

# **StratML: Private & Public Sector Uses**

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## Introduction

The goal of this document is to provide the reader with a better understanding of what StratML is and how it can be leveraged. Today, there are more technology standards than ever to account for and incorporate. However, sifting the essential from the unnecessary has become more and more difficult due to empty marketing promises, mind-numbing jargon, and more often than not, shoddy technical foundation. Our main objective is to present to the reader the vision of Strategy Markup Language (StratML) -- a worldwide web of intentions, stakeholders, and results -- as well as expose envisioned examples of the language in public and private sectors. In addition, we present a brief review of the technical underpinning of the language. Providing this information in a logical and concise manner should enable the reader to better understand the core capabilities of StratML, as well as how it can be incorporated in their respective organizations. Regarding the future direction of technology adoption, it will be open, machine-readable data standards like StratML that will be the rule and not the exception because their capabilities may be better leveraged across three distinct sectors that include Public, Gray Area (Public & Private), and Private.

## StratML Overview

StratML is an XML vocabulary and schema for strategic plans in general. These include but are not limited to corporate mission statements, policy documents, performance plans, strategic reports, organizational goals, and individual statements of purpose. From an organizational viewpoint, StratML enables the sharing, indexing, referencing, discovery, reuse, and analysis of embedded elements within these plans, along with the names and descriptions of stakeholder groups. It promotes the concept of strategic alignment of records created by organizations in the routine course of their business processes. From a discovery viewpoint, StratML can help organizations and individuals find potential partners that share common or complementary goals and objectives. In addition, it can facilitate stakeholder feedback for strategic goals and objectives, while providing centralized updating and maintenance of such information. While StratML holds great promise, we do not want to misrepresent its true capabilities. That being said, we have tried not only to expose the current capabilities of its current iterations -- Part One, Part Two, and Part Three -- but also possible future paths. On a final note, StratML can reduce time delays and data inconsistencies associated with maintaining overlapping information in stovepipe systems by automatically referencing a single authoritative source.

In reality, when an entity wants to deploy a so called technology "solution" it must have a firm understanding not only of SDLC methodologies, but also of the environment the solution will be deployed in. For example, obstacles such as data access from various types of relational databases can not only be an issue in one ecosystem, but also most likely compounded across various ecosystems. Hence, leveraging the new crop of heterogeneous database access tools will enable entities to better deal with these types of difficult-to-deploy environments. It is also where open, standard, machine-readable formats like StratML can better adapt and promote a true agnostic IT landscape. Circling back to open-standards, if an entity is truly serious about wide-spread adoption it must take the long and arduous route making their solution both AIIM/ANSI and ISO compliant. Not an easy path, but one that promotes the standards mantra and agnostic IT landscape. Regarding data transparency, the Federal Government is really making this topic a key action item and one in which where entities should heavily focus on. From a logical perspective it makes sense for both public and private sector entities to carefully review data transparency requirements, so they can carve out a path compliant with current and/or future mandates.

## How It Works

Before the topic of StratML is discussed, we must first touch upon how organizations currently represent strategy information. The most common way organizations do so is simply in the form of a Word or PDF documents maintained internally by a handful of corporate executives. Many organizations have an HTML version of such a document, showcased on their website as well. However, the strategy data ends up simply a static, non-standard structure, often treated as peripheral to the processes of the company itself.

Organizations often store strategy and performance indicators within their applications and relational databases. While this does allow such data to be dynamically generated and repurposed, it generally isn't in an open, standard notation that would allow easy communication and exchange between heterogeneous systems and frameworks. Thus, such data still remains locked into a proprietary technical and logical architecture.

### Technical Overview

StratML provides a standard, open, machine-readable representation of strategy information. Before we discuss the underpinnings of StratML, we'll begin with a few words about XML itself -- the markup notation StratML is based on. For those of you not familiar, XML is a method used to embed metadata within data. In other words, the data within an XML document is self-defined. The elements and attributes within XML typically refer to fields and properties in conventional database terminology. They resemble HTML in structure, parsable by all modern browsers and a variety of common applications.

```
<address>
  <city zone="pacific">
    Ashland
  </city>
  <state>
    Oregon
  </state>
</address>
```

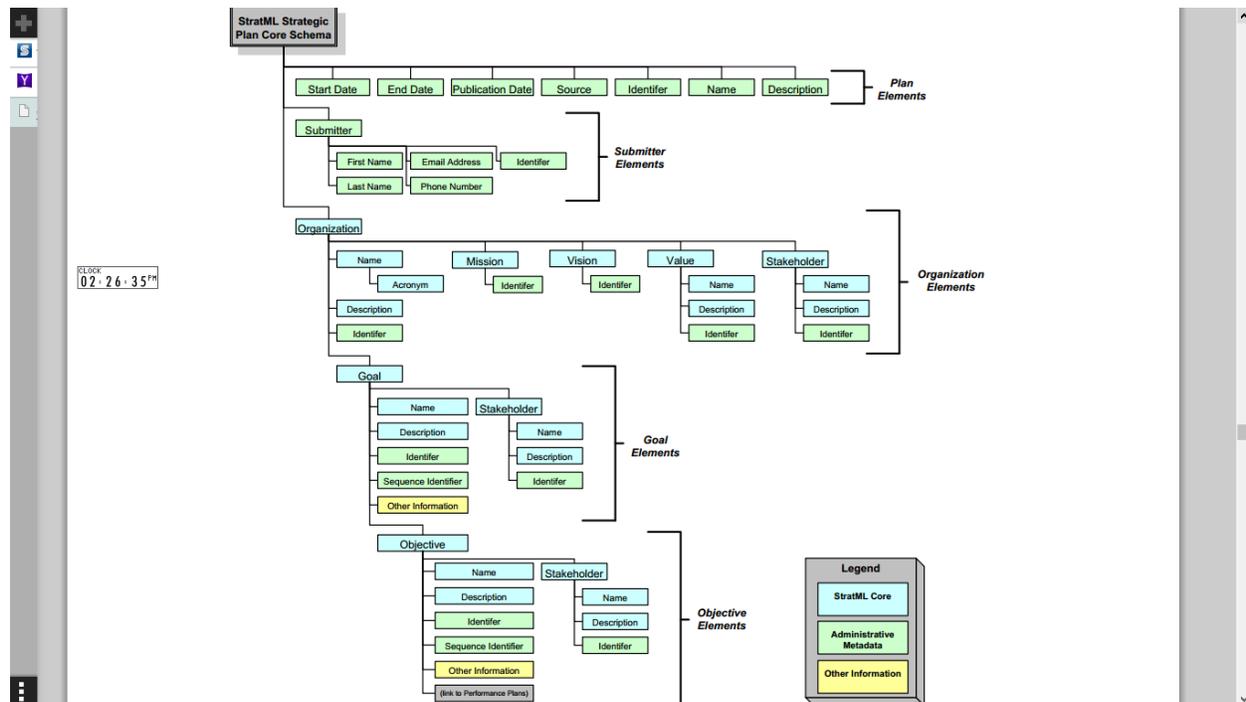
#### *Example: A simple XML element*

XML data is generally stored in the form of documents with an "\*.xml" extension, though such documents are often generated manually or on-the-fly from various databases. XML documents are machine-readable, but still straightforward enough to make sense to a human reader. From XML notation are derived various markup languages, each of which are defined in what is called an XML Schema. StratML is one such language derived from XML. StratML is an XML-based language that defines specific elements and attributes representing strategy, performance, and stakeholder information. The scope includes individuals, teams, organizations, and government agencies. StratML's data definition -- the details of its elements and attributes -- is defined in its own XML Schema (see References). Each valid StratML document is generated based on this schema, comprising unique user-defined data in each instance. Such a document contains the strategy data, specific for the individual, team or organization it is representing.

## Current Work

The StratML standard development process is an ongoing effort, composed of three parts. Part 1 captures basic mission, values, objectives, and stakeholders information. Part 2 contains additional performance details, including stakeholder roles and performance indicators. Part 3 incorporates even more data containers, including categorization of goals, legal policies, value propositions, and an additional level of modularity for custom strategy methodologies.

Parts 1 and 2 are American (ANSI) national standards and Part 1 has been approved as an international (ISO) standard. Since it is considerably more complex, Part 3 is being published first as an AIIM best practice, in order to provide additional time for review and input from prospective users. Now that it has been approved as an ISO standard, Part 1 should be stable for the foreseeable future, whereas evolution of Parts 2 and 3 will depend upon consensus not only in AIIM's StratML Committee but also the national and worldwide voluntary consensus standards communities comprising ANSI and ISO.



*Logical Structure of StratML Part 1*

```
<stratml:PerformancePlanOrReport xmlns:stratml="http://www.stratml.net/PerformancePlanOrReport" Type="Performance_Report"> => root element + StratML Schema namespace
<stratml:Name>2011 Annual Report</stratml:Name>
<stratml:Description>
  This report covers the activities of the Strategy Markup Language (StratML) Committee during 2011. It is cumulative in the sense that it also documents results achieved previously...
</stratml:Description>
```

```

<stratml:OtherInformation>
...
</stratml:OtherInformation>
<stratml:StrategicPlanCore>
  <stratml:Organization>...</stratml:Organization>
  <stratml:Vision> => "Vision" element
    <stratml:Description>
      A worldwide web of intentions, stakeholders, and results.
    </stratml:Description>
    <stratml:Identifier>efe1e1dc-51be-43ca-82fe-
5444a471a822</stratml:Identifier>
  </stratml:Vision>
  <stratml:Mission> => "Mission" element
    <stratml:Description>
      To specify an XML-based voluntary consensus standard for
      the information commonly contained in strategic and
      performance plans and reports.
    </stratml:Description>
    <stratml:Identifier>161b7a63-5951-475e-aca8-
961906a64596</stratml:Identifier>
  </stratml:Mission>
...

```

*Example: A snippet of a StratML document*

## Entering Data into StratML

A StratML document is editable with any text-editor. However, it is helpful to enter the data through a standard form. There are a variety of tools and applications to help create XML documents, such as Microsoft Infopath below.

Screen Shots of InfoPath Form for StratML Part 3

The screenshot shows a Microsoft InfoPath form titled "Strategic & Performance Plan & Report Form" dated "November 16, 2012 - Draft". The form is divided into several sections:

- Plan/Report Name:** Includes fields for Description, Identifier, Web Address (URL), and Acronym.
- Other Information about This Plan or Report:** Includes fields for Name of This Information, Description, Identifier, Web Address (URL), and Acronym.
- Organizations Supporting This Plan:** Includes fields for Sequence Indicator, Special Type of Organization, Name of Other Type, Organization Name, Description, Identifier, Web Address (URL), and Acronym.
- Stakeholders of This Organization:** Includes fields for Type, Sequence Indicator, Stakeholder Name, Description, Identifier, Web Address (URL), Acronym, Role of This Stakeholder, Role Name, Description, Identifier, Web Address (URL), and Acronym.
- Point of Contact for This Stakeholder:** Includes fields for First Name, Last Name, Phone Number, Email Address, Identifier, and Web Address (URL).

*Sample InfoPath input form for generating a StratML document*

## Viewing StratML Data

On the other side of the coin, when viewing a StratML document, we are easily able to display the StratML file using XSL, CSS, or a variety of rendering tools. Below is an example of a StratML document transformed into an easily navigable, web-enabled view:

**Table of contents**

- Vision
- Mission
- Values
  - Openness
  - Standards
  - Machine Readability
  - Performance
- Results
  - Part 1: Strategic Plans
    - 1.1: ANSI/AIIM Publication
    - 1.2: StratML Part 1 Files
    - 1.3: Tools, Applications & Services
    - 1.4: ISO Standard
  - Part 2: Performance Plans and Reports
    - 2.1: ANSI/AIIM Publication
    - 2.2: StratML Part 2 Files
    - 2.3: Tools, Applications & Services
    - 2.4: NIEM Implementation Profile
  - Part 3: Additional Elements
    - 3.1: GFRAMA
    - 3.2: Other Elements
    - 3.3: ANSI/AIIM Publication

**Performance\_Report**  
2012 Annual Report

This report covers the activities of the Strategy Markup Language (StratML) Committee during 2012. It is cumulative in the sense that it also documents results achieved previously. In addition, it begins to outline objectives to be pursued in the months and years ahead.

Please let us know if you have proposed additions or corrections. Comments and suggestions with respect to prospective goals and objectives are also welcome, particularly if you would like to participate in specifying Part 3 and/or developing StratML tools, applications, and services.

**Source:**  
<http://www.xml.gov/stratml/cusson/SMLC2011.xml>

**Start:** 2012-01-01 **End:** 2012-12-31 **Publication Date:** 2012-12-18

**Submitter:**

**First name:** Owen  
**Last name:** Ambur  
**Email Address:** Owen.Ambur@verizon.net

**Organization:**

**Name:** Strategy Markup Language Committee  
**Acronym:** SMLC  
**Stakeholder(s):**

- AIIM**  
As ANSI-Accredited Standards Development Organization (Performer)
- Owen Ambur**  
As **Chair** (Performer)  
As **AIIM Professional Member** (Beneficiary)
- Adam Schwartz**  
As **Former Co-Chair**: With the completion and approval of Part 2 as an ANSI/AIIM standard, Adam deemed his work on the committee to have been completed and resigned his role as co-chair in 2011. (Performer)
- Betsy Fanning**  
As **AIIM's Director of Standards** (Performer)
- Sylvia Webb**  
As **Member of the StratML Committee** (Performer)  
As **Leader of NIEM Task Group**: Sylvia is leading a task group to develop a NIEM implementation profile for StratML (Performer)

*StratML document rendered as an HTML webpage, via XSLT*

## Examples

To help us get a better sense of the benefits of StratML, it's important to consider examples in which it can be used. Below are two depicting StratML integration. These are meant to paint pictures in which StratML seamlessly integrates into the internal and external processes of an organization. These depict an ideal landscape in the near-future where StratML is extensively used throughout the Web, and within an organization, as a platform for representing strategy and performance information.

### Example One – Education

Xaxa is a hypothetical non-profit educational institution with a company mission of providing educational products to underprivileged children across the US. It has a stated mission to provide free, online curriculum for science and mathematics. Its statement, values, and roles are defined explicitly on their website, which include inclusion, freedom of education material, and social relevance.

Xaxa's basic mission and values however are not depicted simply in the form of a static HTML or PDF page, but in a rendered StratML document. Thus, visitors to the site are able to see a standardized set of data related to basic corporate strategy. A potential customer or prospective employee comes to the website and is able to quickly navigate to and identify the mission, purpose, values, and relevant

performance indicators of Xaxa. Other customers might happen to have a StratML-enabled browser plug-in, separate web app, or access to a directory service that automatically culls and parses websites for their StratML based information. As a result, visitors can thus receive a clear, standardized view of Xaxa's relevant strategy details.

Bebe Elementary School is a school in the Midwest US that has a need for additional curriculum related to mathematics. It has the guiding value of ensuring whatever students learn is relevant to their lives. Bebe goes to a social media site that is StratML enabled. They search for a company that can provide free courseware for students for their mathematics class while also owning a strong corporate value of ensuring 'real-world relevance' of all its material. As this is a StratML-enabled social media site, Bebe's outreach liaison is able to easily discover Xaxa as a suitable partner, and contact the relevant stakeholders involved. She is able to review the values, supporting performance indicators and unique value proposition of Xaxa, quickly comparing it to various other organizations, confident in the fit between Bebe's needs and Xaxa's offerings.

The details of the specific roles of Xaxa are transparent and explicit, allowing Bebe Elementary School to touch base with the appropriate contact, rather than go through a potential email or phone-tag cycle.

It isn't about finding the best organization and individual, but the best organization and individual for what Bebe is looking for. Ultimately, Bebe is easily able to find the necessary information of Xaxa and other education companies, without struggling through esoteric organizational self-description, or sifting through the myriad ways in which a company presents itself through marketing, image, or brand.

Xaxa in its search for funds and sponsorship avails itself for government funding and tax credit through a government service auction portal. This allows it to distribute its material to public schools across the Midwest. This portal uses StratML to discover organizations that can be best suited to accomplish some of the government's own functions. Since Xaxa voluntarily made additional performance data and analytics available online, Bebe and other public and private organizations are further able to express a clear sense of what its success trends and criteria are and what types of benefits it can provide to students.

### **Example Two – Enterprise**

Hypothetical multi-national corporation Leeway is a software conglomerate with dozens of subsidiaries within its infrastructure, many of which were acquired over the years. It has a stated mission of providing high-end budget tracking solutions to individuals and institutions, with corporate values of transparency, customer listening, and shared decision-making it deems as critical to meeting its objectives.

Leeway's subsidiaries run on different sets of operating systems, platforms, and applications. Thus, strategy and performance information is represented in a wide variety of formats across the enterprise. That said, Leeway has a company mandate that specifies the entire company represent its data in StratML format, regardless of database, platform, or apps used.

Leeway's StratML-enabled infrastructure allows it to easily generate a consolidated view of the internal strategy information, milestones, value propositions, and performance indicators aggregated from various platforms. Data that supports the company's values and mission are automatically pooled from each department, allowing for much greater confidence that decisions are aligned, coherent all the way up and down.

The mission and values of the parent organization and subsidiaries are continuously contrasted with one another, explicitly defining a lock-step relationship between all areas of the organization. In the next annual review, performance indicators are pulled in and viewed together from all subsidiaries, compared and contrasted not only with the parent company, but with each other. Comments and internal survey data is clearly visible underneath each performance indicator from all employees, making explicit the level of internal alignment. Modifications are made to specific parts of the company strategy based on these culled perspectives.

Leeway's executives are able to chart course with a higher degree of precision. The Marketing Department sees relevant trends of application downloads, directly annotating performance indicators. Product development teams update the status of new features, addressing at each decision point how they are in-line with the values and objectives of the company. Team members throughout provide to each other feedback on goals they are embodying within their actions, milestones they are meeting, and intentions they are expressing. Roles become sharp representations of the actual accountabilities of each employee. Values are checked and team direction is course checked.

Leeway's internal discourse facilitates seamless meetings. Individuals and their individual strategy is explicitly defined up-front. Their individual and team objectives are not left to assumption.

Leeway is listed in several StratML-enabled directories based on documents already on their website. Potential partners, in the form of hardware manufacturers, web hosting facilities, and brick-and-mortar outlets, are all able to identify stakeholders within Leeway that they need to be in touch with...and vice versa. Rather than each stakeholder identified by a generic role such as 'Director', the specific duties that each stakeholder is accountable for is made explicit.

Leeway, its employees, its teams, its subsidiaries, its customers, and the companies it works with all taste the benefits of an open, standard, machine-readable data format for strategy information.

## Private Sector Focus

Private organizations, teams, projects and even individuals benefit from having a StratML representation of their strategy and performance details. StratML applies to any purpose-driven effort, whether profit driven or not. We must note that StratML isn't an isolated solution, but a standard way of representing strategy-related data in a way that augments current systems, facilitating clearer communications. It is not meant to replace, overhaul, or even duplicate current systems, but rather provide an open, standard, machine-readable conduit facilitating communication between them.

There are many situations linked to inefficiencies in a corporate environment based on unclear or uncommunicated strategy and performance information. These inefficiencies don't stem from a lack of technology, know-how, manpower or capacity. They simply stem from a lack of a standard data format for such data. Below are a list of universal challenges that organizations face each day, and resolutions that a StratML-enabled infrastructure can help bring.

### Current Challenges

- **Difficulty in Discovery:** Companies have a very difficult time discovering matching partners, customers, vendors, and collaborators for their company. The way they currently do so is to

scour the web through a typical search engine and stumble across organizations that match a particular set of keywords they are looking for. Many have access to specialized directories like Hoovers.com that contain a set of corporate information at cost, or social media platforms like LinkedIn.com that list organizations by general category, size, connections or reputation. However, they don't have the ability to quickly or freely cull and parse self-identified mission, values, objectives and performance information of organizations throughout the Web.

Discovery often takes weeks of research, organization, and processing to extract such information. Even these conclusions are often surmised from other information, rather than grounded on self-defined, explicitly owned information by the organizations they are looking for.

- **Disparate Data Systems:** Disparate application and operating system environments that maintain strategy and performance data continue to have trouble communicating with each other. They still very often require many non-standardized, laborious, error-prone steps of transferring and translating from one data format to another. Doing so certainly costs time, effort, energy, focus, and resources in mapping out and recreating the logic of strategy information, while increasing the likelihood of data being lost-in-translation.
- **Ineffective Marketplace:** Capitalism in its purest form facilitates the best match between products and services; between consumer and business. However, our marketplace is rife with inefficiencies, distorted advertising, mismatched marketing messages, and a general uncertainty and lack of information about an organization. Oftentimes, a consumer will discover later that the company they signed up with does not share the same objectives and values they assumed it to have. Further, the products or services are simply not aligned with what their needs were in the first place.
- **Fuzzy Identity:** Organizations are often not able to identify what they represent to themselves or others. This leads to an organization often defaulting into a pursuit of the bottom-line, with employees defaulting to simply doing what they assume is their job, not knowing clearly what the basis of their decisions should be or the higher level purpose or alignment of their work. A fuzzy identity leads to a loss of confidence and clarity, not just in how an organization perceives others, but how its employees express their own intentions and the intentions of the organization they are representing.
- **Lost feedback:** Much feedback provided to and through an organizations is lost, mismatched or imprecise. Much of it never leads back to its primary goals and objectives, specific performance goals and values. Companies often have extensive feedback or survey processes, but many of them never get linked back and digested in accordance to its overarching principles.
- **Wasteful Meetings / Events:** Organizations often have meetings that are unfocused or untied to specific performance data or objectives. These meetings are often conducted for the sake of having a meeting, disconnected from specific individual, team, and organizational intentions and objectives.
- **Performance Challenges:** Employees often experience performance roadblocks due to unclear or missing performance indicators available to them to reference or append. Without knowing

what they are working towards, or knowing how they are actively furthering the company's performance goals, they are unclear in how to continuously evolve their company, team, and themselves.

Very often performance suffers because employees aren't clear what performance standards are. Teams and organizations proceed without an explicit ability to quantify gains in performance, which includes basic analytics including customer retention, work satisfaction, or time expenditure with clients.

Through a strategy-enabled company infrastructure augmented by StratML, we can go a long way in minimizing the difficulties above:

- **Easy Discovery:** StratML makes it easy for companies to find individuals within organizations, and find organizations around the world-at-large, that match precisely who and what they're looking for. They not only discover organizations based on name, location, reputation, industry, and size, but also find those that match precise intentions, values, objectives, and performance parameters they are looking for.

Business success will be tied to the ability to articulate intention, values, and performance. Companies identify partners and allow partners to find them through shared, transparent values. This enables precise, differentiated, unique, value propositions in an open, standard, machine-readable form that enables transparent, free, open, easy discovery.

Organizations are able to clearly network with other organizations that provide services that could be of value to them. They are able to precisely identify partners, investors, customers, and contractors that align with who they are and what they provide.

- **Communication between systems:** Heterogeneous environments are able to link with each other seamlessly. With the simple benefits of having common data definitions in different systems, companies are able to minimize much of the lost data and confusion that comes from having differing platforms and standards. They are able to prevent needless duplication of efforts and ease maintenance, promote data repurposing, and clarify common values. This prevents loss of time, energy, and duplication of efforts.
- **Marketplace of Values:** The free market works as it should, with the best match between business and consumers. StratML could help usher in a golden-era of competition, where clear explicit corporate strategy and performance information naturally creates the best match with consumers. Advertising evolves into an exercise in clear communication, rather than perceived as distraction. Consumers know not only exactly what product or service are buying, but the mission, values, objectives, and value propositions of the company they are buying from.

Government grants or tax-credits could be offered to organizations to offload services normally provided by the government itself. Thus, competition could extend into the NGO/NPO territory, where government and the private-sector engage in healthy competition for funding. The marketplace could be made up of CSR efforts, non-profits, and for-profits – i.e. “for purpose” organizations.

- **Clearly Convey Identity:** The identity and intention of each individual, team, effort, and organization is explicit to all. Confusion regarding the level of alignment between the individual, team, and organization is minimized. All parties know what they represent, at each level.
- **Targeted Feedback:** Feedback and comments are precisely identified, organized, and integrated around the specific values, objectives, and performance indicators they are meant to address. Instead of a generic feedback form, the customer is provided a transparent view of the values, performance indicators that validate these values, and a solicitation for feedback directed at those goals or values.
- **Effective Meetings:** With StratML-enabled meeting formats, meetings can directly tie into explicit intentions and values of all participants. StratML enables clear agendas based on a consistent set of strategy information. Individual members define their unique value and performance to the team, and teams define their unique value and performance to the organization. Everyone has a clear idea of the intentions and values of everyone else, as individuals and as groups. StratML also allows a much more precise troubleshooting of miscommunication and misunderstanding. Individuals are able to find out where exactly differences in perspectives reside. Everyone is on the same page. Clear reports and agendas can be created, in-line with machine and human-accessible classification systems.

Meetings and events link transparently to the performance objectives of the event. Virtual partnerships develop based on common objectives, and documentation of the results they might achieve is automatically generated.

- **Increasing Internal Performance:** By making performance data machine-readable, standard, and open, people within an organization can have much easier access to the metrics that govern the performance of their organization. Internal performance improvement could much more sharply be achieved with transparent, explicit, standard, machine-readable strategy and performance information shared and available to all stakeholders, across all platforms. This allows much easier allocation of problem-solving resources, and much more effective problem-solving.

## Public Sector Focus

StratML's alignment capabilities through private sector partnerships can augment essential public sector services (e.g. water & sewer systems, the electric grid, transportation systems, etc.) to improve the efficiency of one or more ecosystems. As a result, Government Agencies are prime candidates for StratML's capabilities and the real-world scenarios outlined in this section should provide many compelling reasons why they should move forward with this technology. Saving lives, minimizing injuries, and reducing property loss seem to fit the bill as viable use-cases. Sensationalism is not the goal, but improving "alignment" between potential partners who share common goals and objectives is. Below are a number of event driven scenarios where StratML could be used at the federal, state, and local levels. In addition, other parties (e.g., utilities, garbage haulers, mobile providers, etc.) could play key roles during a catastrophic event via systems built with StratML and have been showcased accordingly. *Please Note: Over 90% of military facilities rely on commercial power, which is controlled by investor owned companies or municipal or regional agencies. Hence, there are complex interdependencies between the public and private sectors.*

The term Return on Investment (ROI) is commonly misunderstood and often overused. While ROI may be applicable to the 30 Year Treasury it is not applicable to such events such as hurricanes or terrorist attacks. There really can be no true ROI regarding improved strategic planning, which in effect could create a better infrastructure to handle catastrophic natural or manmade events. As a result, StratML may be used to augment mechanisms already in place by the Department of Homeland Security (DHS) or the Department of Defense (DOD) to improve strategic planning and execution in dealing with these types of events. Capabilities that include indexing, referencing, discovery, reuse, and analysis of the elements of strategic plans, which include goal and objective statements, along with as the names and descriptions of stakeholder groups are a natural fit. As does the capability to promote the concept of strategic alignment in literal linkages among goal and objective statements and other records created by organizations and, or other entities in the routine course of their business processes. In effect, StratML could have a positive impact if applied and implemented properly in not only bringing interested parties together, but to also increasing the efficiency of coordination in interrelated ecosystems.

### Event Driven Scenarios

Improved strategic planning can save lives, minimize injuries, and reduce property damage in relation to a catastrophic event. For our event driven scenarios an "event" will be termed either natural (e.g., earthquake, hurricane, volcano eruption, etc.) or manmade (e.g., oil spill, terrorist attack, cyber-attack, etc.). Below are a number of scenarios in which effective action could be facilitated by usage of the StratML standard in advance.

- **Loss of Life & Sustained Injuries:** On 9/11 approximately 3,000 people were killed. These types of events often lead to rising numbers because more people usually surface onto the injured or death lists after the initial event. Case in point: The injured who die within 72 hours.
- **Disruption of Essential Services:** Services that include hospitals, power plants, water processing plants, and sanitation removal & processing facilities are critical to maintaining an organized and stable infrastructure. While local police forces can be augmented by National Guard troops, it is another case when a major service provider's operations are severely damaged or destroyed. For example, on March 11, 2011 an earthquake rocked Japan and caused massive damage to the Fukushima nuclear facility. Reactors 1, 2, and 3 experienced full-meltdown, which merited a 7

on the International Nuclear Event Scale (INES). Hundreds of thousands were left without power in cold weather, which only further substantiates the reliance on basic services such as power generation to support a stable and organized infrastructure.

- **Disruption of Communication Systems:** While cellphones and smartphones take precedence in regards to numbers, landlines are still used by many. In addition, the cable routers that people connect via wireless routers could be rendered inoperable because both are powered by electricity, which could be unavailable as a result of large-scale earthquake or severe hurricane. For example, many businesses and residents in Lower Manhattan had their communication systems completely knocked out as a result of a Category 2 Hurricane called Sandy. Not only were communications adversely affected in America's "Financial Capital" over the short-term, but many businesses and residents were not back to pre-storm level communication performance until months after the initial event. Lack of AC power will render cable and wireless routers useless, and also affect a plethora of digital devices (e.g., smartphone, tablet, notebook, etc.) because all of these devices require 120v power via direct connection (routers) or AC adaptor (digital devices).
- **Disruption of Transportation Systems:** Properly functioning transportation systems (e.g., roads, railways, airports, etc.) are vital during a time of crisis, and can have a direct bearing on lives lost and injuries sustained. Case in point: The ability to quickly and efficiently evacuate people in mass via roads and railways before a natural event such as major hurricane could save many lives. For example, on October 29, 2012 Hurricane Sandy hit the New York Tri-State area and caused havoc on roadways, railways, and airports. Busy railways such as Metro North and the Northeast Corridor ground to near halt, while subways were running with greatly reduced schedules, and cars were visibly absent from the all major roadways. It is important to note that places like Manhattan and Galveston are true islands and it is logical to assume that mass evacuation would pose many substantial logistical hurdles.
- **Property Damage:** The damage to property (e.g., government, commercial, and residential, etc.) resulting from as catastrophic event will most often run into the billions of dollars at the outset, and just keep rising as a result of lower overall output of goods and services. For example, two twentieth century San Francisco earthquakes make for good real-world examples because they provide a glimpse of the possible damage costs. First, The Great San Francisco Earthquake 1906 struck the Bay-Area on April 18, 1906. It measured 7.9, and over 3,000 people lost their lives, while property damage was estimated to be approximately \$400 million in 1906 dollars. In retrospect, The Great San Francisco Earthquake of 1906 sustained massive damage to government, commercial, and residential property. Second, the Loma Prieta earthquake struck the Bay-Area on October 17, 1989. It measured 6.9, and over 50 people lost their lives, while property damage was estimated to be approximately \$6 billion. It is fair to say that if an earthquake were to take place in major cities like Los Angeles or San Francisco today, property damage could easily hit in the tens of billions of dollars. 159 people lost their lives as a result of Hurricane Sandy and damages have been estimated to be in the realm of \$65 billion dollars.

While the event driven scenarios outlined above may blur the lines between the public and private sectors it only reinforces the alignment and the finding potential of partners who share common goals and objectives theme of StratML. Accordingly, below are the areas where the capabilities may be leveraged if properly applied and implemented.

- **Dead and Injured:** Regarding the initial event and aftereffects, if city morgues and hospitals are full, then the dead or injured could be sent to a nearby facility in accordance with a predetermined plan that takes into account the possible beds and spaces available. For example, if an injured person being transported by private ambulance dies on their way to the hospital, then the plan outlined could help route this person to the city morgue, or optional alternate location. Thus, creating an intuitive and logical framework could be of great value during a catastrophic event because it would allow for hospitals and, or temporary emergency centers to better deal with the injured, while sending the dead to locations better able to handle the overflow.
- **Essential Services:** Strategic agreements could be put into place with various private sector entities to provide portable toilets, mobile power generators, drinking water, and trash removal services. It is logical to assume that this type of public and private sector alignment will no doubt help to prevent the outbreak of disease. If we look back to events like The Great San Francisco Earthquake of 1906, water pipes ruptured, which in essence did not allow the various fire departments to put out key fires. As mentioned earlier in this section hundreds of thousands of Japanese had to suffer brutal cold without electricity because of damaged caused by nearby nuclear plants in 2011. In addition, it is also logical to assume that in the event of a large-scale earthquake damage to sewer system will be extensive in cities such as Los Angeles and San Francisco. As a result, portable toilets would not only have to arrive quickly, but also in mass. While technology may have changed in leaps and bounds since events such as 1906, firemen still need water to put out fires, and people need essential services such as electricity, sewer systems, and trash removal.
- **Communication Systems:** In the event of a large-scale earthquake or severe hurricane communication systems could be affected on a grand scale. Strategic plans between public and private sector entities could help to minimize disruption. Mobile cell towers could be brought in by both public and private sector entities, while people with landlines could be given prepaid phones to make calls in case of emergency. We must remember that modern digital devices (e.g., smartphone, tablets, etc.) work via their rechargeable batteries, and are rendered useless when these batteries run out of power. In a nutshell, if digital device owners do not have access to AC power, then they cannot recharge their devices rendering them inoperable. Accordingly, mobile providers could send AC power stations to affected areas, so people could recharge their digital devices in a time of crisis.
- **Transportation Systems:** There is no question that underground and above ground transportation systems will be severely disrupted during a large-scale earthquake or hurricane, and private entities could be used to augment public sectors services. For example, if a hurricane more powerful than Sandy hit New York City then major arteries like the Queens-Midtown, Lincoln, and Holland tunnels would most likely become flooded and not useable for some time after the initial event. The private ferry system would ground to a halt at the outset, but could be of value soon after the initial event by ushering in food, water, and medical supplies into the city via East River and Hudson River. In addition, the private ferry system could move the injured to hospitals in outer lying area if needed. Again, public and private sector cooperation and coordination could help to bring water, food, and medical supplies into the city, while also relocating the dead and injured.

- **Property Damage:** In the event of a large-scale earthquake or severe hurricane building and walkways will be heavily damaged and that is why having business partners in the planning and communications loop will enable the city to get back on its feet much quicker. For example, some of the big housing supply entities could help provide valuable commodities (e.g., lumber, concrete, electrical, etc.) in time of need. Again, having private sector entities aligned with a strategic plan and, or plans could help get needed supplies into the city, so life can back to normal for residents and business in a shorter period of time. For example, one private vendor could help supply a designated building or area with plumbing & electrical supplies, while another could provide sheetrock, and another lumber. Again, a logical framework would enable public and private entities to better coordinate the overall recovery effort.

Not to oversell the concept, but StratML's capabilities could help to bring order out of chaos. Again, StratML could be used to augment mechanisms currently in place to help bring order to natural or manmade catastrophic events. In the case of a catastrophic event a properly aligned strategic plan and, or plans could help to save lives, minimize injury, keep essential services running, and reduce property damage. The event driven scenarios expose a number of key areas where the benefits of StratML could be used, but there are also many other public sector applications where its multitude of capabilities may also be leveraged. Unless and until that occurs, taxpayers have every right to be skeptical -- not only on the basis of lack of evidence of productivity but also reports of waste and abuse.

## Gray Area Clarification

While the outlined event driven scenarios depict when the public sector calls upon the private sector for assistance, the flipside is also of great importance. Rather than get caught-up any marketing hype, we need to take a step back and examine this last statement in greater detail from a pragmatic viewpoint. Let us look at when the private sector requires help in dealing with a topic such as civic unrest. For example, the alignment capabilities of StratML could possibly help in dealing with these types of events, so we do not repeat a pain point in American history such as the Watts Riots. The retail landscape has changed dramatically since 1965 with big box vendor displacing many mom & pop shops. One saving grace is that many of these big box vendors not only operate nationally, but internationally and why open-standards should be both ANSI/AIIM and ISO compliant. As a result, strategic plans with these large vendors could cover both national and international operations. Strategic agreements between the private and public sectors to deal situations like these could improve how things are handled. For example, how are vendors better able to protect their employees and property? On a micro level, things like how vendors are to deploy internal mechanisms like security guards and loss prevention people could go a long way on protecting a specific location during a crisis. On a macro level, what entity or entities (e.g., police, fire department, National Guard, etc.) should be deployed to an area and, or areas to quell matters in an orderly and humane fashion. Strategic agreements between the private and public sectors could go a long way in creating a framework that could possibly better deal with topics such as civil unrest and other-types of related events. In addition, when a terrorist attack does happen like at the recent Boston Marathon, strategic agreements between the private and public sector could be leveraged to reduce loss of life, and minimize injury, and property damage. Hence, the Gray Area covers both the private and public sectors. We have shown both sides of the coin. One side is where the public sector has strategic plans in place with the public sector to help in time of need (natural or manmade events), and the other side is where the private sector requires the help of the public sector with a situation such as civil unrest. Both are important, and both are where StratML's alignment capabilities could be leveraged.

# Participation

As with any new technology effort there will be different levels of participation. Some will be highly technical, while others will not. Accordingly, the team at StratML has come up with a number of initiatives that cater to a wide-range of interests and skill levels. They range from e-mail announcements all the way to development tools and applications. So it is really up to the individual how far they want be involved and below are some of the current paths.

## Tracking Progress

<http://xml.fido.gov/stratml/index.htm#WorkResults>

## General Announcements via Listserv (notification of teleconferences and other related items)

<http://listserv.aiim.org/scripts/wa.exe?A0=STRATML>

## Tech Discussions via Listserv (diving deeper in to the technical aspects of StratML)

<http://listserv.aiim.org/scripts/wa.exe?A0=STRATML-TC>

## LinkedIn

[http://www.linkedin.com/groups/Strategy-Markup-Language-1514487?trk=myg\\_ugrp\\_ovr](http://www.linkedin.com/groups/Strategy-Markup-Language-1514487?trk=myg_ugrp_ovr)

*Please Note: Anyone who wishing to engage more actively in the effort is welcome to participate in the StratML teleconferences. The URL below allows interested parties to view the upcoming schedule:*

<http://xml.fido.gov/stratml/index.htm#WorkResults>

One may also get involved in the StratML effort in other ways, and below are some examples.

- Helping to raise awareness and usage of the standard.
- Encouraging organizations with which they are associated to publish their plans and reports in StratML format.
- Converting to StratML format the strategic and performance plans and reports of organizations whose missions are of interest to them, for inclusion in the collection at:  
<http://xml.fido.gov/stratml/drybridge/index.htm>
- Developing tools, applications, and services supporting the standard and making StratML data readily useable and useful to others.
- Encouraging additional software tool, application, and service developers and providers to build support for the standard into their offerings.
- Trying out existing StratML tools and providing usability feedback to their developers and, if possible, technical assistance in helping to improve them.
- Reviewing and perhaps testing StratML Part 3 and providing feedback on it in preparation for placing it on the ANSI/ISO standards track.

## Postscript

Regarding the Federal Government's push on transparency, the StratML team has done an excellent job in pursuing national as well as international compliance. While the route is long and laborious, it will pay dividends in the long run as this standard becomes widely adopted. A caveat, as with many new technologies, is that some components are more mature than others. In any event, the benefits of strategic alignment are well known and include promoting a better overall understanding of core competencies, while improving project coordination within an organization. Ultimately, StratML's most powerful draw may be its strategic alignment capabilities, allowing a clear link between potential partners that share common goals and objectives. The ability to cross-pollinate vantage points and strategies between parties can vastly increase the effectiveness of either party alone. StratML offers organizations the ability to promote the concept of strategic alignment in literal linkages between goals, objective statements and other records created by organizations in the routine course of their business processes. Also regarding social media, it is abundantly clear that organizations that effectively leverage social networks are likely to gain a distinct advantage over those that do not. Social networks that incorporate a standard like StratML will demonstrate even sharper advantages by enabling far more effective discovery and alignment for public and private organizations alike.

# References

## Part One

### Tracking Progress

<http://xml.fido.gov/stratml/index.htm#WorkResults>

### General Announcements via Listserv

<http://listserv.aiim.org/scripts/wa.exe?A0=STRATML>

### Tech Discussions via Listserv

<http://listserv.aiim.org/scripts/wa.exe?A0=STRATML-TC>

### LinkedIn

[http://www.linkedin.com/groups/Strategy-Markup-Language-1514487?trk=myg\\_ugrp\\_ovr](http://www.linkedin.com/groups/Strategy-Markup-Language-1514487?trk=myg_ugrp_ovr)

### StratML Teleconferences

<http://xml.fido.gov/stratml/index.htm#WorkResults>

## Part Two

### StratML Part 1 Strategic Plans (ANSI/AIIM 21:2009)

<http://xml.fido.gov/stratml/index.htm#Part1>

### StratML Part 2 Performance Plans & Reports (ANSI/AIIM 22:2011)

<http://xml.fido.gov/stratml/index.htm#Part2>

### StratML Part 3

<http://xml.fido.gov/stratml/index.htm#Part3>

### StratML Stylesheet Part One & Part Two

<http://xml.fido.gov/stratml/carmel/stratml.xsl>

### Standards Hub

<http://xml.fido.gov/stratml/carmel/UKSHwStyle.xml>

### Slideshow

<http://www.aiim.org/documents/standards/stratml/ansiaiim212009.pdf>

### A Worldwide Web of Intentions, Stakeholders, and Results

<http://xml.fido.gov/stratml/index.htm#DefinitionPurposes>

## **Performance Plan/Report**

<http://xml.fido.gov/stratml/cusson/SMLC2013.xml#3f84f98f-d313-40e0-84ca-ed5e45c27e07>

## **List of Purposes**

<http://xml.fido.gov/stratml/index.htm#DefinitionPurposes>

## **Markets for Good**

<http://ambur.net/stratml/carmel/M4GwStyle.xml>

## **StratML Collection**

<http://ambur.net/stratml/carmel/EIAwStyle.xml>

<http://ambur.net/stratml/carmel/PETwStyle.xml>

<http://ambur.net/stratml/carmel/SPNwStyle.xml>

<http://xml.fido.gov/stratml/carmel/MSPBWwStyle.xml>

## **Documents Available for Editing**

<http://stratml.hyperbase.com/documents.html>

## **StratML Portal Indexes**

<http://stratml.hyperbase.com/stakeholders.html>

<http://stratml.hyperbase.com/statistics.html>

<http://stratml.hyperbase.com/OGP.html>

<http://stratml.hyperbase.com/USNAP.html>

## **Feedback from Stakeholders**

<http://xml.fido.gov/stratml/index.htm#DefinitionPurposes>

## **GPRAMA**

<http://xml.fido.gov/stratml/references/PL111-532StratML.htm#SEC10>

## **Machine Readable StratML Format**

<http://xml.fido.gov/stratml/carmel/EOMRDwStyle.xml>

<http://xml.fido.gov/stratml/carmel/M-13-13wStyle.xml>

## **National Council**

<http://xml.fido.gov/index.asp#new>

## **IT Deployments in Heterogeneous Environments Report**

<http://xml.fido.gov/stratml/index.htm#WorkResults>

# **Part Three**

## **U.S. Department of Defense (DOD)**

<http://www.defense.gov/>

**U.S. Department of Homeland Security (DHS)**

<http://www.dhs.gov/>

**U.S. Geological Survey (USGS)**

<http://earthquake.usgs.gov/regional/nca/1906/18april/index.php>

<http://earthquake.usgs.gov/regional/nca/1989/>

**Federal Emergency Management Agency (FEMA)**

<http://www.fema.gov/>

**FEMA (Hurricane Sandy Timeline)**

<http://www.fema.gov/hurricane-sandy-timeline>

**Reference to Emergency Management Preparedness Database**

<http://disasterlit.nlm.nih.gov/>

**eGov Act 202 (b),(4), (5), 7 (d)**

<http://xml.fido.gov/stratml/references/eGovXML.htm#202b>

**National Commission on Terrorist Attacks Upon the United States (9 -11 Commission)**

<http://www.9-11commission.gov/>

**Oasis (UBL 2.1)**

<http://docs.oasis-open.org/ubl/cos1-UBL-2.1/UBL-2.1.html#S-COLLABORATIVE-PLANNING-FORECASTING-AND-REPLENISHMENT>

**XML.Gov (What's New)**

<http://xml.fido.gov/index.asp#August>

**World Nuclear Association**

<http://world-nuclear.org/info/Safety-and-Security/Safety-of-Plants/Fukushima-Accident-2011/#.Uhzk6r7D Mw>

## **Part Four**

**New York Academy of Medicine Public Health Portal Preparedness Portal Project**

<https://lists.oasis-open.org/archives/huml/200310/doc00000.doc>

**Massachusetts Institute of Technology (UDDI Report by Alston and Ruggiero) - Reference #57**

<http://dspace.mit.edu/bitstream/handle/1721.1/17001/54108865.pdf.txt?sequence=3>

**Breaking Government: Federal IT Spending (Episode 3)**

<http://breakinggov.com/2011/08/16/the-hard-numbers-of-government-debt-federal-spending-episode/>

### **Breaking Government: Federal IT Spending (Episode 5)**

<http://breakinggov.com/2011/09/15/an-unlikely-innovator-in-technology-adoption-federal-spending/>

### **Breaking Government: Federal IT Spending (Episode 9) - Report by Brooks, Ruggiero, and Harang**

<http://breakinggov.com/2011/11/10/you-can-get-there-from-here-federal-spending-episode-9/>

### **The Loss Matrix for Federal, State, and Local Governments by Russell Ruggiero**

<http://www.examiner.com/article/the-loss-matrix-for-federal-state-and-local-governments>

### **Information Management**

<http://www.information-management.com/authors/32186.html>

### **XML.org (Web Services Report by Brooks & Ruggiero)**

<http://www.xml.org/xml/news/archives/archive.02252005.shtml>

### **OASIS Conference (Thunga & Ruggiero)**

<http://xml.coverpages.org/conf.html>

### **Incubating New Kinds of Collaborations with Emerging RDF/XML Technologies**

<https://www.oasis-open.org/committees/download.php/4621/HumanMLinCollaborations.doc>

### **SIA Pilot-6 Improving Rapid Emergency Response for 4th SOA eGov**

<http://humanml.cim3.net/forum/irsc-forum/2007-09/msg00002.html>

### **Federal Region 4 Semantic Interoperability Pilot Project**

<http://137.227.242.48/region4cop102904.ppt>

### **FEA DRM Schema Specification**

<http://137.227.242.48/scope06282005.ppt>

### **The Semantic Interoperability Tool Kit Pilot Part Two**

<http://www.powershow.com/view/a8e4c->

[OTIzM/The Semantic Interoperability Information Sharing Tool Kit Pilot Part 2 powerpoint ppt presentation](OTIzM/The_Semantic_Interoperability_Information_Sharing_Tool_Kit_Pilot_Part_2_powerpoint_ppt_presentation)

### **Perspective Mapper**

<http://perspectivemapper.com>

### **HolacracyOne**

<http://holacracy.org>

### **Radical Management**

<http://stevedenning.com/Radical-Management/default.aspx>

### **W3Schools XML Tutorial**

<http://w3schools.com/xml>

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Date: October 11, 2013

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