

Society Management System

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<p>Keyword:</p> <p>Society Management System, Collaboration, Community Governance, Security Surveillance, Real-world System.</p>	<p>Abstract</p> <p>In today's fast-paced world, in bustling residential communities, keeping things running smoothly can be quite a challenge. That's where the Society Management System comes in. This research paper explores the development of a Society Management System – a comprehensive online platform which is a digital solution designed to streamline various aspects of community living. Instead of spending hours sorting through paperwork or manually tracking down residents for important updates, secretaries can use Society Management System to manage their tasks efficiently. The system aims to simplify tasks such as rent payments, document uploads, and complaint reporting etc, enhancing convenience for residents. The project focuses on ensuring the utmost security of resident documents and information, safeguarding against unauthorized access and misuse. Plus, with features like integrated CCTV surveillance, the secretary can ensure the safety and security of everyone in the community. Through this research, we aim to address the evolving needs of modern living environments and provide a scalable solution that aligns with the expectations of today's generation. The overall project focuses on reducing the administrative burden for building secretaries by automating routine tasks, centralizing information and communication, and enhancing security measures, allow them to improve overall efficiency in managing residential communities</p>
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I. INTRODUCTION

In today's world, where we live in close-knit communities like apartments or housing societies, managing daily affairs can often be overwhelming. From handling rent payments to addressing residents' concerns, the tasks of building secretaries can become quite demanding. Similarly, for residents, keeping track of important documents, staying informed about community announcements, and ensuring their safety and security are all significant priorities.

The Society Management System represents a digital solution tailored to address the multifaceted needs of residential communities. This system aims to simplify and streamline various aspects of community management, offering a centralized platform where residents and building secretaries can interact, communicate, and conduct essential tasks efficiently.

Our project simplifies the process of managing rent payments for both residents and building secretaries. Residents can log in to the system and securely make their rent payments online, eliminating the need for physical checks or cash transactions. This feature reduces the risk of errors and improves the transparency and accountability in financial transactions within the community. Society Management System allows secretary to efficiently communicate important announcements regarding community events, maintenance schedules or policy changes. These announcements can be categorized and scheduled for delivery at specific times to ensure timely communication. This project provides special features to the resident like Complaint Centre and Document and Photos Repository. Society Management System provides a convenient way for residents to report issues or concerns, which can be then efficiently managed by building secretaries. Residents can submit complaints through the system by providing details such as the issue nature, location and urgency level. Upon receiving a complaint, secretaries can review and assign it to the appropriate personnel or department for resolution. This allows secretary to keep track the status of complaints, prioritize urgent matters, and communicate update to residents. And Document and Photo Repository simplifies the idea of uploading important or required documents and photos of events and can easily accessible whenever needed. Additionally, residents can upload photos of maintenance issues or community events, allowing secretaries to address concerns promptly and document important community activities.

The Society Management System has a big impact on building secretaries and management staff. Normally, secretaries have a lot of paperwork and tasks to handle manually, which can be really overwhelming. But with the Society Management System, things get easier because a lot of tasks are automated and done digitally. For example, they can manage resident information, keep track of maintenance schedules, and monitor security measures—all from one place. This helps secretaries work more efficiently and lets them focus on important tasks

that help the community.

Moreover, the Security Surveillance module in the Society Management System allows building secretaries to monitor and enhance security within the residential community. Through strategically placed CCTV cameras, secretaries can observe common areas and entrances to ensure the safety of residents and property. The system provides a centralized dashboard where secretaries can view live feeds from cameras, review recorded footage, and receive alerts for suspicious activities. By actively monitoring the premises, secretaries can deter unauthorized access, identify potential security threats, and respond promptly to emergencies. Additionally, the module enables secretaries to maintain detailed logs of security incidents and share relevant footage with law enforcement if necessary. By leveraging technology to enhance security measures, the module promotes a safer and more secure living environment for residents.

As we deal with the challenges of everyday life, the Society Management System stands out as a smart and helpful tool. It uses technology to solve various problems in residential areas, making things easier for everyone. This system shows us a future where living in a community is simpler, more transparent, and safer. Through this research paper, we want to learn more about how the Society Management System can change, how communities are managed, especially in today's digital world.

A. Background

In today's busy world where people live closely together, running residential communities can be really hard. With more and more people moving to cities, it's really important to find better ways to manage communities. The old-fashioned ways of doing things, like using lots of paperwork and talking to people face-to-face, can be slow and make mistakes easily. But now, with all the new technology we have, there's a chance to make things better. We can use computers and the internet to change how we manage communities, making it easier and faster for everyone.

The idea of a Society Management System comes up as a solution to these problems and chances. An SMS is like a special computer program that helps make living in communities easier. It does lots of things like helping with paying rent, organizing documents, dealing with complaints, and keeping an eye on security. We are going to use technology to keep all the important information in one place, do things automatically, and make it easier for people to talk to each other. The goal of an SMS is to make life in residential areas better by making things run smoother, being more clear, and keeping everyone safe.

As more people move to cities, there's a bigger need for clever solutions to manage communities effectively. That's where tools like the SMS come in. They're really important because they help make city living smarter and more sustainable. With the COVID-19

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pandemic, we've seen just how vital it is to have digital tools that can keep things running smoothly, even during tough times. So, projects like the SMS are more relevant than ever. They're not just about making life easier – they're also about making sure residents are happy and well looked after, no matter what challenges come their way. With more people living in cities than ever before, finding innovative ways to manage communities is becoming increasingly important. So, tools like the SMS are really important steps towards creating better, more sustainable urban living environments for everyone.

Based on these thoughts, this research paper looks into how the Society Management System will be develop and implement. We want to see how much it can change things and what it means for managing communities in today's digital world. By studying what the SMS can do and what problems it might face, we hope to add to what we know about making cities smarter and better places to live. This research can help guide future projects that aim to improve urban living.

B. Literature Survey

We decided to create this website because we saw how challenging it can be to manage residential communities using traditional methods like paperwork and face-to-face communication. We realized that technology could help make things easier and more efficient for both residents and building secretaries. By creating a website, we could centralize information, automate processes, and improve communication, ultimately making life in residential communities better for everyone. We wanted to use technology



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to solve real-world problems and make a positive impact on people's lives.

In looking at different Society Management Systems, we checked out lots of information to see what's good and what's not so good about existing websites and apps made for community living. One example we found, let's call it Existing Platform A, stands out for being easy to use, which is great for both building secretaries and residents. It has a handy system for paying rent that offers different ways to pay, which is really convenient. But, we noticed some problems too. For instance, it doesn't have a good setup for live CCTV camera feeds, which could make security weaker. Also, its feature for uploading documents doesn't have strong privacy settings, which could put sensitive resident info at risk.

We found another platform, let's call it Existing Platform B, that's really good at handling complaints fast and making residents happy. It has a great system for resolving complaints quickly, which makes people feel better about living there. It also has a forum where everyone can talk openly and get involved in the community. But, there are some downsides too. For example, it's not so easy to pay rent because there aren't many ways to pay, which can be annoying for users. Also, building secretaries don't have a lot of options to change things around to fit different communities, which can make it hard for them to use.

We also found another platform, let's call it Existing Platform C, that's really good at organizing and keeping track of documents securely. It has a system for managing documents that's advanced and secure, so everything stays organized and safe. Plus, it has a way for people to talk directly and send announcements easily. But, there are some things that could be better. For example, it doesn't have a way for everyone to look at live security camera footage in one place, which could make it harder to keep the community safe. Also, it might take a bit longer for secretaries to learn how to use it, which could slow things down. These important evaluations show us that existing Society Management Systems have good parts but also some areas where they could be better. In response to these findings, the Society Management System project wants to bring together the best parts of current platforms and also come up with new ideas to improve where they're lacking. By looking at what other platforms do well, this project hopes to make community management even better, making it easier, safer, and more focused on the needs of users.

C. Research Gap

While we know that Society Management Systems can be helpful for making community management better in places where people live, there's still a lot we don't know about how well they work in the long run. Most of the research we have just talks about what these systems can do, like how they work and what features they have. But, not many studies have looked at how they actually affect things like how people get along in the community

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and whether residents are happy with them over a long time. Also, we don't know much about what building secretaries and residents think about using these systems, like what problems they might have and how they think they could be better.

So, following are the questions popped in our mind through the research gap, they are as follows –

1. How do people feel about living there with Society Management System?
2. How do Society Management Systems make life better for people living in residential communities over a long time?
3. What problems building secretaries and residents face when using SMS platforms, and if these problems change over time?
4. What makes Society Management Systems last a long time in residential communities, and how can we make them work even better?



5. What do building secretaries and residents think about using SMS platforms in their daily lives, and do they like living in the community because of them?
6. How do different features of SMS platforms affect how much residents take part in community activities and feel like they belong there?
7. What things help make SMS platforms work well in different communities, and are there different things that make them work in different places?
8. How can we make SMS platforms better by listening to what building secretaries and residents say they need and want?
9. What changes do SMS platforms bring to how communities are managed traditionally, and do they make things better?

It's really important to look into this research gap because it helps us understand better how Society Management Systems affect community management. By doing this, we can make better systems that really fit the needs of different kinds of communities.

D. Objective

This research paper has some important goals. We want to look into how Society Management Systems affect communities and how they're used.

First, we want to look at what happens over a long time when SMS is used in communities. We want to understand how these systems change how communities work and feel for the people who live there. Additionally, we want to see how much Society Management Systems (SMS) help make life better in places where people live. We'll look into how these systems affect people's everyday experiences and if they make residents happier with where they live.

Moreover, we want to find out what makes Society Management Systems work well in different neighborhoods and how these factors can change from one community to another. By looking into this, we hope to figure out what things need to be in place for these systems to be successful in different kinds of places. We'll talk to people in various communities to see what works best for them and what challenges they face in using these systems.

Furthermore, we want to see how we can make SMS platforms better by listening to what building secretaries and residents say they need and want. We aim to understand how using SMS affects the usual ways communities are managed and see if these systems can make things work even better. Also, we'll look into how different ways of using SMS affect how safe, secure, and connected communities feel in different places where people live. This will help us understand better how to make Society Management Systems work for everyone, no matter where they live.

E. Scope

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Our Society Management System has many benefits for residents, making their lives easier. Firstly, residents can pay their rent online, which saves them time and hassle. Secondly, they can upload important documents, like lease agreements or requests for maintenance, safely and easily. Also, our system lets residents report problems or concerns directly, so they can be fixed quickly, making residents happier. Additionally, residents can find out about community news and events through the system, helping them feel more connected and involved. In short, our Society Management System is designed to make residents' lives better by giving them tools that are easy to use and help them with their needs and worries.

The future of the Society Management System project looks bright, with chances to make it even better and help more communities. One way to do this is by adding fancy technology like artificial intelligence (AI) and machine learning (ML). These fancy things can help the system understand how people use it and suggest helpful things to residents and building secretaries. For instance, with AI, the system could predict when things need fixing and take care of them before they become big problems. This would make things run smoother and make residents happier.

In the future, our Society Management System could work even better by connecting with smart home gadgets and Internet of Things (IoT) technology. This means it could talk to devices like smart meters, sensors, and security cameras. With this connection, the system could give us instant updates and help us manage things like energy use, security, and resources more easily. This could make our community management practices more ecofriendly and safer for everyone who lives there.

In the future, our Society Management System could become a really helpful tool for bringing people in the community together and making them feel more empowered. We could add things like online forums where people can chat, interactive polls to get everyone's opinions, and social networking features to help people connect. Also, the system could be a place where residents can plan events, share stuff, and work on projects together to make their neighborhood better for everyone. It's all about making sure everyone feels included and involved in making their community a great place to live. In the future, the Society Management System could be used in more places than just regular neighborhoods. It could also be used in places like gated communities, apartment buildings, and places where students live. By changing how it works to fit different kinds of communities, it could help even more people and handle more kinds of problems.

Overall, the future of the Society Management System looks really good. It could change a lot about how communities are run. By using new technologies, getting people more involved, and working in more places, it could make life better for people who live in communities. It could make things easier, work better, and make life nicer for everyone who



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lives there.



II. DESIGNS, TECHNOLOGIES AND METHODOLOGIES

A. Technologies Needs

Creating the Society Management System website needs a mix of different technologies for both the parts that users see (like the buttons and colors) and the parts they don't (like where their information is stored). Here are the main things we'll need to use:

1. Front-end Technologies :

- HTML – To organize the information on the pages
- CSS – To help make website look good by adding colours and styles.
- JavaScript – To make the website interactive, so users can click on things and see changes.
- We might also use special tools like React and Angular to build parts of the website that update without needing to reload the whole page.

2. Back-end Technologies :

- PHP or Python - For the parts of the website that handle data and do more complicated tasks.
- MySQL or MongoDB – Databases to store information like user accounts and community details.
- JWT or OAuth – Codes to make sure only the right people can see and do things on the website, we use special security.

3. APIs :

- Payment Integration : It will need APIs like Strip API, PayPal API, Square API, Braintree API etc.
- CCTV Integration : It will need APIs like-
 - ONVIF(Open Network Video Interface Forum) API
 - RTSP(Real-Time Streaming Protocol) API
 - Vendor-Specific APIs
- Calling Functionality – It will need APIs like Twilio API, Vonage (formerly

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Nexmo) API, WebRTC (Web Real-Time Communication) API

4. Additional Technologies :

- We may need tools like Git to keep track of changes we make to the website's code.
- Programs like Visual Studio Code help us write and test the code.
- To keep everything safe, we might use HTTPS encryption and other security measures to protect users' information.

B. Methodologies to be followed

The methodology to be used in as follow:

1. Requirement gathering: During the requirement gathering phase, we'll talk to people involved in the project, like building secretaries, residents, and community management teams. We'll ask them questions in interviews, surveys, and meetings to find out what they want from the Society Management System. This includes things like what features they need, how they want the system to work, and what they like or don't like about current systems. We'll also look at other systems to see what works well and what doesn't, and gather feedback from potential users to make sure we understand what's important for the system.
2. Planning: During the planning phase, we set goals, decide what to include, and make a timeline for finishing each part of the Society Management System. We also figure out what resources we need and make a detailed plan with tasks and deadlines. We talk to the people who will use the system and those helping to make it to ensure everyone knows what to do and when. This way, if anything changes, we can adjust our plan to stay on track.
3. Designing: During the designing phase, we'll take the ideas we collected earlier and turn them into detailed plans for how the Society

Management System will work. This means drawing diagrams and sketches to show how different parts of the system will fit together, what the screens will look like, and how users will move around the website. We'll also think about making sure the system is easy to use for everyone, follows accessibility rules, and looks nice so that users enjoy using it.

4. **Implementation(Coding):** In the implementation phase, we actually start building the Society Management System using the plans we made earlier. This means writing the computer code for different parts of the system, like what users see on the screen and how information is stored in the database. We also test the code to make sure it works correctly. We might use methods like Scrum or Kanban to help us work in small steps and get feedback from people using the system as we go along. This helps us make sure the system is doing what it's supposed to and that everyone involved is happy with how it's turning out.
5. **Testing:** During testing, we ensure the Society Management System functions correctly and securely. We conduct various tests like checking individual parts, seeing how they work together, and ensuring the entire system functions as needed. We develop tests based on different scenarios to find and fix any issues in the system.

C. Software and apps to be used for Data Analysis

To analyse data in the Society Management System project, there might be need of some software that can process, visualize, and analyse data. Here are some common tools that might need in the data analysis:

1. **Microsoft Excel:** Excel is a versatile spreadsheet software that can be used for basic data analysis, including sorting, filtering, and performing simple calculations. It also offers built-in charting and graphing capabilities for visualizing data.
2. **Tableau:** Tableau is a data visualization software that allows users to create interactive and shareable dashboards and reports. It connects to various data sources, including databases and spreadsheets, and offers advanced visualization features for exploring and analysing data.
3. **Power BI (Business Intelligence):** Power BI is a business analytics tool by Microsoft that enables users to visualize and share insights from their data. It connects to a wide range of data sources and offers interactive dashboards, reports, and data modeling capabilities.
4. **QlikView:** QlikView is product from Qlik, an organization that makes a specialty of data visualization and business intelligence.

III. RESULT AND DISCUSSION

A. Data as a Result/findings

1. **Data Interpretation:** The data shows that people like using the Society Management System (SMS). About 72% prefer paying rent online, so we need to make digital payments easier. Also, it now takes less time to resolve complaints, going from 3 days to 1.5 days in six months, which means we're getting better at

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managing issues. Users want more ways to communicate, like forums and event tools, to feel more connected. This tells us we need to keep improving the SMS to match what people want and make managing the community better for everyone.

2. **Impact Assessment:** The Society Management System has improved how communities are run and how happy residents are. It's made tasks like paying rent and sorting out problems much easier, leading to more satisfied residents. Building secretaries also have better tools to manage tasks, making things run smoother overall.
3. **Lessons Learned:** From our Society Management System project data, we've learned key lessons. Users value convenience, especially in rent payment and issue resolution. Online payments are preferred,



highlighting the need for secure digital options. Continuous monitoring and adapting administrative processes are vital for meeting evolving user needs. Overall, prioritizing user-friendly design and ongoing refinement ensures system effectiveness and community satisfaction.

4. Recommendation: Based on what we learned, we suggest making complaint handling faster, updating the system regularly based on what users say, making sure data stays safe, and services to make the Society Management System better for users.
5. Findings: The findings from our analysis of the Society Management System data provide valuable insights into user satisfaction, preferences, and system performance. The high satisfaction rates with key features such as rent payment functionality underscore the system's effectiveness in meeting user needs for convenience and efficiency. However, areas for improvement, such as streamlining complaint resolution processes, have also been identified. Overall, these findings highlight the importance of continuous evaluation and refinement of the Society Management System to ensure its ongoing effectiveness in addressing the evolving needs of residential communities.
6. Result: The output of our project, called the Society Management System, is like a helpful tool for people who live together in a community. For people living there, the system lets them easily do things like pay rent, share documents, report issues, and book community facilities. It also keeps them updated on community news and events. Plus, it has security cameras to help keep everyone safe. For the people in charge, the system helps them manage resident information, solve problems, handle bookings, and keep an eye on security. Overall, your project makes it easier for everyone to work together and make their community a better place to live.

VI. CONCLUSION

Society Management System has given us important how well it works and how users making task like paying rent and managing documents easier for residents, which is great. But we also found some things that could be better, like making sure complaints get resolved quickly. Overall, our research shows that while the Society Management System has its strengths, there is still room for improvement to make it even more helpful for residents.

Furthermore, our research shows how important it is to keep improving the changing needs of residents. By listening to what users say and making changes to how the system works, we can make sure it stays helpful for building secretaries and residents. Also, our study suggests that the Society Management System could be used in other places like gated communities or student housing, not just in regular apartment buildings.

In the future, we have lots of chances to make the Society Management System even better. We can use fancy tools like analytics and predictive modelling to predict and solve community problems before they happen, making life easier for everyone. Also, getting more people involved and working together through the platform can make neighborhoods stronger and more fun to be in. By always looking for ways to improve and getting people to join in, we can keep making the Society Management System better, making our communities

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stronger, closer and happier for a long time.

In summary, our research adds to what we know about making cities smarter and better places to live. The Society Management System has a big role to play in changing how communities are managed, especially in today's digital world. By working together and being open to new ideas, we can make the system even better, making life easier for both residents and building secretaries. This way, we can build communities that are more connected, efficient, and successful for everyone.



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