INCOSE Value Strategic Initiative
Presented at IS19 Strategy Session
"Developing a Value Proposition"

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July 19th 2019

Developing a Value Proposition Panel

- What is the INCOSE Value Strategic Initiative (VSI)?
- Staffing and organization
- Approach to developing a value proposition
- Project Plan and Schedule
- VSI Schedule
- Summary

Initiative Background

- As a not-for-profit membership organization, the International Council on Systems Engineering (INCOSE) depends on the value provided to its individual and organizational membership as well as in the curating and continued expansion of the systems engineering discipline.

- Value is at the core of every INCOSE value stream.

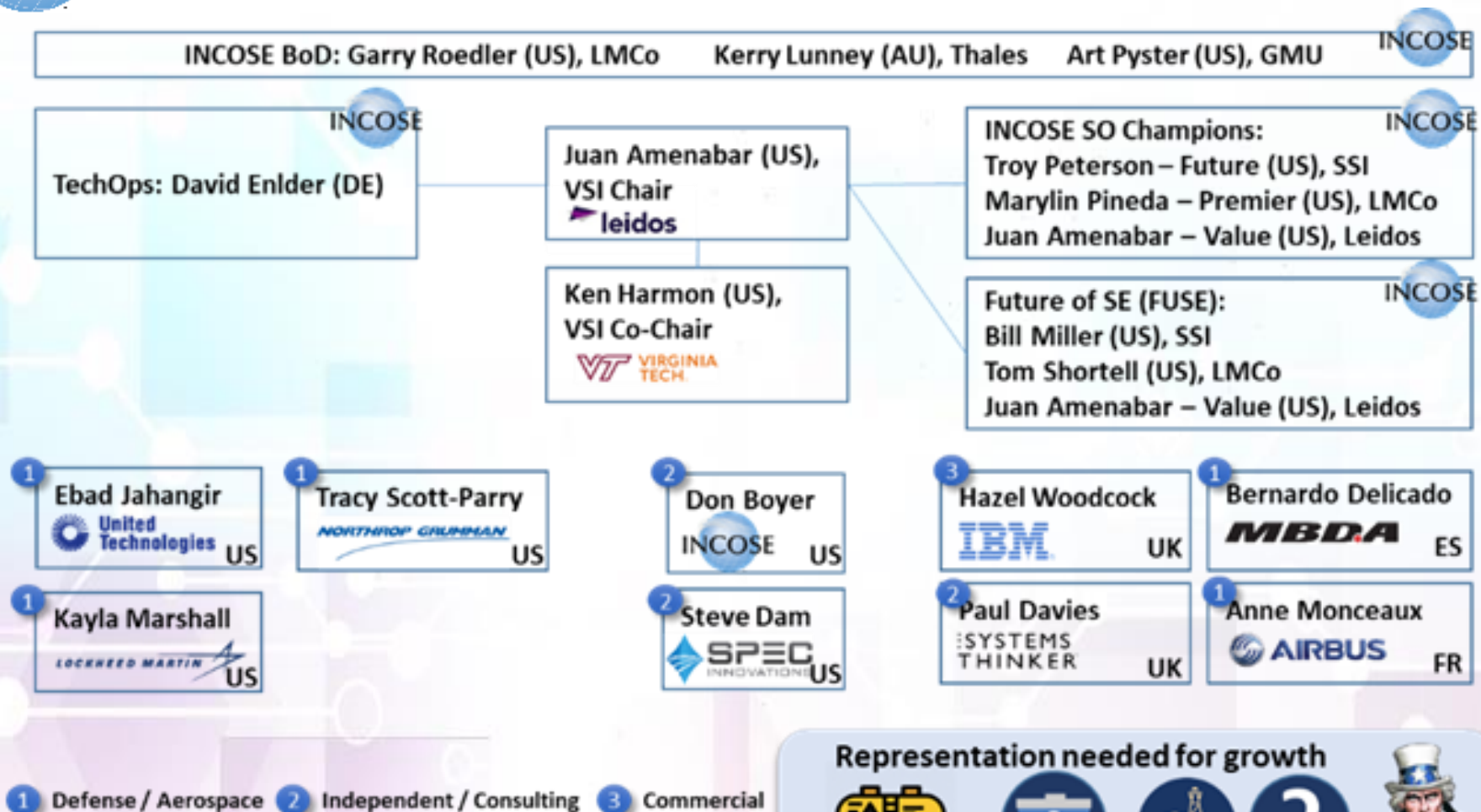| Value Stream	Value Proposition Dependency
Product	• What are the benefits of systems engineering and how does it improve ability to deliver the right product on time and on budget? • How do I tailor lessons learned to my industry and area of expertise?
Event	• What does the organization gain from sponsoring employee participation? • How can organization further its goals with sponsorship / participation?
Certification	• Why should I become certified and maintain / upgrade my certification
Membership	• Why should I join INCOSE and/or maintain my membership • Why should organization join INCOSE and how will it benefit bottom line
Training	• What training is available for my organization? • How do I identify required training gaps?

Without value there is no membership, without membership there is no INCOSE

VSI Chartered at IW19

- Value propositions have been identified as a top priority by the INCOSE Corporate Advisory Board (CAB), by the Future of Systems Engineering (FUSE), and by earlier INCOSE efforts.

- Previous efforts have not kept pace with the evolving nature of systems engineering and/or have not encompassed the breadth of needs.

- A holistic approach is required to distill the characteristics of what a value proposition is, develop a taxonomy of required tailored views, and develop a tailored set of statements for each need all based on the same core value proposition characteristic set.

- "*The Value Strategic Initiative (VSI) seeks to distill the characteristics of value propositions and project those values to a prioritized taxonomy of needs whose major classes include the audience, the area and the industry.*"

VSI Organization

INCOSE BoD: Garry Roedler (US), LMCo   Kerry Lunney (AU), Thales   Art Pyster (US), GMU

TechOps: David Enlder (DE)

Juan Amenabar (US),
VSI Chair
leidos

Ken Harmon (US),
VSI Co-Chair
VIRGINIA TECH

INCOSE SO Champions:
Troy Peterson – Future (US), SSI
Marylin Pineda – Premier (US), LMCo
Juan Amenabar – Value (US), Leidos

Future of SE (FUSE):
Bill Miller (US), SSI
Tom Shortell (US), LMCo
Juan Amenabar – Value (US), Leidos

1 Ebad Jahangir
United Technologies US

1 Tracy Scott-Parry
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3 Hazel Woodcock
IBM UK

1 Bernardo Delicado
MBDA ES

1 Kayla Marshall
LOCKHEED MARTIN US

2 Steve Dam
SPEC INNOVATIONS US

2 Paul Davies
SYSTEMS THINKER UK

1 Anne Monceaux
AIRBUS FR

1 Defense / Aerospace   **2** Independent / Consulting   **3** Commercial

Representation needed for growth

Transportation   Healthcare   Oil & Gas   Others

**May 2019**

VSI Stakeholders

Audience	Characteristics / Needs
INCOSE Member	• Individual members questioning the value received • Individual members that do not feel engaged • Associate members thinking about transitioning to individual membership
INCOSE CAB Corporation	• Corporations and universities evaluating their annual membership costs • Corporations and universities evaluating the value of CAB membership for their employees and operational advantage
Systems Engineering Community	• Engineers, educators, managers and corporations looking to become involved with INCOSE • Engineers, managers, corporations, customers of systems engineering capability to manage their program technical objectives
General Public	• Individuals interested in systems engineering discipline and career paths

Value Proposition Needs Span INCOSE Efforts

Initiative General Approach

1A

Taxonomy
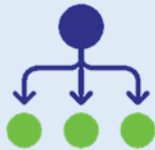
- Define areas of need
- create taxonomy that spans the need areas and minimizes taxonomy composition elements
- Prioritize elements by need

1B

Value Proposition Core

- Define salient characteristics of a generic value proposition
- What makes a value proposition good?
- What methods / experiences exist to create one?

2

Profile

- Develop a profile containing key characteristics of each element including core value proposition
- Utilize a common profile template for all elements
- Each profile MUST be independent
- Core profile identifies the main attributes of a value proposition
- Other element profiles identify characteristics and main value needs for that element.

3

Filters
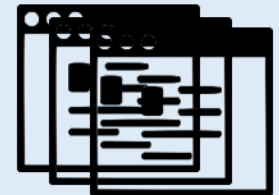
- Group profiles to create group of target value propositions
- Example profile grouping: manager / INCOSE Membership / Oil & Gas Industry

4

Value Statements

- Apply core value proposition profile to selected profile groups to create tailored value proposition statements

The goal of this initiative is to create compelling value propositions that span the needs of the stakeholders and provide a process for updating in time while maintaining a base core set of principles

VSI Approach Implementation Plan
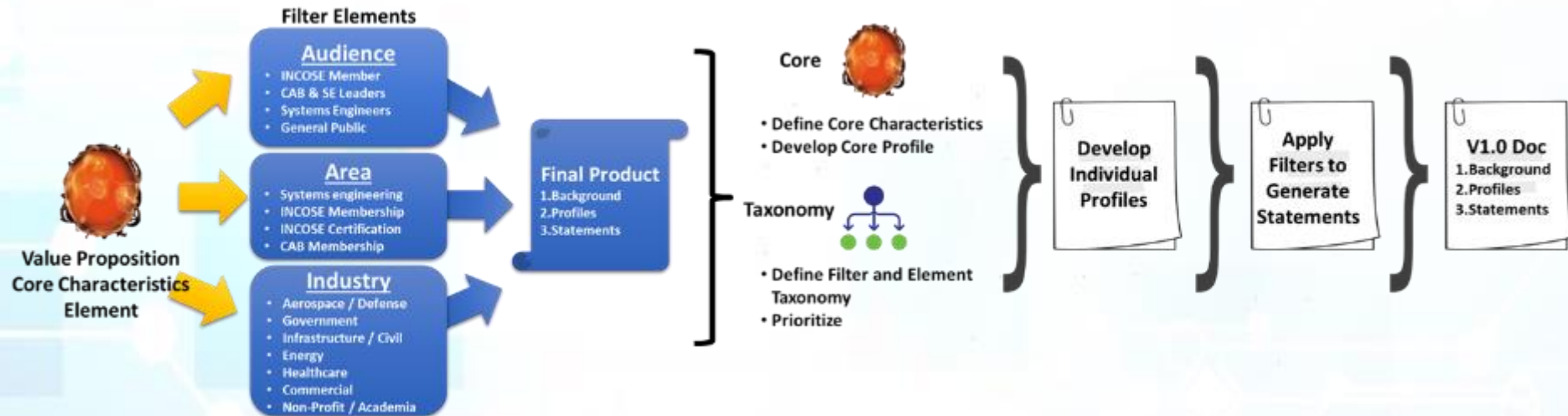
- Distill the characteristics and structure of a good value proposition
- Develop an organized and prioritized taxonomy that span INCOSE's needs
  - Taxonomy is made of elements
  - The core value proposition characteristics is an element
- For each element, develop a common profile describing the main attributes of that element
- Based on the taxonomy prioritization, filter the core value proposition profile through the other element profiles to generate tailored results
- Outcome includes: taxonomy, profiles, value propositions and final report

VSI Sample Profile Template

INCOSE   Value Strategic Initiative (VSI) Profile

Profile type: <element or core>

Profile version: <version of profile form>

Profile History:

Date	POC	Change

Profile Name: <short element or core profile name>

Profile Purpose:

<Short description of what this profile is documenting>

Profile Needs:

<describe the needs of this profile, for core it is to define the basic characteristics, for element it depents on particular element>

Profile Characteristics:

<Describe the salient characteristics of that profile>

Profile Key Tailoring Points:

<What are the important points to tailor to for this element?>

- Profile tailored to each element
- Core proposition also has a profile
- Profile contains salient characteristics of each element and core
- Profiles are used as guides to project core characteristics for tailored value proposition statements
- Taxonomy is an orderly arrangements of element categories and subcategories

VSI Taxonomy

Filter Elements

Audience
- INCOSE Member
- CAB & SE Leaders
- Systems Engineers
- General Public

Area
- Systems engineering
- INCOSE Membership
- INCOSE Certification
- CAB Membership

Industry
- Aerospace / Defense
- Government
- Infrastructure / Civil
- Energy
- Healthcare
- Commercial
- Non-Profit / Academia

Value Proposition Core Characteristics Element

- Taxonomy is composed of elements that span INCOSE's value proposition needs
- Taxonomy is an orderly arrangements of element categories and subcategories
- Each element including the value proposition core as a profile which contains salient characteristics
- Developing and maintaining a taxonomy is a key task of this effort

Taxonomy workbook outlines: Category, Element, Element Components, Description, Characteristic, Need

Open taxonomy workbook to examine

Taxonomy Structure

- Taxonomy elements drive the solution space
  - Audience is who is listening / who is the proposition for / what is their role and what is important to them
  - Area is what function the proposition is developed for
  - Industry is what type of organization they belong to and what characteristics should the proposition tailoring take
- Historical listings of value proposition elements are significant in number
- A taxonomy is an orderly classification of major areas that contain an order of these listings or elements into groups
- What is important is to capture a minimal set of taxonomy groups that (1) span the need and (2) minimize the number of groupings
  - Each group carries the characteristics of all its components minimizing unnecessary duplication of effort
  - The total minimum number of groups ensures the entire population is covered

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Core Value Proposition DRAFT Profile (1/2)

Profile Section	Section Description
Profile Name	Core Value Proposition
Profile Version	0
Profile Description	**Clear, simple statement** of the benefits, both tangible and intangible, that the organization will provide for those benefits Statement that **clearly identifies what benefits a customer will receive** by utilizing a particular product or service from INCOSE **Positioning statement that explains what benefit you provide for who and how** you do it uniquely well. It describes your target buyer, the problem you solve, and **why you're distinctly better than the alternatives**
Profile Needs	Core value proposition profile is needed as the baseline to be tailored to other selected profiles and profile combinations that make up the value proposition needs

Core Value Proposition DRAFT Profile (2/2)

Profile Section	Section Description
Profile Characteristics	**Target**: **Definition of target market** (taxonomy element) by segmenting the target into more specific focused people based on their : attitudes, beliefs, behavior, location, gender, age, etc. We can start to narrow down which audience/area/industry we are talking about **Insight**: **Definition of what problem we intend to solve**. It relates directly to the target market, it will be the target market biggest unmet need and our intended audience will have many problems/needs but we will be focused on the one that is most significant to them because in solving that escalates the value proposition. **Alternatives**: To **understand what alternatives already exist** in the market for the intended audience/area/industry to resolve that problem who directly or indirectly already delivers against that problem **and why they fail to adequately solve it**. **Benefits: It is our promise**. The benefit is a function of the insight if we know the biggest problem of my intended audience/area/industry, the benefit we offer cannot be anything else, it has to be a commitment to solve that problem nothing else. **The reason to believe: The proof that we can make the benefit come to life and deliver** the promise to solve the insight despite the fact all those alternatives have failed to do so in the past. **Superiority: It is also called discriminator**, differentiator or unique selling point. We want to be able to say is this value proposition that we are offering we can deliver the benefit to a high degree of uniqueness and superiority over everything else that exists in the market hence they should come to us.
Key Tailoring Points	Apply key concepts presented here to selected profile combinations for tailoring / filtering to that need

Sample Audience Profile: INCOSE Member

Profile Section	Section Description
Profile Name	Systems Engineering Community [Audience]
Profile Version	0
Profile Description	Members are the basis of INCOSE, they drive the requirements, generate the products and provide the major source of funding. They represent organizations that in turn can support INCOSE through sponsorship, requirements, CAB membership
Profile Needs	• Members look to INCOSE for education, networking, materials, training, place to share ideas and present results from own work and be recognized • Entry level members are media savvy and look for content that is valuable, well organized, and easy to navigate. • Mid level members look for supporting material and venues to publish their results as well as networking opportunities. • Senior level members are interested in networking and sharing their collective experiences • Why should I join INCOSE and/or maintain my membership
Profile Characteristics	INCOSE members represent a wide spectrum of organizations, industries, … INCOSE members are characterized by entry level, mid level, senior level • Entry level members look for support in learning and growing their career goals and objectives. • Mid level members are in the midst of their career and are looking for networking opportunities and means to support their efforts. • Senior level members have a great deal of experience and are looking to actively participate in activities and working groups.
Key Tailoring Points	Value depends on the level of the member and needs to be tailored accordingly. This profile should create 3 value or a one value proposition with 3 thrusts.

CAUTION WORK IN PROGRESS

Sample Area Profile: INCOSE Certification

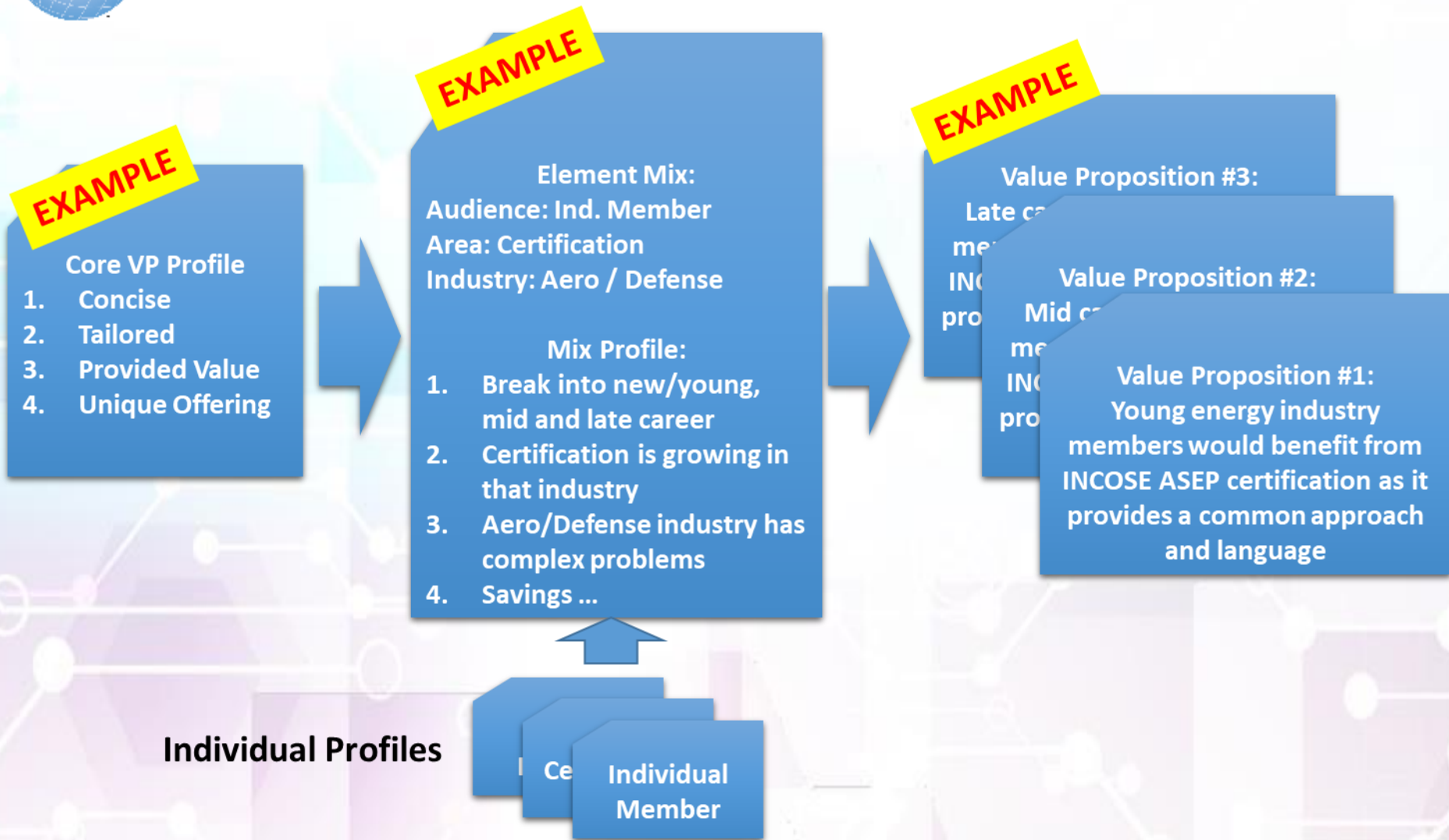| Profile Section	Section Description
Profile Name	Individual Membership [Area]
Profile Version	0
Profile Description	INCOSE certification numbers have leveled off and industry does not see the value for certification without customers requiring it like they might do with PMP
Profile Needs	• Why should I maintain and upgrade my certification • Why should I become certified • Value proposition
Profile Characteristics	• INCOSE's certification structure provides a variety of individual participation. • INCOSE provides organizations with an agreement to sponsor their own certification process • INCOSE has difficulty increasing certification levels
Key Tailoring Points	Certification value to be tailored to the different levels as well as the value in moving to the next level or becoming involved in other opportunities within INCOSE if an ESEP

CAUTION WORK IN PROGRESS

Sample Industry Profile: Aerospace / Defense

Profile Section	Section Description
Profile Name	Aerospace / Defense [Industry]
Profile Version	0
Profile Description	Aerospace industry is a key driver of systems engineering principles, tools and methods. Aerospace / Defense industry is driven by large, long term investments which are safety driven and require complex integration / high technology levels / automation and Educated and up to date workforce / contractors
Profile Needs	Aerospace industry is a key driver of systems engineering principles, tools and methods. Evolution towards digital transformation, artificial intelligence, cybersecurity, internet of things and systems of system integration are major needs in this industry
Profile Characteristics	• Large, long term investments • Safety driven • Complex integration / high technology levels / automation
Key Tailoring Points	???

Sample "Made-Up" Application

EXAMPLE

Core VP Profile
1. Concise
2. Tailored
3. Provided Value
4. Unique Offering

EXAMPLE

Element Mix:
Audience: Ind. Member
Area: Certification
Industry: Aero / Defense

Mix Profile:
1. Break into new/young, mid and late career
2. Certification is growing in that industry
3. Aero/Defense industry has complex problems
4. Savings …

EXAMPLE

Value Proposition #3:
Late c...
me...
INC...
pro...

Value Proposition #2:
Mid c...
me...
INC...
pro...

Value Proposition #1:
Young energy industry members would benefit from INCOSE ASEP certification as it provides a common approach and language
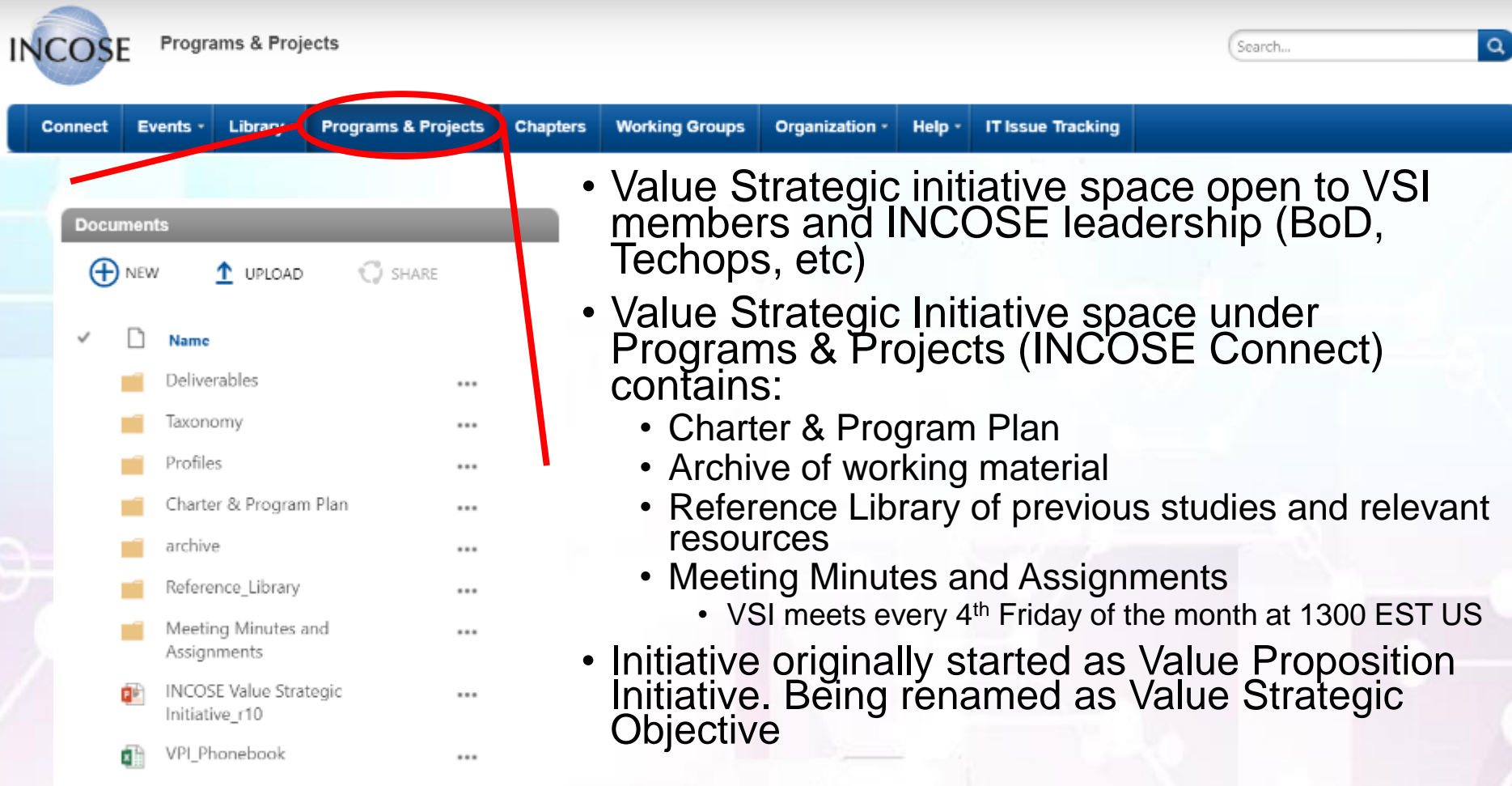
Individual Profiles

Ce... **Individual Member**

Current VSI Reference Material

- "4 Steps to Building A Compelling Value Proposition"; Michael Skok; Forbes Magazine online article; June 2013.
- "Best Practice in Value Propositions Webinar Slides"; Helen Curtis, Coterie Marketing; 2015
- "Better Project Outcomes when Project Management and Systems Engineering Work Together"; Dr. Martin Barnes, Derek Hitchins; INCOSE
- "Building a Business Case for Systems Engineering: the 2012 SE Effectiveness Study"; Joseph Elm; SETI/NDIA/AESS; October 2012
- "Business Model Generation"; Alexander Osterwalder, Yves Pigneur; John Wiley & Sons; 2010; ISBN 978-0470-87641-1
- "Healthcare Value Brochure"; INCOSE
- "IEEE Communicating a Strong Value Proposition", Grid-X Partners
- "Improving Systems Engineering Development"; Professional Development Guidebook Storyboard; INCOSE
- "Providing Value to All AIAA Members"; John Langford; Aerospace America; December 2018
- "Unique Selling Proposition (USP)"; Entrepeneur Media; 2019
- "Value Proposition Design"; Alex Osterwalder, Yves Pigneur, Greg Bernarda, Alan Smith; John Wiley & Sons; 2014; ISBN 978-1-118-96805-5
- "Value Propositioning"; Rick Dove; Iceni Books; 2005; ISBN 1-58736-389-5

VSI Resources

- Value Strategic initiative space open to VSI members and INCOSE leadership (BoD, Techops, etc)
- Value Strategic Initiative space under Programs & Projects (INCOSE Connect) contains:
  - Charter & Program Plan
  - Archive of working material
  - Reference Library of previous studies and relevant resources
  - Meeting Minutes and Assignments
    - VSI meets every 4th Friday of the month at 1300 EST US
- Initiative originally started as Value Proposition Initiative. Being renamed as Value Strategic Objective

VSI Program Plan

Task #	Task Title	Task Description	Progress Measure
1.0	**Task management**		
1.1	Website management	Maintain website, add members, keep files updated	Updated website timeliness
1.2	Membership management	Recruit new members, provide white papers, communications	New member growth
1.3	Task management	Maintain effort on schedule, status work, maintain MOPs	Progress status towards goals
1.4	INCOSE relationship and communications	Monthly minutes, briefings, BoD reports, TechOps reports & briefs	Number of reports, briefs, communications
2.0	**Core Value Proposition Characteristics**		
2.1	Reference study of value proposition	• What makes a value proposition useful? • How to develop good value propositions? • Literature and samples of relevant value propositions • Previous INCOSE value proposition work	Number of identified reports in Ref Library
2.1	Value proposition characteristics	• Distillation of value proposition characteristics • Common aspects of good value propositions	Number of characteristics identified
2.2	Common definition of value proposition	Define an INCOSE core value proposition set of characteristics based on the research performed	Definition of core value proposition
3.0	**Value proposition needs taxonomy**		
3.1	Research of value proposition needs	Develop list of value proposition needs	Number of identified needs
3.2	Integrated need list taxonomy	Categorize list of value proposition needs into a taxonomy that minimizes list and spans the entire set of needs	Definition of need taxonomy
3.3	Tailoring approach	Define approach to project core value proposition into identified taxonomy	Definition of tailoring approach
4.0	**Value proposition statements**		
4.1	Value proposition statement prioritization	Identify prioritized list from taxonomy to generate draft statements	Definition of prioritized list
4.2	Value proposition statements	Develop first draft set of statements in order of priority	Definition of prioritized statements

Products include: final report, need taxonomy, element profiles, value statements

VSI Product Generation Schedule

Task #	Task Title	Product Deliverables
1.0	Task Management	• Task schedule and assignments (ongoing) • Reports and communication (ongoing) • Ongoing product and task management (ongoing)
2.1	Reference value proposition study	• IS19
2.1	Core Value proposition characteristics	• IS19 draft • IW20 final
2.2	Common value proposition statement	• IW20
3.1	Value proposition projection contents	• IS19
3.2	Categorized taxonomy of value proposition needs	• IS19 draft • IW20 final
3.3	Tailoring approach	• IW20
4.1	Prioritized value proposition need taxonomy	• IW20
4.2	Value proposition statements	• IS20

Continuously looking for opportunities to compress schedule

VSI Panel Review Areas

- Value proposition development process
  - Is the proposed development approach solid?
  - Does the proposed schedule satisfy the need?
- Value proposition definition
  - Evaluate core value proposition profile?
  - Consider VSI background material?
- Taxonomy composition, does it span the need?
  - Are the correct elements categorized
  - Are the elements correctly organized and prioritized into the taxonomy?
  - Do the selected elements span the need?
- Profile generation
  - Does the proposed profile template capture the essential characteristics of each element?

Summary

- The Value Proposition Initiative, in conjunction with INCOSE's Strategic Objective Initiative, seeks a holistic approach towards the development of tailored value propositions for INCOSE and its membership based on a core set of time invariant value proposition characteristics

- Current efforts leading to IS19 include: taxonomy and draft element profile generation

- Your participation in this effort is crucial to its (and your) success!

"If the rate of change on the outside exceeds the rate of change on the inside, the end is near." Jack Welch, GE CEO, Feb 10, 2014

BACKUP SLIDES