Digital Container Shipping Association (DCSA) is a neutral, non-profit association with the mission of leading the industry towards systematic collaboration.

DCSA drives initiatives to make container transportation services transparent, reliable, easy to use, secure and environmentally friendly.

DCSA’s open-source standards are developed based on input from DCSA member carriers, industry stakeholders and technology experts from other industries.

www.dcsa.org
1. Introduction
2. EDI to API approach
3. EDI to API costing analysis
4. Towards Operational adoption
Introduction

2 main topics
- Moving from EDI to API
- Moving from standard setting to operational standard adoption

 Doesn’t happen by itself
- Different factors (as presented last time)
  - Customers & other stakeholders
  - Business case to allocate resources
  - Buy-in from entire organization
  - Completeness of standards

 How to deal with it
- Measuring is key
- What is an EDI connection,
- What is operational adoption?
- What are the actual costs?
EDI to API approach

Why this analysis

1) To infuse the standards development with facts,
   • e.g. what are the most important messages in the industry, what are the most commonly used data attributes, etc.

2) To verify the completeness of published standards in order to support your process,
   • i.e. what data attributes are the current DCSA standards missing in order to be complete.

To get to the end state, we need to take several steps:

The EDI Message Catalogue is the point of reference for understanding which messages are being transacted today and for what purpose.

Further analysis is needed to
• Identify exactly which messages are used to target the common messages
• Understand the EDI landscape, from which message can be reviewed
• Create an attribute matrix can be completed to identify the data fields and their usage.
EDI to API Costing

Costing Study through independent research

This study has three key outputs:
1) An accurate and representative **cost centre model** for supporting EDI data integration operations at a very large container carrier.
2) The first known attempt at assigning and apportioning **overhead cost contributors to data integration** from an ocean carrier perspective.
3) A **reasoned ‘cost-per-connection’ figure**, which, while based upon the carrier-centric headquarters model, is a useful figure from which this study estimates the total cost of supporting EDI data integration across a typical tier 1 global carrier.

**Ethnographic Study**
- General carrier attitudes
- The human element
- Varying technical ability
- In-House Talent Acquisition
- Quantifying Carrier EDI Integration

**Cost Modelling**
- Peer-to-Peer Integration
- Integration Platform-as-a-Service (iPAAS)
- Common Platform integration Costs
- Blended Integration Regime
- Cost Centres and Overhead Allocation
- Apportionment of Overhead Costs

**Scenario-based Cost Calculation**

<table>
<thead>
<tr>
<th>Tier 1 Carrier - Central Office Support Costs (EXCLUDES REGIONAL OFFICES &amp; AGENCIES)</th>
<th>Bledend EDI</th>
<th>API +Yr1</th>
<th>API +Yr1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Unit Overheads</td>
<td>71,700</td>
<td>10,700</td>
<td>10,700</td>
</tr>
<tr>
<td>Staff Overheads</td>
<td>644,000</td>
<td>4,300</td>
<td>4,300</td>
</tr>
<tr>
<td>Consultancy Fees</td>
<td>258,900</td>
<td>42,900</td>
<td>21,400</td>
</tr>
<tr>
<td>IT Hardware Infrastructure</td>
<td>119,400</td>
<td>8,600</td>
<td>8,600</td>
</tr>
<tr>
<td>IT Software Tech Stack</td>
<td>209,600</td>
<td>38,600</td>
<td>38,600</td>
</tr>
<tr>
<td>Initialising / Onboarding</td>
<td>179,100</td>
<td>300,000</td>
<td>NIL</td>
</tr>
<tr>
<td>Subscription and Transaction fees</td>
<td>636,000</td>
<td>21,400</td>
<td>21,400</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2,388,000</td>
<td>428,600</td>
<td>105,600</td>
</tr>
<tr>
<td><strong>Cost Per Connection</strong></td>
<td>17,100</td>
<td>3,100</td>
<td>750</td>
</tr>
</tbody>
</table>
Towards Operational Adoption

**Standard setting**
- Development
- Maintenance
- Improvement

**Stakeholders**
- Communication (ebooks, videos, social media, etc.)
- Engagement (clusters, partnerships, pilots, etc.)
- Consultation (members, reference users, open consultation)

**Training**
- IT (IT experts internal & external)
- Business (sales, customer service, management)
- Operational (vessel crew, local offices/ports)

**Adoption & implementation support**
- Documentation (guides, specifications, manuals)
- Helpdesk (questions, issues, “just someone to contact”)
- Direct support (consultancy or additional services, stakeholder management)

**Sandbox**
- Open testing (PoC, Business Case validation)
- Conformance testing (data, interfaces, etc.)
- Prototyping/ Piloting (development, maintenance & improvement)

**Certification**
- Completeness (are the standards fully implemented)
- Correctness (are the standards correctly implemented)
- Recognition (proof of compliance & effort)
Thank you
Moving to APIs and Operational Adoption
UN CEFACT FORUM

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