

Desired – Future State Model

Trending Technology Research

Phase 2 – 2021

Design Registration is a program to encourage, reward, and support engineering in product design and demand creation activity from Authorized Distributors and guarantee revenue capture wherever the order is fulfilled. It also delivers share of mind for manufacturers with their channel partners while assuring investments made by the Distributor both domestic and global.



Design Registration Roadmap

2020

Q1

Introduction

Manufacturing Council Discussions
Council Task Team
Scoping Document

Q2

Structure

ECIA, GEDA, ERA
Executive Steering Committee
SME Work Group & Launch

Q3

Framework

In/Out of Scope – Current State
Survey Questions
Part-1 Survey

Q4

Phase 1 End

Part-2 Survey
Deliverables:
Master Index – Survey Results
Current State Assessment
Executive Summary

2021

Q1

Phase 2 Start

Deliverable Review, Publication
Adjustments to SME Work Group
Desired – Future State Model

Q2

Research

D – F State Compatibility with
Trending Technologies

Q3

Research Cont'd

D – F State Compatibility with
Trending Technologies

Q4

Phase 2 End

Deliverable:
D – F State Document
Research Document
Alignment to the Model
Vs
Gaps to the Model

2022

Q1

Phase 3

Provide Industry Guidance
Organize a collaboration for
proof of concept using the
D-F State Model.

Q2

Identify a manufacturer or
distributor with interest to
develop and/or upgrade their
design registration program,
working with the Desired-
Future State Model, an AI-
Machine Learning company
and a technology company
specializing in D-Reg tools.

Q3

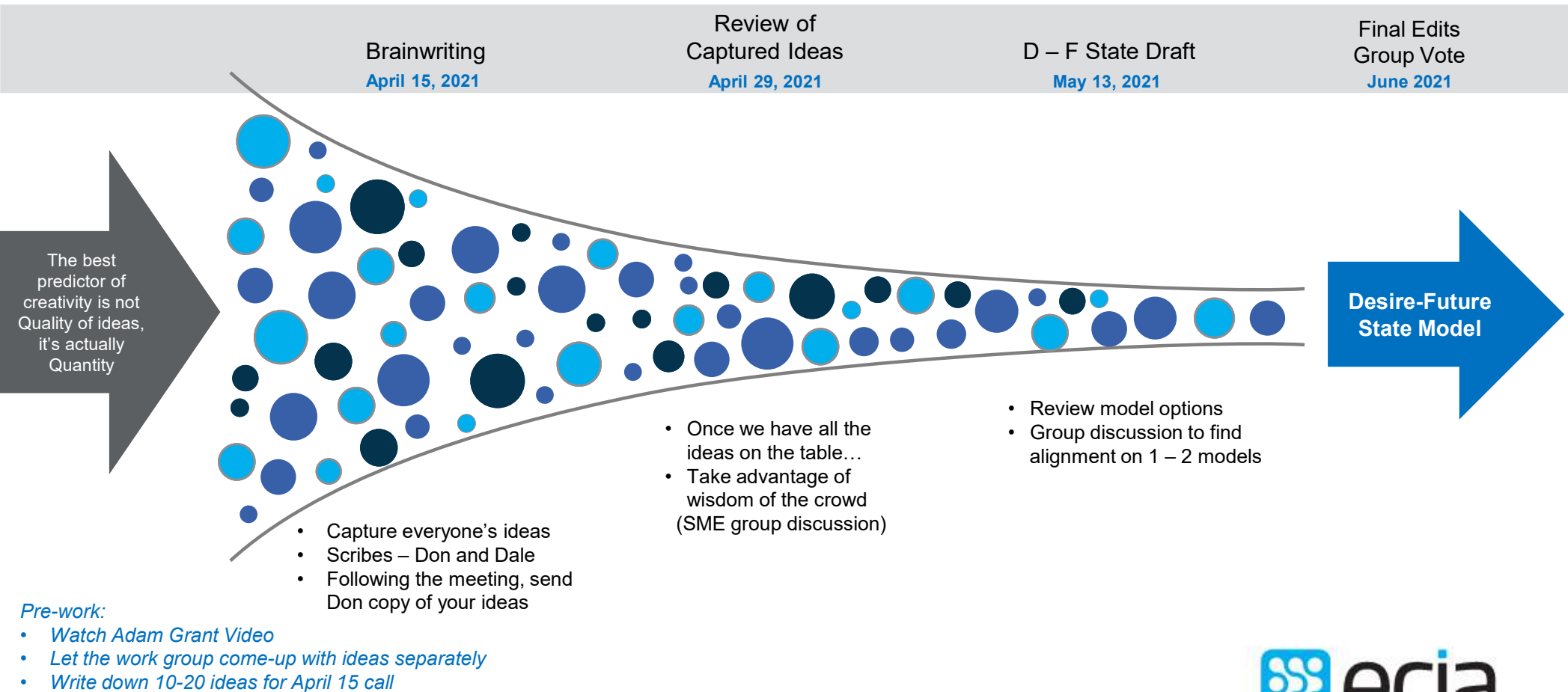
Q4

Global Industry Practices Committee (GIPC)

© Copyright 2020 Electronic Components Industry Association. All rights reserved.



Desired – Future State Model Plan

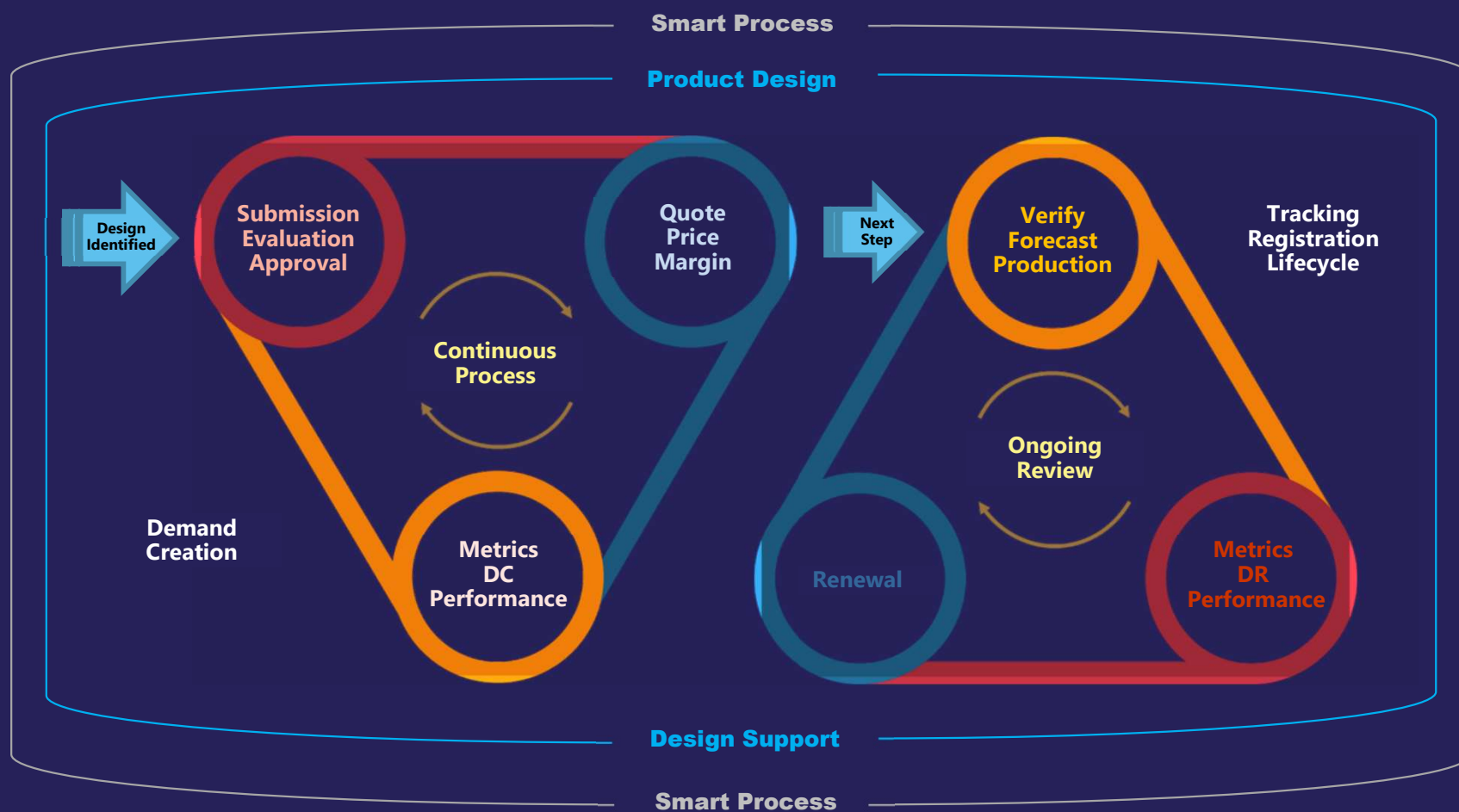


Global Industry Practices Committee (GIPC)

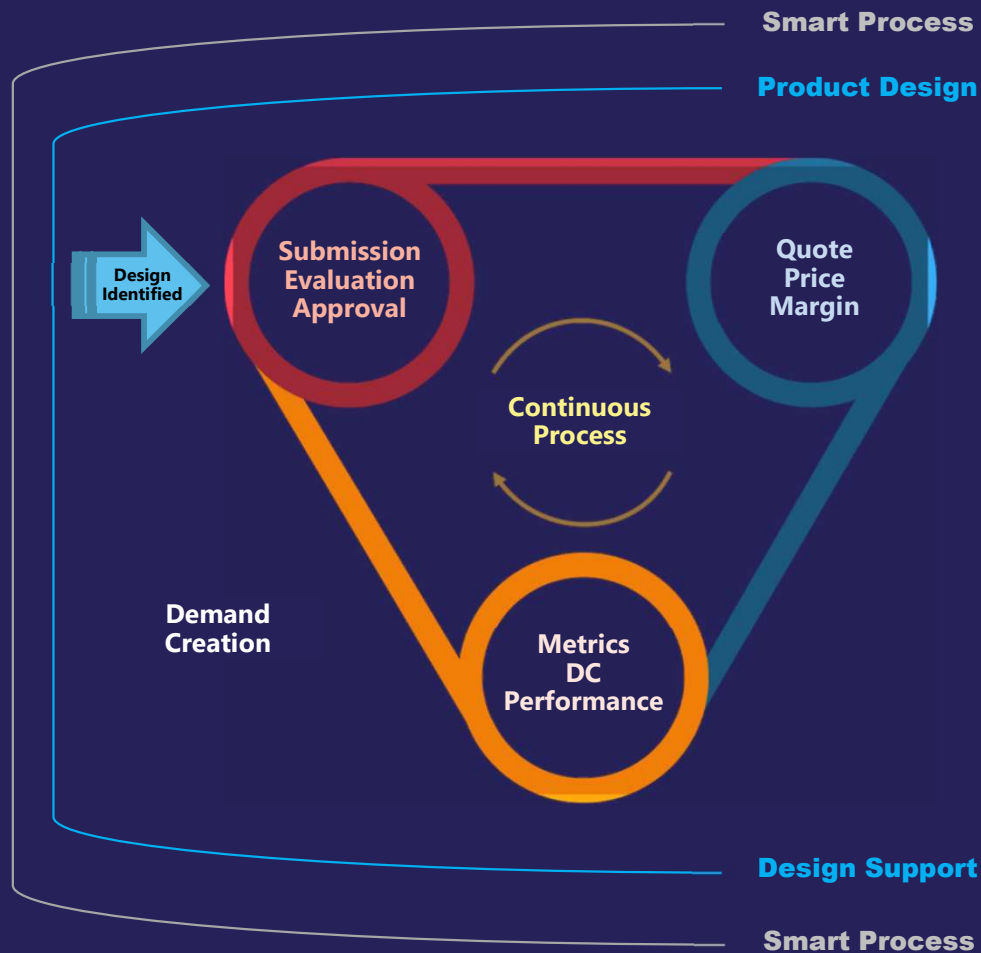
© Copyright 2021 Electronic Components Industry Association. All rights reserved.

Design Registration

Desired – Future State Model



Design Registration



Desired – Future State Model

System Attributes:

1. Ability to use AI (Artificial Intelligence) Smart software / system with Global capability
2. Smart process...needs to work with existing systems that distributors and manufacturers have already invested in
3. Smart registration form (NEDA/ECIA form)
4. Intelligent formatting of key information for accuracy; using industry standard customer master data through 3rd party tools, example D&B
5. Smart form content must satisfy majority of Manufacturer's requirements and allow for customization
6. Secure Smart platform to protect data/information and majority of Manufacturer, M-Rep, Distributor contractual requirements and allow for customization
7. Smart submission process with notification alert flags, time logs and escalation
8. Evaluation takes place using notification alert flags, time logs where additional information is needed
9. Access to manufacturers product/part number eligibility lists
10. Multiple language capability
11. Smart access to queries and database reports
12. Smart process sends approvals to registered names with DR tracking number
13. Quoting process takes place and is recorded with price and margin

Design Registration

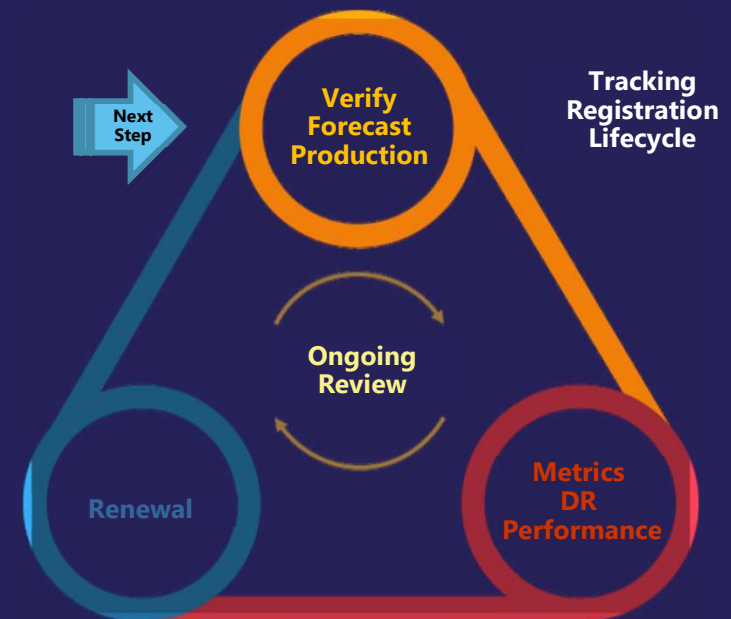
System Attributes:

1. Smart process begins DR tracking lifecycle
2. Forecast and verification of production is ongoing and requires two-way communication
3. Intelligent bridging of platforms: DR – Quoting – POS
4. Smart metrics must satisfy majority of Manufacturer's and Distributor's requirements and allow for customization
5. Metrics with notification alert flags and time logs for missing data / information or when metrics fall below established threshold
6. Smart interactive review process using notification alert flags, time logs for data / information being exchanged between organizations
7. If DR movement is needed out of region, Smart process tracks using notification alert flags, time logs
8. Ability to track history globally, across regions/markets
9. Smart process access and flexibility critical to DR movement out of region
10. Multiple language capability
11. Smart access to queries and database reports

Desired – Future State Model

Smart Process

Product Design



Design Support

Smart Process

Phase 2 SME Sub – Group Research

SG1

- Vienna D. – ON Semi
- Nicole G. – Luscombe Engr
- Philippe V. – Future
- Kaye E. – Vishay
- Simone B. – EBV Avnet EU

SG2

- Corban G. – Maxim Integrated
- Jaime S. – AVX
- Chris R. – Avnet
- Josh L. – RFMW
- Tobi C. – Kruvand

SG3

- Joyce N. – Allegro
- Bob R. – Trek-Tech
- Josh K. – TE Connectivity
- Mark H. – TTI
- Neil H. – Murata

Technology Companies:

- ✓ mETaL Corp (**SG3**)
- ✓ Regimen - Distiman (**SG2**)
- ✓ Neural Corp (**SG1**)
- ✓ Salesforce (**SG1**)
- ✓ MuleSoft – API
- ✓ Model N (**SG3**)

} Merged

- Steps followed for sub-group research with trending technology companies:
 - Provide a copy of Phase 1 Executive Summary – R8 (*this is a new revision since publication*)
 - Provide a copy of Phase 2 Desired – Future State Model – R19
 - Initial call to set expectations and confirm interest
 - First call with assigned sub-group and technology company to review **a.** and **b.** documents and answer questions
 - Second call will be for sub-group to hear technology company presentation on the compatibility of their product/ideas with the D-F State model
 - Finally, the work group will prepare a document to recognize alignment and gaps with the model

Global Industry Practices Committee (GIPC)

© Copyright 2021 Electronic Components Industry Association. All rights reserved.

Technology Companies Who Participated in the Research



NEURAL Corporation
19925 Stevens Creek Blvd
Cupertino, CA 95014

CEO | Founder: Mark Swartz is the founder of NEURAL Corporation, an Artificial Intelligence/Machine Learning provider, which helps Manufacturing companies be as productive as possible. The net result is that our clients are better through the use of technology.



mETaL Corp
284 First NH Turnpike,
Northwood, NH 03261

mETaL is a protocol, developed by the mETaL Corp and purpose built for the Electronics industry, that allows any company, with any CRM, anywhere in the world B2B CRM communication. Established in 2020, the mETaL Corp created the mETaL Cloud, a SAAS platform, which enables companies to connect and sync sales data. mETaL eliminates manual entry of information. Manufacturers, Distributors and Representatives can synchronize Sales Opportunities, Quote Information and Design Registrations with a simple click of a button.



DISTiMAN
4786 Blackstone Way
Fremont, CA 94555, US

Our company's founders, having worked in the electronic components industry for the last 30 years with roles in sales, marketing and engineering, lead our teams to develop advanced systems that address the challenges faced by both manufacturers and distributors. Our platform approach saves substantial time, money and effort while improving quality and performance.



Salesforce Tower
415 Mission Street, 3rd Floor
San Francisco, CA 94105

Salesforce is the world's #1 customer relationship management (CRM) platform. We help your marketing, sales, commerce, service and IT teams work as one from anywhere — so you can keep your customers happy everywhere.

Model N

777 Mariners Island Blvd., Suite 300
San Mateo, CA 94404

Model N delivers end-to-end revenue management solutions that ensure automated quoting and pricing to channel partners in minutes or less. This includes global price management, automated discounting controls, volume-based tiering. Enables channel with accurate stock rotations, price protection programs, and discount incentives like ship & debit and special pricing agreements (SPA)/debits. Automatically manages channel sales providing real-time data and insights into partner performance.

Global Industry Practices Committee (GIPC)

© Copyright 2020 Electronic Components Industry Association. All rights reserved.

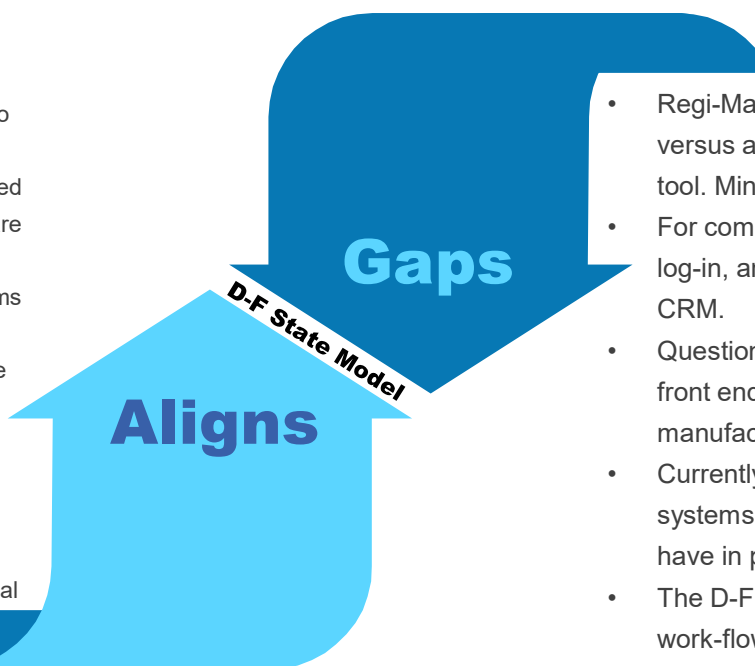


Phase 2 SME Sub – Group Research

Regi-Man



- Regi-Man is an existing tool running through a browser interface, maintained and upgraded by the company. It is customizable for each manufacturer based on their DR program rules. Costs are based upon quantity of registrations.
- Regi-Man appears to be a tool more suited for a company with no CRM, such as a small manufacturer and/or distributor..
- Regi-Man is purposefully not trying to be a CRM. They are focused on simplicity to facilitate adoption throughout the channel. APIs are available to connect to any desired CRM.
- Regi-man has APIs in place to communicate with 3rd party systems and software.
- A csv file can be uploaded to provide a part database to minimize data entry errors factor, manufacturers simply upload an excel file of their registerable part numbers.
- Created an entry form that was close or matched industry standards/NEDA/ECIA forms
- Regi-Man offers automated responses and reminders to its members, including approval, rejections, update requests, renewal requests, etc..
- Reports are sent in a link and no log-in/password is required for access.



- Regi-Man seems to be more of a basic tracking tool versus a comprehensive design registration management tool. Minimal AI in the design.
- For companies with CRMs in place, this is yet another log-in, another place for data, detached from the larger CRM.
- Question the amount of set-up time and costs to create front end communication code between manufacturer / manufacturer representative / distributor.
- Currently does not have the ability to talk to other systems that a manufacturer or distributor may already have in place..
- The D-F State Model level of automation, intelligence and work-flow was not present.

Global Industry Practices Committee (GIPC)

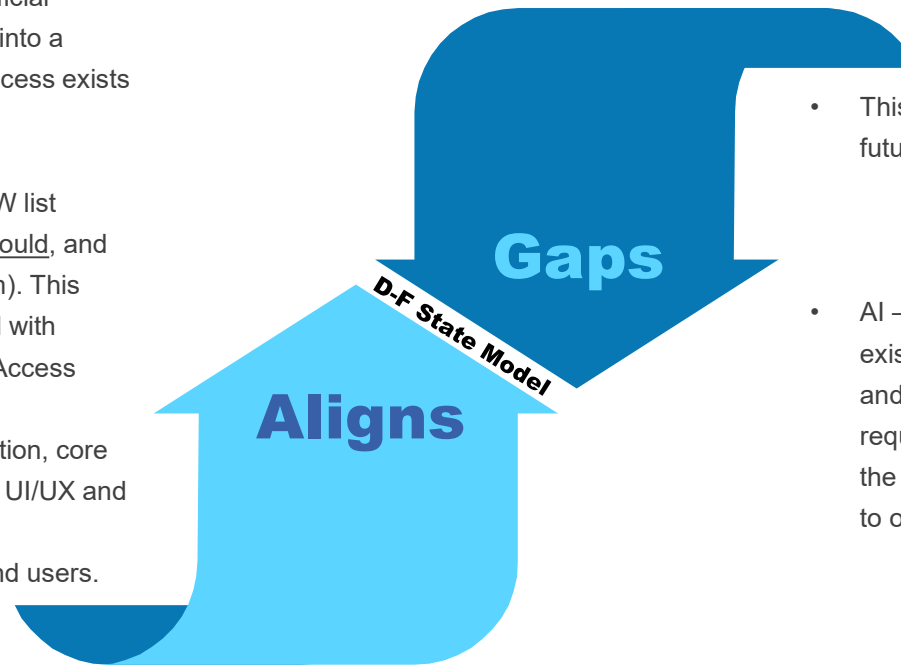
© Copyright 2021 Electronic Components Industry Association. All rights reserved.



Phase 2 SME Sub – Group Research

AI – Machine Learning

- The opportunity to incorporate artificial intelligence and machine learning into a future state design registration process exists in today's technology tool-box.
- Starts with an initial workshop with companies to sort out the MoSCoW list (documenting the Must, Should, Could, and Would have features of the system). This workshop would also be high-level with Security, Data, Permissions, and Access discussions and clarity.
- Then move into ease of use, adoption, core functionality, and finally into visual UI/UX and mockups, etc.
- Neural is the facilitator between end users.



NEURAL Corporation

- This technology may have limitations within a future state design registration process: example:
 - Human interaction requirements
 - Identify registration data with different formats from multiple CRM systems
- AI – Machine Learning applications mostly don't exist today within design registration programs and would need to be developed. This would require a collaboration for proof of concept using the D-F State Model and working with companies to organize and commit resources.

Global Industry Practices Committee (GIPC)

© Copyright 2021 Electronic Components Industry Association. All rights reserved.



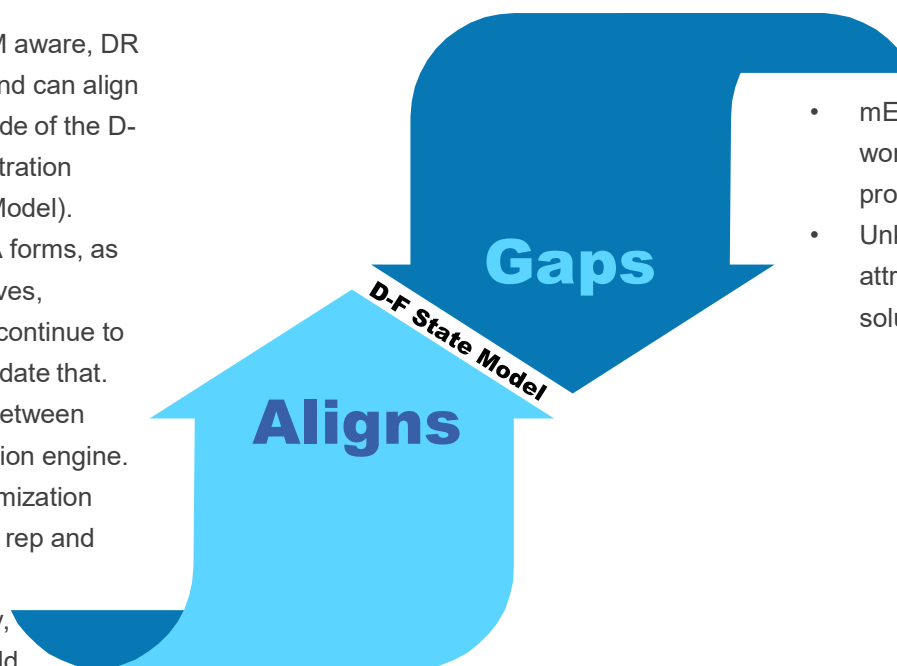
Phase 2 SME Sub – Group Research



mETaL Cloud

The mETaL Cloud Connect

- mETaL Cloud is a bi-directional, CRM aware, DR approval process sensitive solution and can align with both the demand creation (left-side of the D-F State Model) and the tracking registration lifecycle (right-side of the D-F State Model).
- Plans to eliminate the need for NEDA forms, as they do today with their Representatives, Manufactures. If Distributors want to continue to use NEDA forms, they can accommodate that.
- Can provide rapid data interchange between clients. They are a “real time” replication engine.
- Client mapping would allow for customization between manufacturer, manufacturer rep and distributor.
- Their protocol will allow any company, with a mETaL Cloud open API, to build integrations between themselves and their partners. (developed in any language)



- mETaL Cloud is in POC/Pre-production stages working with Distributors to use the mETaL protocol.
- Unknown how many D-F State Model system attributes would be available in a mETaL Cloud solution.

Global Industry Practices Committee (GIPC)

© Copyright 2021 Electronic Components Industry Association. All rights reserved.



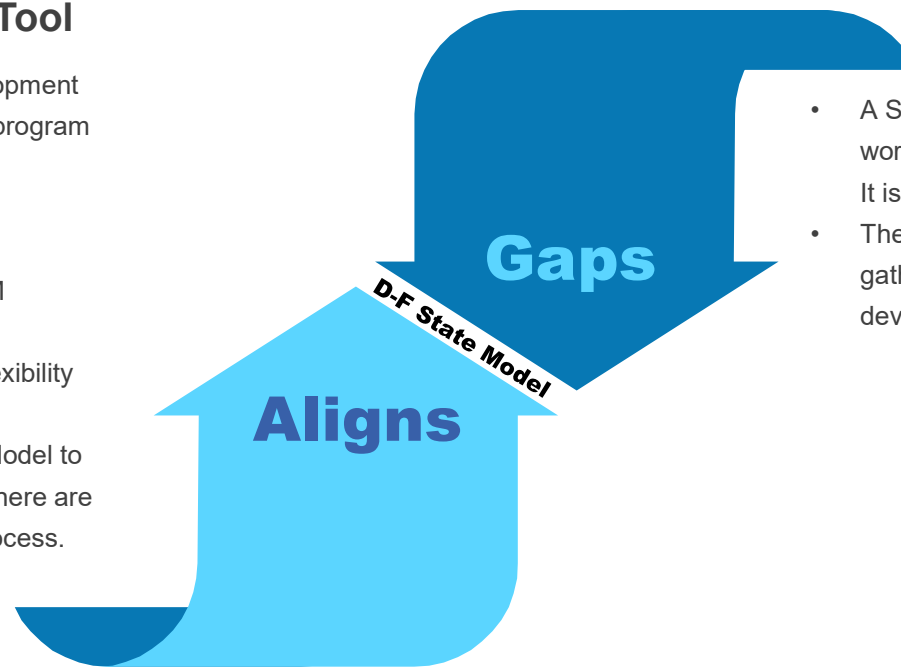
Phase 2 SME Sub – Group Research



Salesforce

Revenue Management Tool

- Salesforce is committed to the development and addition of a design registration program to their suite of tools.
- Development strategy and ideas are currently being worked on.
- Allows entities who use multiple CRM systems to access registration data. Salesforce tools can and will allow flexibility with connectivity.
- They are using the ECIA D-F State Model to identify where they align and where there are gaps as part of their development process.



- A Salesforce design registration tool would be a work-in-progress because it doesn't exist today. It is in a development stage currently.
- They are working with DR program users to gather critical information to assist them in their development.

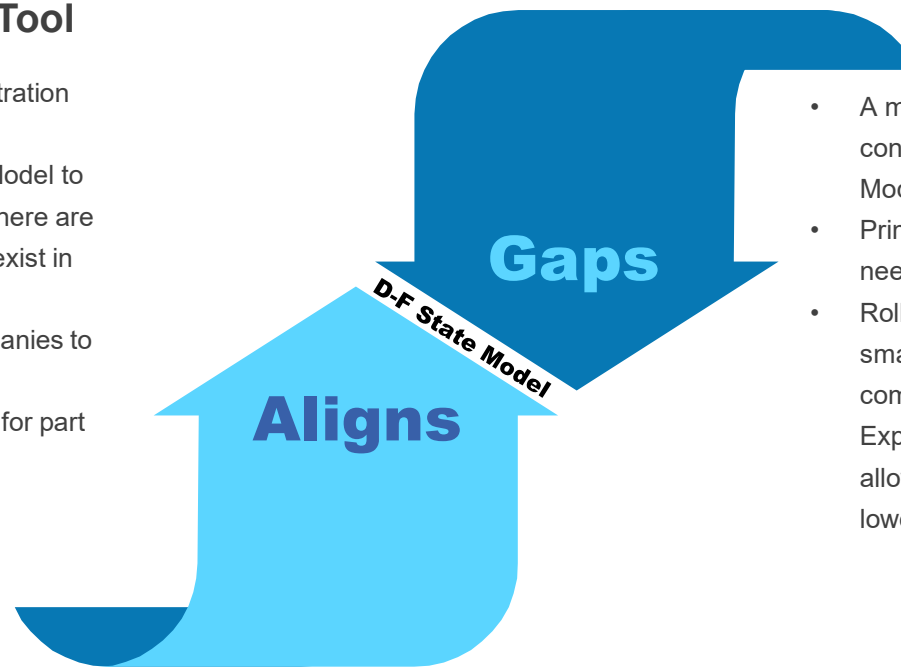
Global Industry Practices Committee (GIPC)

© Copyright 2021 Electronic Components Industry Association. All rights reserved.



Revenue Management Tool

- Model N currently has a design registration program within their suite of tools.
- They are using the ECIA D-F State Model to identify where they align and where there are gaps. Many of the system attributes exist in their current product.
- Their modular approach allows companies to pick and choose options.
- AI / Machine Learning in place today for part of the Model N registration process.



- A more detailed review would be needed to confirm alignment and gaps to the D-F State Model.
- Primarily semiconductor focused and would need enhancements for other products.
- Rolling out an adoption plan to bring Model N to small – medium size companies in the electronic component channel. They have created a new Express Methodology to expedite deployments allowing companies to go live much faster for a lower cost.

Please!

Don't Violate The Law!

This document is copyrighted by the ECIA and may not be reproduced without permission.

Any republication, reproduction or redistribution of any portion of this study without prior permission from ECIA and attribution to ECIA is prohibited.

For information, contact:

Electronic Components Industry Association
310 Maxwell Road
Suite 200
Alpharetta, GA 30009

Main Office
Phone: 678-393-9990
Fax: 678-393-9998

delario@ecianow.org

