Advanced Survey Design, LLC.

Surveying the future

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Corporate Overview

Advanced Survey Design (ASD) provides a comprehensive survey assessment process to assist clients in better understanding their organizational climate and improving their operational effectiveness. While specializing in web-based survey administration and feedback, ASD offers a variety of products and services:

- Customized survey development
- Tailored interactive survey website design
- Web-based, off-line computer based, or pencil/paper questionnaire administration
- Real-time data display
- In-depth data analysis and personalized feedback/reports
- Intervention strategy development
- Survey website hosting
- Customized training packages, presentations, seminars, and workshops
- On-line maintenance error information management system

ASD believes that three features are essential for survey success and encourages their use:

- ✓ Preserving survey **response anonymity**
- ✓ Safeguarding **organizational confidentiality**
- ✓ **Restricting access** to survey results

ASD currently focuses on operational and maintenance safety climate assessments using a survey process well-grounded in organizational theory and risk management concepts applied to high reliability organizations. This focus is readily tailored to other domains employing the same theoretical and conceptual foundations.

ASD maintains an on-line Maintenance Error Information Management System (MEIMS) capable of inputting, tracking, analyzing, and reporting maintenance incidents. MEIMS uses the Human Factors Analysis Classification System (HFACS) for its framework. This system is also adaptable to other domains.

ASD's **mission** is to assist clients in better understanding their organizational climate so they can achieve success through quality problem solving using current, accurate, and useful information.

ASD's **vision** is to deliver reliable, relevant, and responsive data to a growing number of businesses that embrace data-driven process improvement.

ASD maintains a strong corporate "conscience" and thus, an unwavering code of ethics when dealing with potential customers, clients, and competitors. Our code revolves around four basic principles:

- integrity
- trust
- confidence

Description of Process

ASD specializes in web-based survey assessments that measure the organizational climate of its clients. However, methods for completing surveys other than on-line are also available, to include: off-line, computer-based or pencil/paper questionnaire options.

During contract negotiations with the client, ASD will establish:
- Survey administration policies, rules, and procedures
- Timelines
- Deliverables

Other pertinent survey issues also requiring complete definition include:
- Survey response anonymity
- Organizational confidentiality
- Restricted viewing access
- Data analysis and research limitations

Following contract negotiation, a comprehensive organizational assessment and improvement system is implemented which may include any or all of the following (refer to Exhibit 1):
1. Customized survey development
2. Tailored survey website design (and hosting, if desired)
3. Survey construction (onto a survey website)
4. Survey administration (policies, rules, procedures, implementation/administration)
5. Location-specific post-survey debriefing with real-time data display
6. In-depth data analysis
7. Personalized feedback/reports
8. Intervention strategy development
9. Specialized training
10. Recurring, periodic survey implementation (Repeat 4-8, as necessary)
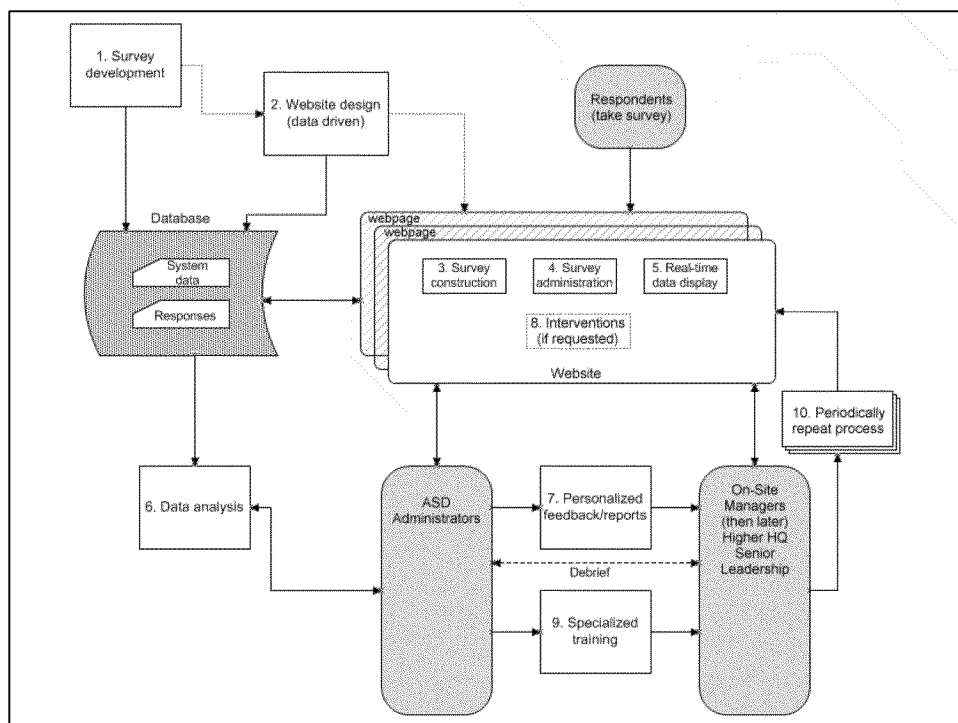

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Exhibit 1: Flow Chart of 10-Step Survey Development Process
A brief synopsis of each element in the system follows:

1. <u>Customized survey development</u> – The foundation of the process is to design a survey that measures what the client wants evaluated. This is accomplished by meeting with the client and mutually defining exactly what information is being sought. Next, ASD interviews the client's subject matter experts to develop a "preliminary set" of potential survey items. In addition, ASD will conduct a thorough literature review for pertinent information and similar surveys with comparable topics to expand upon the "preliminary set" of survey items. ASD then reviews this expanded set of survey items with the client and develops a "test set" of survey items. ASD completes the development process by conducting a beta test of the product from which a "final set" of survey items is recommended.

2. <u>Tailored website design (and hosting, if desired)</u> – Concurrent with survey development, ASD creates a website tailored to the client's needs. If the client desires, ASD will host this website.

3. <u>Survey construction (onto a survey website)</u> – Upon completion of the first two steps, ASD incorporates the "final set" of survey items onto the survey website.

4. <u>Survey administration (policies, rules, procedures, implementation/administration)</u> – If desired, ASD can administer the survey process for the client. Survey administration policies, rules, and procedures established during client negotiation will be implemented. Policy regarding survey administration will be published on the survey website. The key issues to be resolved include who will have access to the data and to what degree are a group's results visible outside that group.

5. <u>Location-specific post-survey debriefing with real-time data display</u> – Upon achieving specified thresholds of survey responses, aggregate data becomes available for display. A "dashboard" display of this data can be made available using restricted access codes provided to select individuals as agreed upon during client negotiations. On-line data is updated in real-time.

6. <u>In-depth data analysis</u> – In-depth analysis of client data (in addition to that provided by the survey software) can be conducted by ASD. The level of analytical support is determined during client contract negotiations.

7. <u>Personalized feedback/reports</u> – Two levels of feedback/reports are available. First level, feedback/reports are generated by the survey software and available to select individuals (as discussed in step 5). Second level, specialized feedback/reports can be produced in addition to the on-line reports. These feedback/reports are determined during client contract negotiations.

8. <u>Intervention strategy development</u> – ASD examines the survey data for links between the data and potential risks. ASD has software modules that can be populated with intervention strategies generated by the client and/or ASD. The level of intervention strategy development is determined during client contract negotiations.

9. <u>Specialized training packages</u> – ASD provides presentations, seminars, workshops, and other training packages that focus on specific survey areas. These packages can be tailored to suit client needs. Training packages cover a variety of subject areas (e.g., risk management, crew resource management, incident investigation, organizational communication, etc.) and can be

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presented in several different formats (e.g., DVDs, PowerPoint presentations, on-line training, program texts, etc.). ASD has the capability to expand its training menu based upon client needs.

10. Recurring, periodic survey implementation – The strength of the ASD program is the ability to easily replicate the process periodically to measure change over time. Steps 4-8 of the survey process cycle would be repeated, as desired by the client.

If the survey process is conducted on-line, then the complete assessment system is recommended. Steps 6-10 are optional, left to the customer's discretion regarding the level of detail desired. The complete assessment and improvement system provides customers the maximum advantage of the survey data collected.

If the survey process is conducted off-line using a stand-alone computer, then the survey process is modified. *Tailored website design*, is then designed for CD use, and *Survey construction and survey administration*, are completed using the CD.

If the survey process is conducted using a pencil/paper questionnaire, then Steps 2-5 of the process are adapted to a spreadsheet format. Later, data can be either entered into an electronic debriefing product or the data can be hand-calculated and debriefed. The last method of employment is more time consuming and costly, not taking advantage of electronic tools available to handle mass data collection, analysis, and feedback/display.

Background of the Survey Process

The framework for the survey process is based upon the Human Factors Analysis Classification System (HFACS) taxonomy, a derivative of James Reason's "Swiss Cheese" model of mishap causation (1990). The HFACS model (Weigmann & Shappell, 1996) – a model now recognized throughout the Department of Defense (DoD) and becoming accepted in general industry –fleshed out Reason's human error model by providing and defining subordinate categories to each of the model's four main tiers:
  – Acts
  – Preconditions
  – Supervision
  – Organizational influences

Factor analyses of safety climate survey data have been conducted. These analyses point to survey item categorization that aligns with the HFACS model.

Value

Value associated with the use of organizational climate assessment surveys includes:
  – Measures current organizational climate (proactive tool)
  – Highlights areas at increased risk of failure
  – Offers a reliable process for repeated measurement
  – Presents leadership with a "big picture" of how things are actually done

Corporate Leadership

Three individuals comprise the core of ASD and are each a corporate officer within the LLC. Each is committed to ASD's success and brings a wealth of unique talents to the organization:

- Robert Figlock – President. His talents/experiences include:
  -- Ph.D. in Applied Management and Decision Science
  -- MS in Systems Management
  -- BS in Education (mathematics major)
  -- Retired Naval aviator with 25+ years rotary/fixed wing aviation experience
  -- Teaching experience (more than 15+ years)
  -- Crew Resource Management (CRM) instructor
  -- Operational Risk Management (ORM) instructor
  -- Administrator of on-line survey processes (10+ years)
  -- Program management experience (20+ years)
  -- Training plan/course development and presentation/instruction

- Michael Schimpf – Vice President of Operations. His talents/experiences include:
  -- MS in Electrical Engineering (Naval Postgraduate School)
  -- BS in Aerospace Engineering (MIT)
  -- Naval aviator with 10+ years aviation experience
  -- Naval jet flight instructor/fighter pilot
  -- Analytical expertise
  -- Information Technology expertise
  -- Administrator of on-line survey processes (5+ years)

- Rorick Sellers – Director of Engineering. His talents/experiences include:
  -- BA in Physics
  -- Private contractor/software engineer (25+ years)
  -- Copyright holder of several on-line survey software programs
  -- On-line survey process designer/software engineer (5+ years)
  -- Information Technology expertise

Contact

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