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Integrating Social Media with Emergency Management at Airports

Executive Summary

The Need for and Value of Social Media in Emergency Management

With the rise of social networking and the ubiquitous nature of messaging apps, social media (SM) has transcended its role as an entertaining pastime to become a vital part of our lives. In this connected culture, individuals and organizations widely accept that SM is an important, if not crucial, tool for disseminating and promoting information; airport organizations are no exception to this. In light of the reach of SM and its ability to connect organizations with their customers, SM managers are becoming invaluable to emergency management (EM) in information gathering and sharing. Integrating SM with EM (SMEM) is proving itself highly useful during incidents, emergencies, and irregular operations for situational awareness and assisting the emergency team in returning operations to normal.

With airport and airline reputations on the line and the speed at which an incident can go viral on the web, airport SM and emergency managers *are in need of a program* for providing critical information to the public and to those responding to incidents. The focus of this WebResource is therefore helping airport operators build an SMEM program. For those airport operators that already have an SMEM program, the WebResource can aid in improving and sustaining your program. Figure 1 demonstrates that with proper integration, SM can complement EM.

SMEM can improve situational awareness through *listening* to public SM platforms. The information can then be shared by *publishing* updates and providing direction to customers. Further, SMEM includes effectively *engaging*
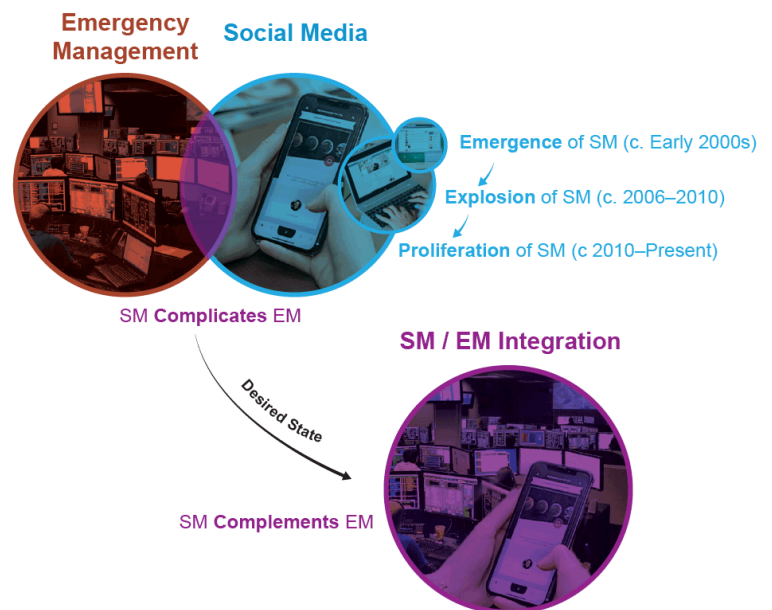

Figure 1: The Need for Integration of Social Media and Emergency Management

in conversations with the airport community (traveling public, stakeholders, and business and government partners) to answer questions and provide valuable discussion during an incident. Effectively applied, an SMEM program promotes valuable communications and awareness to expedite operations returning to normal.

For all of this to happen, the SM and EM managers at an airport should work together to lead the development of an SMEM program as the program *champions*. Bringing these disciplines together is a team effort; the champions will serve as the focal point for bringing all groups with a stake in SM (airlines, tenants, airport departments, federal partners, local government, etc.) and incident response (first responders, mutual aid, emergency dispatch, hospitals, volunteer organizations, etc.) together for shared situational awareness and coordination of response.

Who Is This WebResource For?

While this WebResource is beneficial for *anyone* who has a role in SM interaction or uses information from SM while responding to incidents, the EM and SM managers are its primary audience. Nonetheless, airport executives, first responders, and airport stakeholders (including local, state, and federal agency partners) will find great value in understanding the benefits of an SMEM program. Read Part 1: Understand to learn why your airport should consider an SMEM program and to understand the value that first responders, stakeholders, and other support groups bring to the program.

The WebResource takes a step-by-step approach to guiding users through the process of developing an SMEM program:

- **Part 1: Understand** is focused on providing an understanding of SM, its uses in EM, and the benefits and challenges that it brings. (four steps)
- **Part 2: Assess** gives the option of separately assessing the airport's SM and EM maturity and determining the current level of integration.
- **Part 3: Plan** and **Part 4: Integrate** guide users through planning the SMEM program and establishing the integration. (three steps each)
- **Part 5: Sustain** guides users through maintaining and growing their SMEM program and preparing for future innovation.
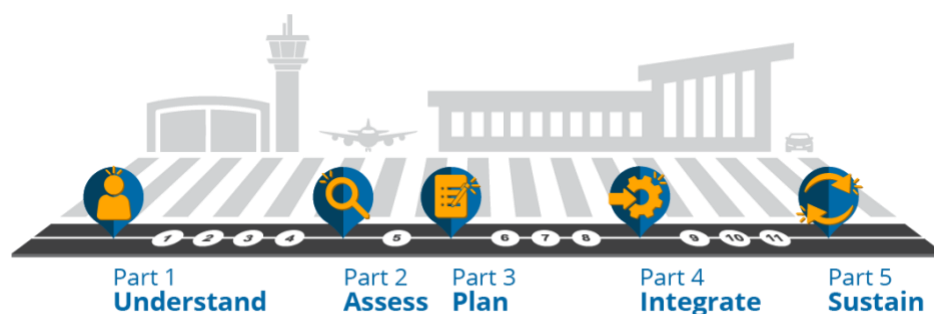

Figure 2: Layout of the SMEM Program Development Process

We structured this WebResource to enable readers to set their own pace based on whether they are just looking for information, or they are seeking to develop, improve, or sustain an SMEM program.

Information Path
For those looking to understand SM and EM and how to fit in

Development Path
For those new to integrating SM into EM, looking to develop a program

Improvement Path
For those who have some SM integration, looking to expand

Sustain Path
For those looking to sustain their program and to innovate

Figure 3: Paths Through ACRP WebResource 8

As you seek to build your SMEM program and bring your stakeholders on board, you can download and distribute the included informational handout to help generate interest in your efforts. *Note: The link to this informational handout is located in the WebResource version of this Executive Summary.*

Part 1: Understand

The foundation to building an SMEM program is properly understanding SM and how it can benefit EM. Part 1 provides the baseline understanding for the rest of the journey and a way to become familiar with the terms and concepts used throughout the WebResource. This part is important for everyone who is sharing information and collaborating within the whole community*:* from the SM and EM managers and first responders to the airport and community stakeholders and local, county, state, and federal partnering agencies.

No matter the level of maturity in these areas, going through the steps will provide insight into the use of SMEM and effectively set up the next steps to integrate SM into EM at the airport.

Understand the Basic Functions of Social Media and the Social Media Management Functions

Building or improving an SMEM program requires a solid understanding of the basics of SM use and management. When considering how an *organization* can leverage SM, most industry professionals generally refer to the following four functions: listening, engagement, publishing, and reporting. We refer to these functions throughout this WebResource as **SM management functions.**

Function	What Is It?
Listening	Process of **monitoring** digital conversations to understand what airport visitors, passengers, internal and external stakeholders, etc., are saying about the airport. Filtering tools can be used to facilitate listening.
Engagement	Process of **connecting** directly with individuals **in response** to questions and/or comments. Engagement can be performed on SM channels by replying to public comments or directly messaging with users. It can also encompass the use of private secure responder messaging channels to facilitate emergency response.
Publishing	Process of **proactively posting/communicating** with the public and stakeholders to make announcements or provide updates. The goal is to communicate well enough that the audience pays attention to what is being said. Coupled with other forms of communicating (traditional media, public address announcements, etc.), publishing can broaden your reach.
Reporting	Process of **consolidating and internally distributing the information** gathered through the other three functions. This information can be useful during real-time situations to assess the effectiveness of your engagement and publishing activities and to focus your listening. Reporting is also useful for post-event evaluations and process improvements.

Understand Social Media Uses in Emergency Management

EM examines potential emergencies and incidents based on the risks posed by likely hazards and develops/implements plans designed to reduce the impact of these events on the airport. For risks that cannot be eliminated, plans are designed to respond to and deal with the consequences of actual events and to recover from those events. Figure 4 depicts the four phases of EM.
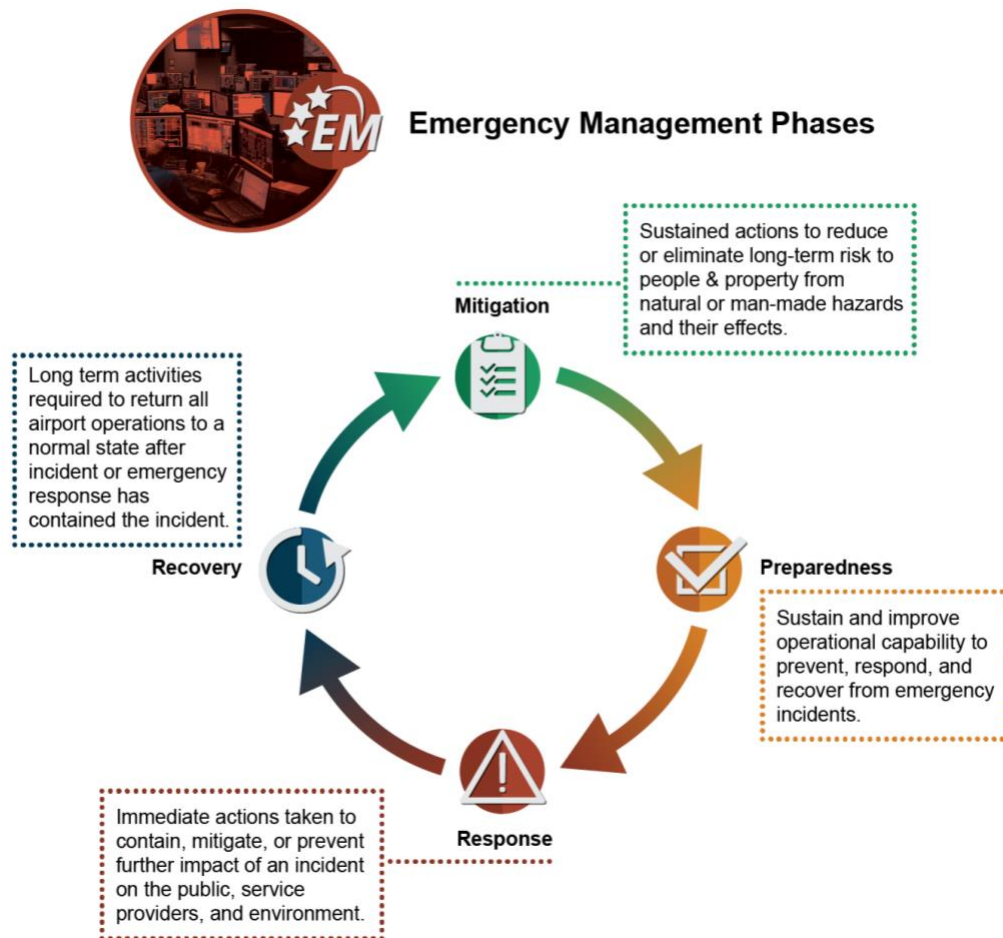
Emergency Management Phases

Mitigation — Sustained actions to reduce or eliminate long-term risk to people & property from natural or man-made hazards and their effects.

Preparedness — Sustain and improve operational capability to prevent, respond, and recover from emergency incidents.

Response — Immediate actions taken to contain, mitigate, or prevent further impact of an incident on the public, service providers, and environment.

Recovery — Long term activities required to return all airport operations to a normal state after incident or emergency response has contained the incident.

Figure 4: Emergency Management Phases

Each of the SM functions (listening, engagement, publishing, and reporting) can be integrated with each of the phases of EM.

Since both **Mitigation** and **Preparedness** are pre-response phases, the SM uses during each are very similar. During these phases, you can use SM listening to assess who to follow on SM channels to gain reliable information and to gain an understanding of the important issues for airport customers and stakeholders. You can also use SM engagement to connect with those who have posted about safety issues at your airport and to practice your skills during non-event times. During this phase, you can also publish safety information in advance of an event such as adverse weather.

The **Response** and **Recovery** phases are the phases we most typically think of when considering SM integration. During these phases, listening can provide you with early indicators of building events. It can also supply you with information that could impact real-time response efforts or identify airport users who have posted that they are affected by an issue. Through engagement, you can provide real-time direction to individuals to help keep them safe. You can also use private messaging channels to coordinate activities with your responders and stakeholders. Further, you can use publishing to keep customers up-to-date on issues and to give actionable information for them to make decisions on what to do. Then, through SM analysis and

reporting, emergency operations center (EOC) personnel can assess if messages are reaching the desired audience.

Using SM for EM as described above can result in the following benefits to your airport, customers, and stakeholders:

- **Reputation**: Helps to build and protect positive reputations.
- **Response Efficiency**: Provide information to and share information from first responders to help accelerate response and recovery.
- **Communication**: Improve communication among all stakeholders and the public.
- **Whole Community**: Facilitates involvement of the whole community during and after an event.

Benefits realized will be different for each airport, especially considering different airport sizes and varying SM and EM maturity levels. But SMEM is not without its challenges, both in setting up the program and in practice. In building the program, you may find it difficult to get all stakeholders involved. You may also experience challenges in procuring the right technology and training personnel to the proper proficiency level. Further, SM integration requires a change in culture among those involved—a change which can take some time. Even with these challenges, the benefits far outweigh any roadblocks you may encounter.

Part 2: Assess

As a discipline, airport EM continues to grow and become more professional and sophisticated. SM programs at airports have also developed beyond simple marketing into savvy communication and public relations operations. However, not all airports have properly integrated the two programs. The WebResource provides a Self-Assessment Tool that leads you through a series of questions that will help you assess your current maturity and highlight sections in the WebResource that cover your areas for improvement.

The Self-Assessment Tool gives you the opportunity to assess the following areas:

- SM Sophistication and Maturity
- EM Depth and Maturity
- SM and EM Integration
- SM Tools

Part 3: Plan

Before you can fully integrate SM, you should develop the plan for who will be involved, what the aim of the program will be, and what SM management functions you will include. We have identified three planning steps which include identifying stakeholders (Step 6), establishing a vision and objectives for your program (Step 7), and defining your SM integration (Step 8). All three are necessary and become part of the framework you will develop for supporting the SMEM program.

One of the first efforts in planning is defining your key stakeholders. Who do **you** need to bring to the table in order to set your vision, objectives, and desired level of SM integration? Even if you have existing relationships, take this opportunity to reassess the stakeholders who you may

need to be involved in building your SMEM program. These will include both on-airport and off-airport stakeholder representatives who provide support for the airport and are critical in a time of emergency response. These stakeholders extend beyond airlines, tenants, concessionaires, and fixed-base operators to include local, state, county, and federal partners (at regional and national levels). Each has a unique reach and following on SM channels; by coordinating your messaging efforts, you can multiply the impact of your SMEM program. All these stakeholders make up what is called the *whole community* for SMEM (see Figure 5).

Figure 5: The Whole Community

Note: During the research for this WebResource, we found that regional- and national-level federal agencies (TSA, CBP, FAA, CDC, FEMA, NTSB, etc.) saw the value in partnering with airport programs as a trusted source of SM information and messaging. Additionally, many of these agencies have extensive online training resources and materials you can leverage.

Once you have defined your SMEM community, your focus should turn toward casting a vision for SMEM at your airport. The SM and EM managers at your airport (the champions for the SMEM program) should lead this effort, developing a unique shared vision in collaboration with your SMEM community.

Based on the identified risks and the priorities set in the vision, the SMEM program champions should work with all stakeholders to develop purposeful and realistic goals, as well as measurable and attainable objectives. In addition, you should tie these goals and objectives to your airport emergency and crisis communication plans. This will help ensure your SMEM program is woven throughout your response and is not a standalone effort. For example, for those new to SM, one of the first goals may be to understand your audience. Some objectives supporting this goal include identifying the exact demographics of your audience and determining the most valuable SM channels for your airport based on audience frequency of usage.

After completing your goals and objectives, it is necessary to determine what *level of integration* you can support and sustain. Each of the three **levels** of integration (basic, intermediate, and complete) are built on the following **points** of integration:

- Shared Understanding of SMEM and Associated Benefits
- Policies, Agreements, and Procedures
- SM Tools and Personnel Resources
- SM Training
- SM Drills/Exercises

As you jump into the levels of integration, you may decide a hybrid of two levels is a more ideal goal to start with than one level. That is perfectly understandable; the levels are meant to be guidelines from which you can build what works best for you.

Part 4: Integration

Your final effort in developing and implementing an SMEM program is to build the supporting elements for the integration (Step 9: Establish Your Integration Needs). Once in place, you should establish your SM operating framework (Step 10: Establish the SM Framework). This framework supports the final plans and procedures (Step 11: Develop Procedures and Update Plans) and guides the technology and tools you will utilize.

Identifying and establishing the required integration needs is a critical step in this final part of the journey toward SM integration. You will need to develop key items such as roles and responsibilities and the associated policies and agreements necessary for the operations of the joint information center (JIC), EOC, and your field personnel.

These elements support the SM management functions (listening, engagement, publishing, and reporting) during emergency operations, as well as day-to-day operations. For the SMEM program to be highly successful, the champions, working with the stakeholder team, should develop success measures to quantify the impact of SM on reaching its intended audience, affecting incident resolution, and meeting operational objectives. These success measures will be used as an assessment tool to modify how you are implementing the SM functions.

Your next step is developing an appropriate SM operating framework. Each element in the operating framework guides and directs users on how to develop specific operating procedures for SM. For example, when developing your team's operating procedure for SM listening, you will identify what channels and key words you will monitor as part of that procedure. This framework aligns the SMEM program's vision, goals, and objectives with the defined level of SM integration and incorporates the following pieces:

- Information and Message Sharing Requirements
- Messaging Standards and Procedures
- Day-to-Day Operational Considerations
- Training Plan

This final step toward implementing an SMEM program is updating existing plans or developing new plans and procedures necessary to support the program. For EM professionals,

this should be a familiar process. But for those with strictly an SM background, or for small airport operators functioning under a local jurisdiction, this may not be as familiar. The process involves doing a systematic review of existing emergency plans and incorporating SM functions into them using the framework you have developed. This includes the following plans:

- Airport Emergency Plan (Airport Annex to a County's Plan)
- Crisis Communications
- EOC
- JIC
- Family Assistance Center
- Irregular Operations

The associated roles and responsibilities and checklist/job aids are developed so that SM communications are properly integrated and consistent with other communications methods. Where necessary, specific standard operating procedures may be developed for critical operations, such as the SM message approval and posting process, to define clear lines of authority and accountability.

Once you have updated your plans and procedures, share them with your whole community, and conduct joint training and exercises. Training and exercise are vital components to validate the plans and procedures and to give stakeholders the opportunity to work together before an incident occurs.

Part 5: Sustain

Once you have established your SMEM program, you should turn your efforts to sustaining the program. Part of sustaining is an emphasis on continued improvement. Without it, the program will start to feel stale and stakeholders may lose interest in keeping it going. The key to improvement starts with having the right mindset: one that understands the value of improvement and continually looks for ways to improve through each experience. To do this, the program champions need to build upon existing relationships and seek new ones so stakeholders remain engaged. Additionally, as you utilize the SMEM program, work collaboratively to improve on your success measures, monitor the program, and share the results with your stakeholders. As you learn more and become more proficient, consider adding more SM channels for listening or finding ways to advance your level of integration from basic to intermediate and, eventually, to complete integration.

Another way to sustain your program is to continually seek out innovation. This includes maintaining a current understanding of the rapidly changing digital and social landscape. It also includes studying adjacent or entirely unrelated industries to help you spot truly "new" opportunities for innovation you can apply at your airport.

Last, to sustain your program, you should continually refresh your team's training plan. Although it will initially be more focused on mastery of the tools you just deployed, it should grow toward advancing the collective ability of the entire team. Sustainable SMEM programs require that your team stays well trained and informed.

Conclusion

It is our desire that this WebResource provide you with the understanding and direction necessary for a robust SMEM program. We see great potential for you to develop better situational awareness, build stronger relationships, and provide excellent service to your customers. We encourage you to take full advantage of the many resources and reference materials available to you through the WebResource for building or improving your program.