the foundation was established. The platform was built in two nights. Those two nights, the 29th and 30th of the month, were some of the most intense and exhausting periods of focused work I have ever experienced, driven entirely by the urgency of the situation and the knowledge that real students were depending on what we would create.

During those two nights, decisions had to be made quickly and with confidence despite limited information. There was no luxury of overthinking every choice or exploring every possible alternative. Every technical decision was guided by one fundamental question: will this help students access the learning materials they need as quickly as possible? Firebase was selected as the backend infrastructure because it allowed extremely rapid development while still providing scalable cloud storage, real-time database capabilities, and minimal operational overhead. With existing credits available through programs and very limited time and resources, it represented the most practical and efficient solution that could deliver a reliable system in the timeframe available.

The architecture was designed specifically with crisis conditions in mind. The platform needed to handle sudden spikes in traffic as word spread, support large file uploads from contributors across the country, and manage continuous contributions from users with varying levels of technical expertise. Reliability mattered immensely because students would be depending on this system for their exam preparation.

Accessibility mattered because users would be accessing the platform under difficult circumstances, often from mobile devices with limited connectivity. Simplicity mattered because we could not afford to create barriers that would prevent people from contributing or accessing resources.

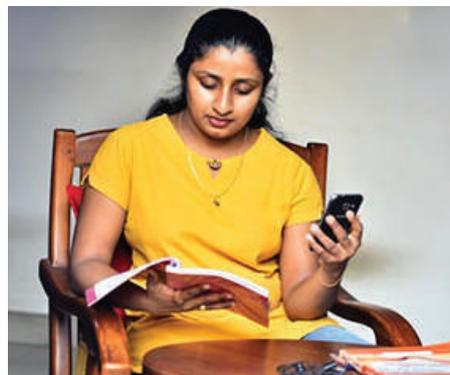
The user interface was intentionally kept clean and intuitive so that even users with very limited technical familiarity could navigate it easily and confidently, language translation mechanisms in place to facilitate the full population and all ethnicities despite their language supporting English, Sinhala and Tamil and performance a aspect rarely take to consideration was put at the forefront at this time by me since I understood the fact if unloading it's unusable taking to account the weak communication infrastructure across the island. Uploading resources needed to be as straightforward as possible to encourage maximum contribution from teachers and students willing to share their materials. At the same time, educational content cannot exist without proper structure and organization. Resources had to be categorized systematically by grade level, subject, syllabus type, and medium of instruction. Without this structure, a crowdsourced system quickly degenerates into chaos where finding specific materials becomes nearly impossible and the platform loses its utility.

Designing this balance between openness for contribution and rigorous organization for usability represented one of the most important technical and design challenges of the entire project. We needed to make uploading easy enough that people would actually do it, while simultaneously ensuring that everything ended up in the right place

where students could find it when needed.

### *The Challenge of Trust in Crowdsourced Systems*

Another critical consideration was establishing and maintaining trust in a crowdsourced platform. When you open up a system for anyone to contribute content, you cannot accept everything blindly without some form of quality control. Students relying on these materials for exam preparation need confidence that what they are studying is accurate, relevant, and properly aligned with their curriculum. Edu Sathkara addressed this fundamental challenge through a carefully designed combination of guided uploads and administrative moderation.



Contributors could submit resources freely without unnecessary friction or complicated approval processes that might discourage participation. However, an admin team worked continuously in the background to review, verify, organize, and properly categorize everything that came in this included Raminda Kariyawasam who joined in and brought this feature concept strong into the system and had stood by me for the duration of this project thereafter. This approach ensured that students could rely on the platform without confusion, misinformation, or the frustration of searching through poorly organized content. The moderation process also

allowed us to identify gaps in the resource collection and actively seek out specific materials that were still needed.

### *A Nation Responds*

As Edu Sathkara went live and word began spreading through social media, school networks, and volunteer organizations, the response was overwhelming in the best possible way. Contributions started flowing in from students who wanted to share their years of carefully prepared notes, preserved digital copies of their materials, and from volunteers across the country who understood that what they uploaded could directly help someone else continue their education during an impossibly difficult time this also included a huge team from ASE NSBM who stood behind the whole effort too working the late nights and collection and publishing the already unorganized data that had already started going around to make the ultimate resource bank.

People shared their personal collections of study materials, understanding instinctively that these resources now served a purpose far greater than individual use. What had started as an emergency response built in two desperate nights of work quickly evolved into a genuine national collaborative effort. Teachers from schools across multiple provinces contributed materials. Tuition class instructors shared their professionally prepared notes and model papers. Students who had successfully completed their exams in previous years uploaded their collections to help those coming behind them. Some literally called us and asked if they could come and handover their physical material to be digitalised and uploaded which we could literally not facilitate at that point in time. The platform became something larger than just a website or a technology

solution. It became a symbol of collective resilience and national solidarity in the face of disaster.

Within just a few days of launch, Edu Sathkara hosted over three hundred and fifty educational resources spanning all grade levels and subjects. The number continued growing as more people learned about the platform and recognized its value. But perhaps more meaningful than the raw numbers were what they represented: a community coming together to ensure that education would not become another casualty of the cyclone.

### Recognition and Validation

One of the most significant moments in Edu Sathkara's journey came when we secured the official .edu.lk domain. This might seem like a small technical detail, but it carried enormous symbolic and practical significance. The .edu.lk domain is reserved specifically for educational purposes, institutions and initiatives in Sri Lanka, and the approval process typically involves lengthy procedures and extensive validation to ensure that only legitimate educational entities receive this designation.



When we approached Sri Lanka Hosting explaining our mission and the urgent need we were addressing, something remarkable happened. Despite the normally rigorous requirements and extended timelines, they understood the cause we were serving and the genuine impact the platform was already creating. They recognized that technology should serve humanity, not the other way around, and they expedited our approval in recognition of the critical role Edu Sathkara was playing in educational recovery. Receiving that .edu.lk domain validation felt like official recognition that what had started as a crisis response built in two nights had become a legitimate and valued part of Sri Lanka's educational infrastructure.

### Beyond Individual Achievement

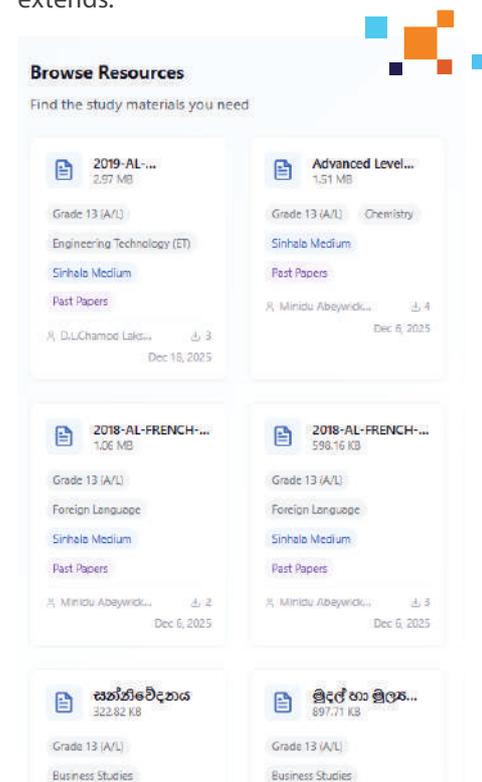
From the beginning, Edu Sathkara was developed and maintained by a small team initially even though conceived by me, proving the fact that no matter what despite the build being of an individual a team is necessary for success. This was never intended or desired to be an individual achievement or a personal project. It represents something far more important: the power of student-led initiatives when combined with genuine purpose, collective ownership, and shared responsibility toward society. The platform was built by Sri Lankan students for Sri Lankan students, embodying the idea that technical skills gain their truest meaning when applied to serve the communities we belong to.

As the project evolved beyond those initial two nights, we added features that enhanced engagement and encouraged continued contribution. A leaderboard system was implemented to recognize and celebrate the most active contributors, turning resource sharing into a collaborative effort where

people could see the collective impact they were creating. These additions came not from the original plan but from observing how people were using the platform and understanding what would make them more invested in its continued success.

### Lessons That Transform Understanding

Beyond its immediate impact in helping students recover from educational disruption, Edu Sathkara represents a broader realization about what technology can and should be. Software development is not just about building products for commercial success or creating innovations for convenience. It can serve as critical infrastructure during crises. Education continuity is not a luxury or a secondary concern to be addressed eventually after everything else is fixed. It is an absolute necessity. When learning stops, futures are disrupted in ways that compound over time, making recovery increasingly difficult the longer the gap extends.





By restoring immediate access to educational resources during this critical period, Edu Sathkara helped bridge a gap that, if left unaddressed, could have created lasting consequences for an entire generation of students whose education was disrupted at crucial stages of their academic journey. This is particularly true for students preparing for O/L and A/L examinations, where timing is everything and delays can mean missing opportunities or having to wait another full year to attempt again.

On a deeply personal level, this entire journey fundamentally reshaped my understanding of what software engineering truly means. It taught me that architecture is not just about elegant design patterns, scalability diagrams, or choosing between different frameworks and technologies. Architecture is about making critical decisions under intense pressure while understanding that real human consequences depend on those choices. It reinforced the absolute importance of ownership and personal responsibility for the systems we build. It demonstrated that speed and clarity of purpose can sometimes matter far more than perfection or comprehensive feature sets.

Most importantly, Edu Sathkara reaffirmed a belief I hope to carry throughout my career: technology should always, fundamentally and uncompromisingly, serve humanity. In the aftermath of Cyclone Ditwah, when physical classrooms fell silent and books lay destroyed in the mud, code became a bridge back to learning. Through this platform, education continued even when it seemed impossible, hope returned to students who had lost so much, and young people across the affected regions were reminded that their dreams and their futures had not been forgotten by their community.

### Looking Forward

Edu Sathkara is not the end of this journey or the final statement on technology's role in crisis response. It is a living reminder of what becomes possible when empathy, technical skills, and genuine urgency come together with clear purpose. It stands as tangible proof that even in the darkest moments of crisis, meaningful systems can be built quickly, responsibly, and with lasting impact when the motivation is genuine and the commitment is unwavering.

In times of disaster, systems matter. The infrastructure we build, both physical and digital, determines how communities recover and how quickly life can return to something resembling normalcy. When those systems are built with purpose, with careful thought about who they serve and what they genuinely need, they can help rebuild not just physical infrastructure but something far more valuable: futures, opportunities, and hope itself.

The platform continues to grow and evolve, serving students across Sri Lanka who need access to educational resources regardless of their circumstances. What started as an

emergency response to a natural disaster has become part of the educational landscape, demonstrating that student initiatives guided by genuine social purpose can create infrastructure that outlasts the crisis that inspired them. Through Edu Sathkara, we learned that the most meaningful applications of technology often come not from planned innovation cycles or market research, but from simply paying attention to the real needs around us and having the courage to act decisively when it matters most.

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