

IntelliPart®

Marketing and Catalog Management Software

...the power of a right idea

IntelliPart™

NCMA 2001

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Booth #47

Typotronics Inc.

- ◆ Serving the information management needs of automotive replacement parts suppliers for over sixty years.
- ◆ Evolved into a full service information technology center where digital typesetting, data management, systems design and programming are provided.

Typotronics Business Groups

- ◆ Graphic Design
- ◆ Web Hosting and Construction
- ◆ Pre-Press Services
- ◆ Data and Content Management
- ◆ Custom Programming
- ◆ Mapping Services

Partial Customer List

- ◆ Belden Wire
- ◆ Bussmann Fuse
- ◆ Champion
- ◆ Dana/Echlin
- ◆ Everco
- ◆ Federal-Mogul
- ◆ Midas
- ◆ Moog Automotive
- ◆ Murray
- ◆ Precision U-Joints
- ◆ Triangle Group
- ◆ Undercar Parts
- ◆ Wagner Brake
- ◆ Wagner Lighting

IntelliPart® History

- ◆ Awarded contract to design and build the Application Database for Moog Automotive in 1993.
- ◆ Contracted with Federal-Mogul in 1998 to enhance the software.
- ◆ Introduced the software to the industry as IntelliPart® in 1999

Market Conditions

IntelliPart™

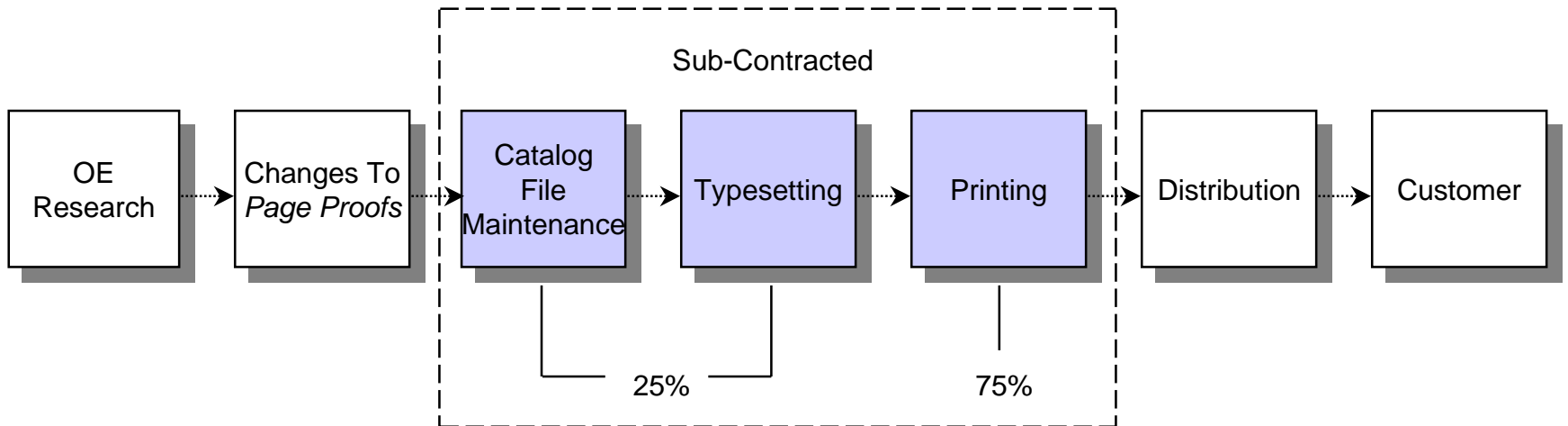
Factors Driving the Industry

- ◆ Slow Market Growth
- ◆ Large Model Diversity
- ◆ Rapid Parts Proliferation
- ◆ Excess Inventory... at all levels
- ◆ Industry Consolidation... at all levels
- ◆ Intense Pricing Pressures / Tighter Margins
- ◆ Emerging Global Markets

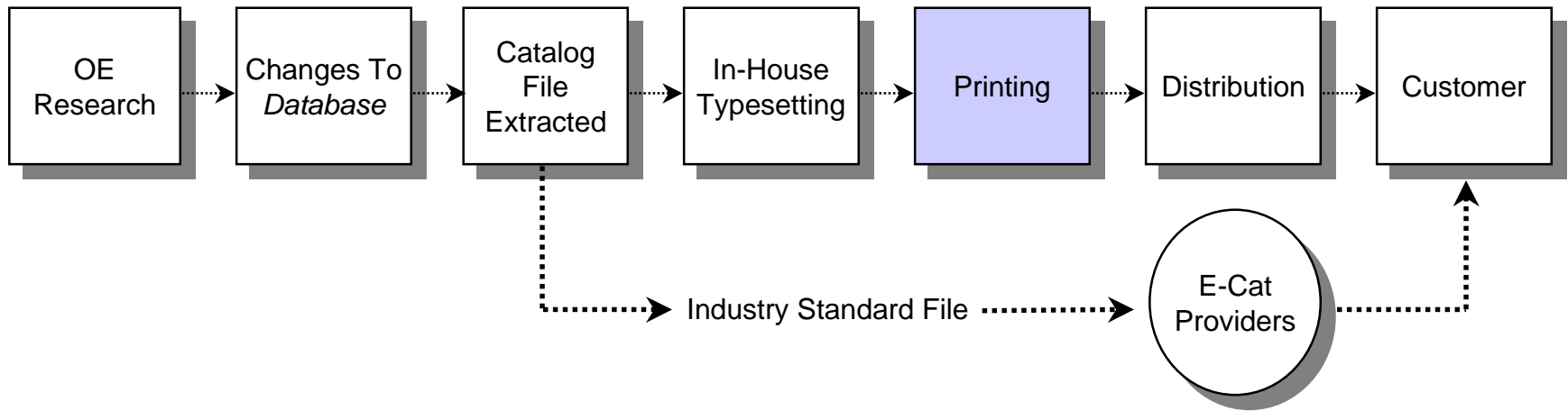
Demands on Manufacturer

- ◆ Accelerated “New Product” Introductions
- ◆ Immediate Competitive Price Analysis
- ◆ Comprehensive Market Information
- ◆ Customized Output for Target Markets
- ◆ Support for New Market Opportunities
- ◆ Rapid Production of Strategic Publications

Traditional Catalog "Process"



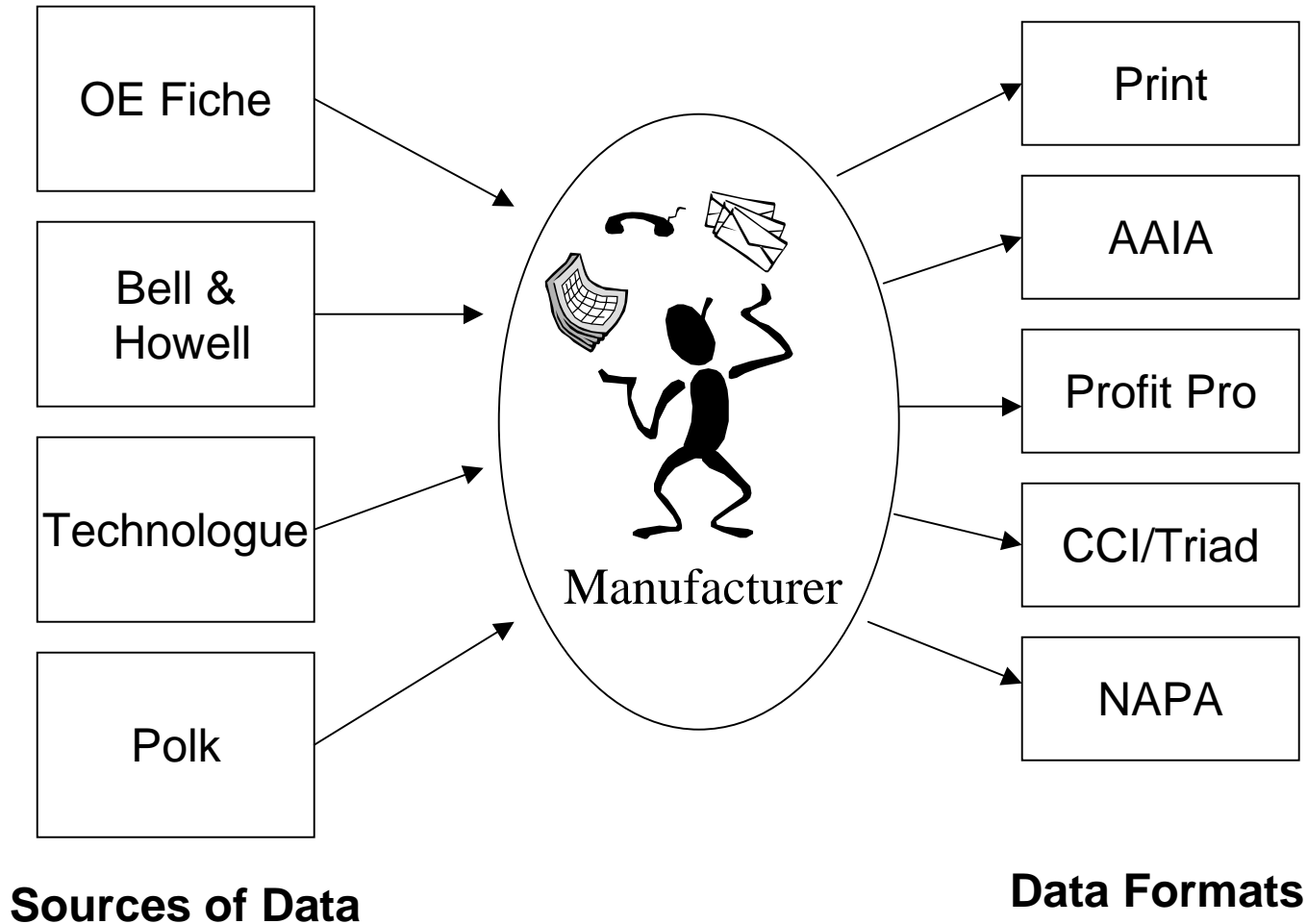
New Catalog "Process"



The Promise of Standards

- ◆ The concept was great
 - deliver applications using common terminology
- ◆ The implementation was flawed
 - forced to communicate at the lowest level (sub-model/engine)
 - fitment comments were not controlled resulting in ambiguous application data
- ◆ Now we have many competing “standards”
 - almost as bad as no standard at all

You're Stuck in the Middle



...and the Industry Suffers

- ◆ The lack of a good standard has:
 - slowed the move away from printed catalogs
 - forced multiple “mapping” efforts
 - caused customer dissatisfaction due to
 - (1) infrequent updates, and
 - (2) poor quality electronic catalog listings

The Bottom Line

Cataloging problems lead to missed sales and high product returns!



What are the solutions?

- ◆ Clean-up and organize your data
 - This is hard, but it must be done
- ◆ Hope that the industry will someday have a workable standard that everyone uses
- ◆ In the mean time, use a data management solution which can map to all required formats

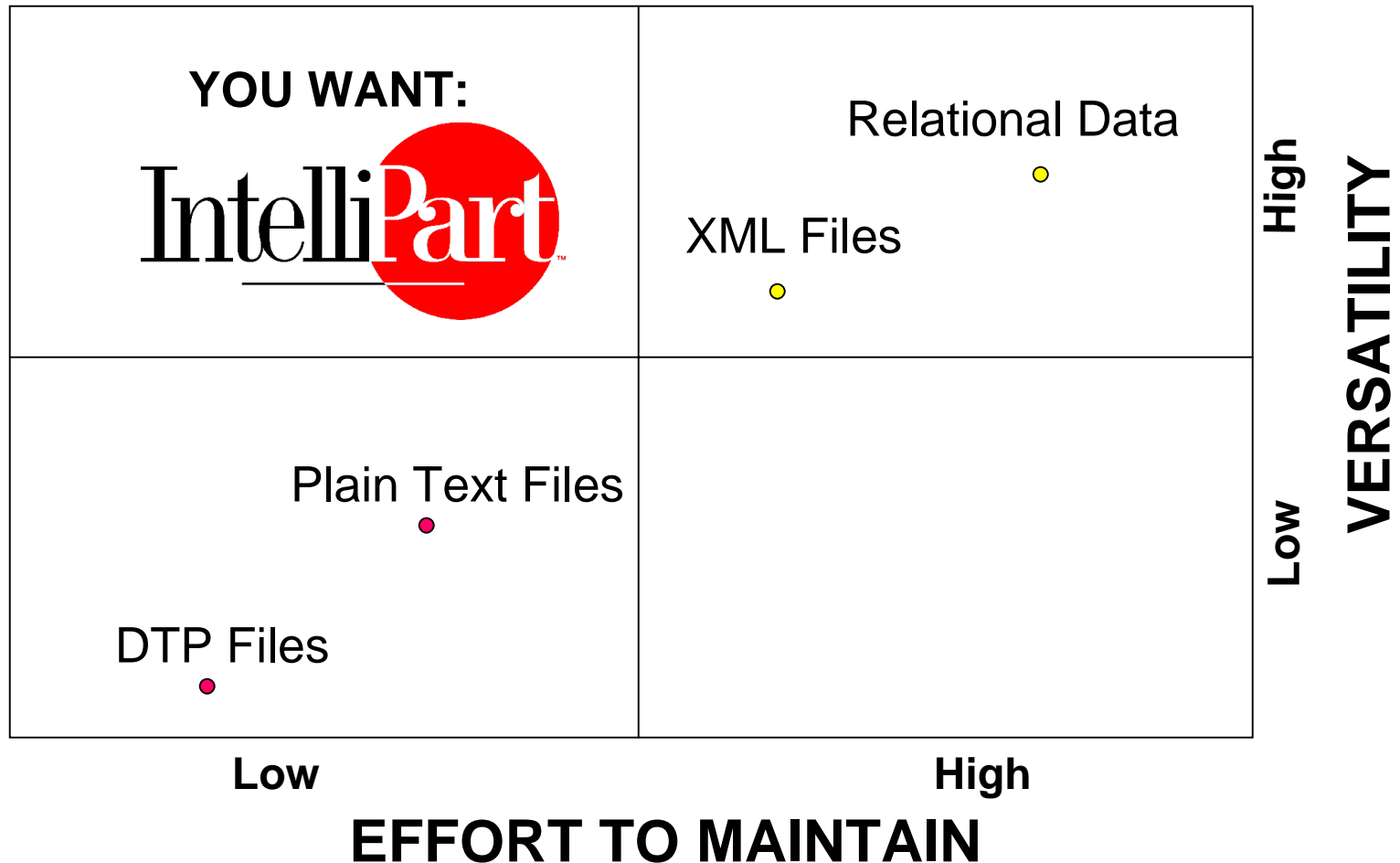
Preparing Your Data

- ◆ What's so hard?
 - Must first *understand* each application (may require re-researching)
 - Must then break it down into its pieces (including models, engines, qualifiers, footnotes, exceptions, etc.)

Preparing Your Data

- ◆ Why is this important?
 - The world is moving away from print toward electronic data
 - Electronic data has no context and must stand on its own

Data Versatility Diagram



IntelliPart® ...

Your Catalog Data Management Tool

IntelliPart Delivers

- ◆ An Integrated Database that Enables Team Effort and Coordination
- ◆ Warehouse for External Reference Data
- ◆ Warehouse for Internal Economic Data
- ◆ Full Array of Marketing Tools (Pricing, Interchange, Mapping, Paper)

System Overview

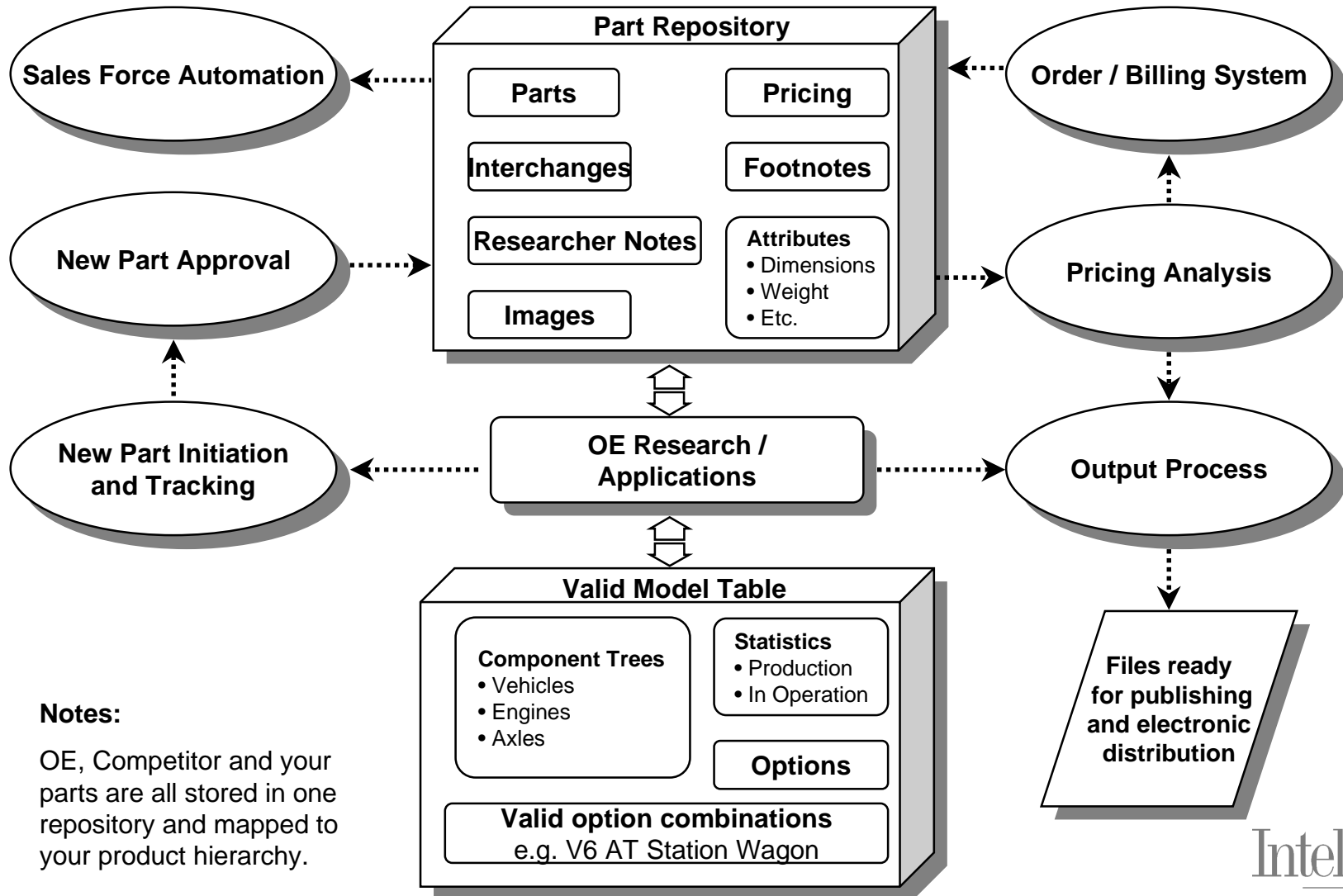
IntelliPart™

Design Goals



- ◆ Scalable Client/Server platform
- ◆ Powerful User Interface
- ◆ Configurable and Flexible Design
- ◆ Data Independent of Output Format
- ◆ Translate to any external terminology
- ◆ Multi-Language Support
- ◆ Advanced Security features

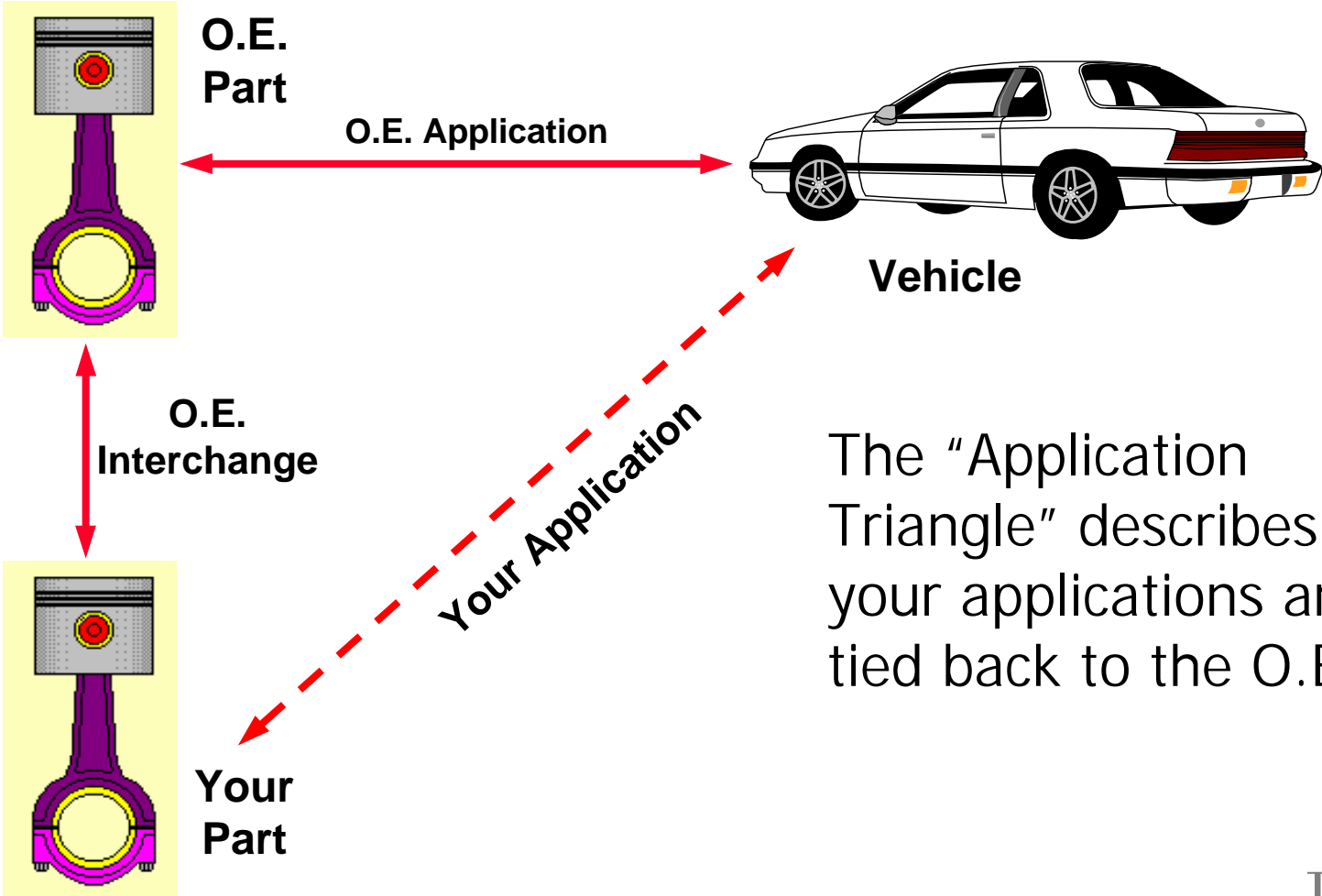
Integrated Architecture



Notes:

OE, Competitor and your parts are all stored in one repository and mapped to your product hierarchy.

Application Triangle



The "Application Triangle" describes how your applications are tied back to the O.E.

Data Requirements



- ◆ Central Data Dictionary of all Terms
- ◆ Database Enforced Integrity
- ◆ Application Enforced Integrity
- ◆ Division and Role-Based Security

Data Requirements

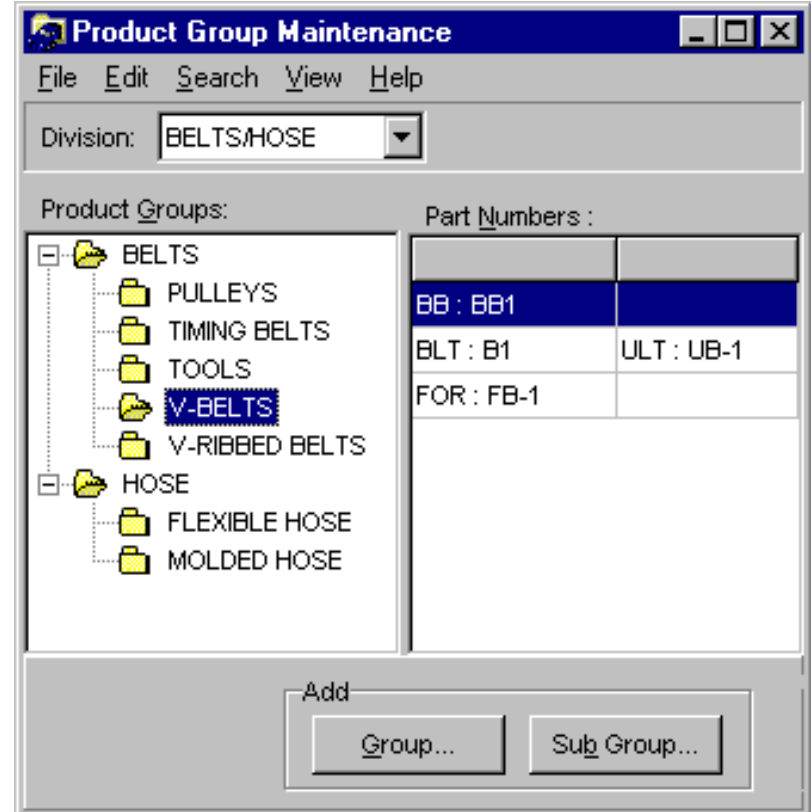
- ◆ Private Brand Part Numbers
- ◆ Supersessions / Re-labels
- ◆ Core parts for reman. products
- ◆ Popularity Codes with History
- ◆ Product specifications

Data Requirements

- ◆ Sales History
- ◆ Cost Information
- ◆ Competitive interchanges and pricing

Product Categories

- ◆ User defined product groups with unlimited levels
- ◆ Organized by division



Part Information

The screenshot shows the 'Part Maintenance' software window with a menu bar (File, Edit, Search, View, Reports, Help) and a toolbar. The main area is divided into several sections:

- Identification:** Part Number: K5149, Part Sort: KI 5149, Core Part: (empty), Part Root: (empty), UPC: 080066149967, Part Alias: (empty), Primary Brand.
- Reference Description:** LCAB.
- Application Override:** (empty).
- Product Group:** COIL ACTION DOMES.
- Max Veh. Qty.:** 2, **Availability:** (empty), **Grade:** (empty), Include In Pricing.
- Veh. Population:** 0.
- Packaging:** Package Qty: 1, Case Qty: 10, Pallet Qty: 0, Rebox: FB69.
- Popularity:** Pop Code: B, Effective: 11/20/1995.
- Status:** Active, Inactive, Code: Def, Reinstated, Status Date: 07/13/1997.
- Supersession:** Type: None, Relabel, Supersession, Publish Date: (empty).

At the bottom right, there is a small image of a mechanical part (a coil action dome).

Support for multiple brands and numbering schemes.

One and two-way supersession support

Part Information

The screenshot shows the 'Part Maintenance' software window. The title bar reads 'Part Maintenance'. The menu bar includes 'File', 'Edit', 'Search', 'View', 'Reports', and 'Help'. The toolbar contains icons for a printer, a folder, a gear, a document, a hand, a screen, a car, a note, and a bar chart. The main window is divided into several sections:

- Part Specifications, Footnotes, Images, General Notes and Pricing Information:** A callout box points to the toolbar icons.
- Identification:** Fields for Part Number (K5149), Part Sort (KI 5149), Core Part, Part Root, and Part Alias.
- Reference:** Description (LCAR).
- UPC:** 080066145567.
- Primary Brand:** Checked.
- Product Group:** COIL ACTION DOMESTIC.
- Max Veh. Qty.:** 2.
- Availability:** 04/01/1997.
- Packaging Information including Rebox carton for Change-Overs:** A callout box points to the 'Packaging' section.
- Pop Codes with history when changed:** A callout box points to the 'Popularity' section.
- Thumbnail Image:** A callout box points to a small image of a car part.
- User defined part status codes:** A callout box points to the 'Status' section.

Packaging Information: Package Qty: 1, Case Qty: 10, Pallet Qty: 0, Rebox: FB69.

Popularity: Pop Code: B, Effective: 11/20/1995.

Status: Active (selected), Code: Def, Reinstated (unchecked), Status Date: 07/13/1997.

Supersession: Type: None (selected), Relabel, Supersession.

Bottom status bar: 07/13/1997 Sys

Part Interchanges

Find Interchanges

Interchanges Involving

Type : Ours OEM Competitor

Brand Name : Moog Automotive

Part Number : K5149

From		To	
Brand	Part Number	Brand	Part Number
BAR	A2-068	MG	K5149
BAR	A2-069	MG	K5149
BAR	A2-756	MG	K5149
DAN	267-4236	MG	K5149
DAN	267-4237	MG	K5149
ELG	2236B	MG	K5149
ELG	2237B	MG	K5149
GMC	9778357	MG	K5149
GMC	9779077	MG	K5149
GMC	9779077	MG	K5149

Find Interchanges

Find

Cancel

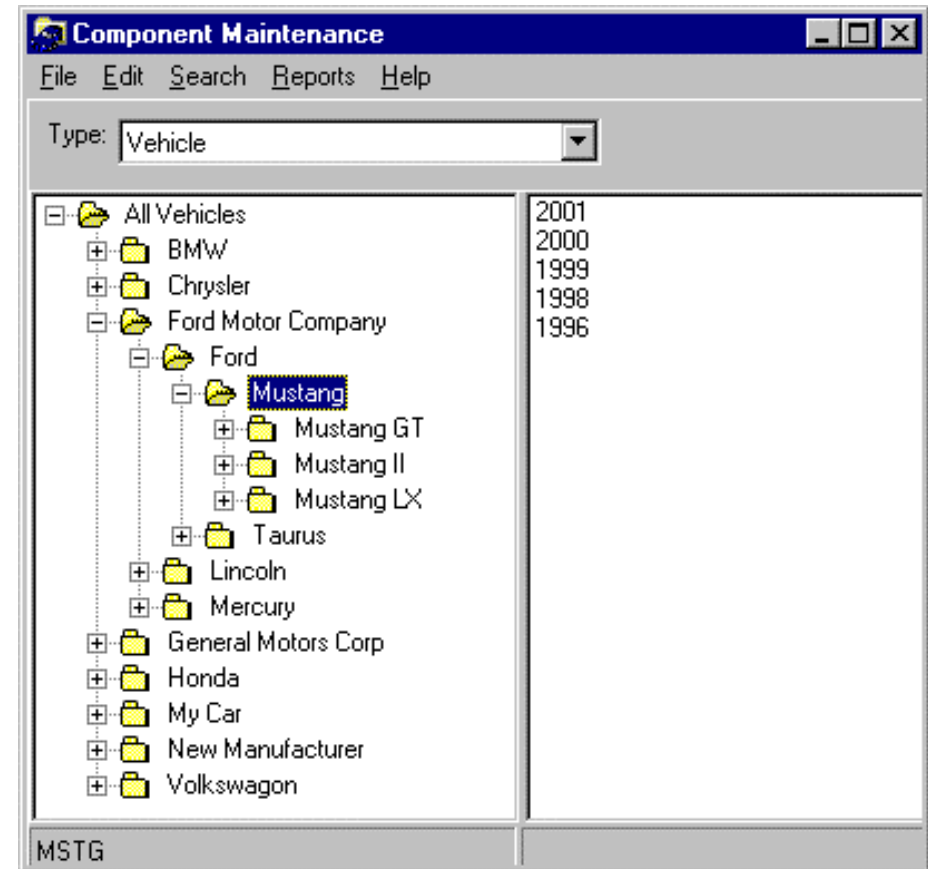
Help

OK

- ◆ Both OE and competitor interchanges
- ◆ Many-to-one and one-to-many relationships

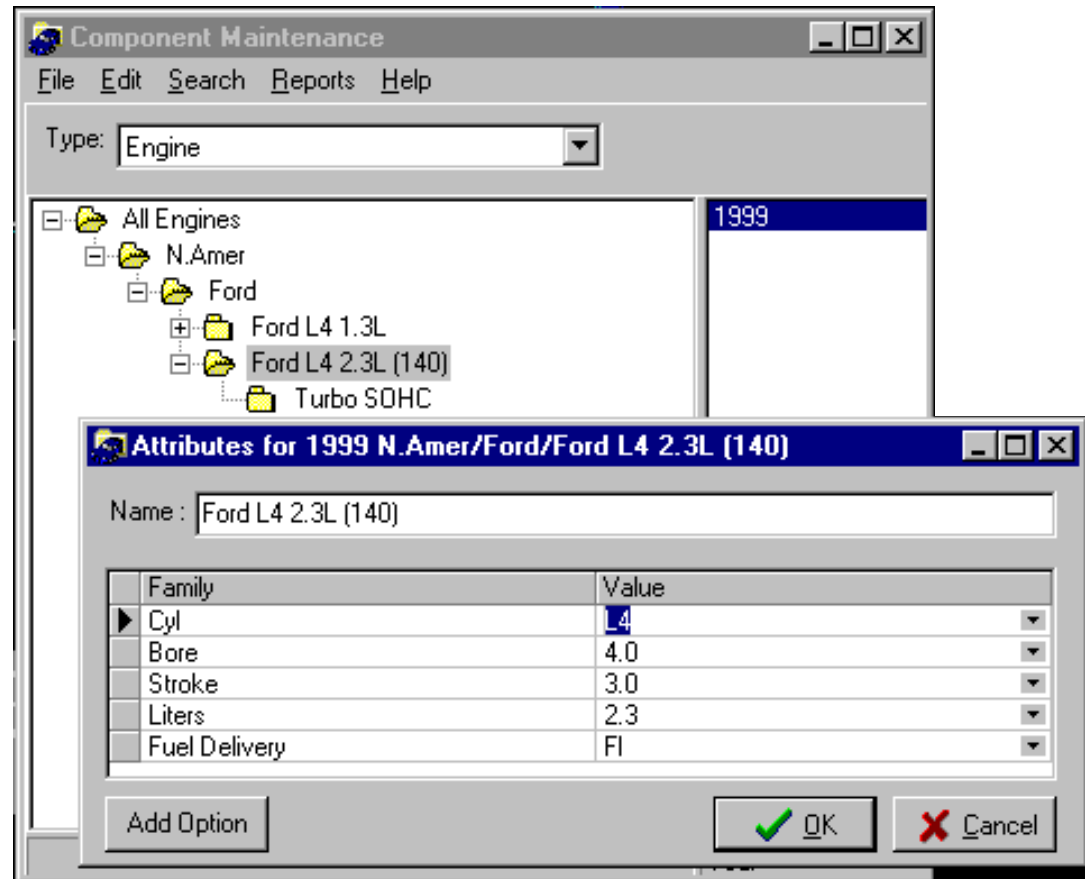
Flexible Make/Model Tables

- ◆ Flexible tree structure
- ◆ Supports regions for globalization
- ◆ Valid Options can be assigned at any level



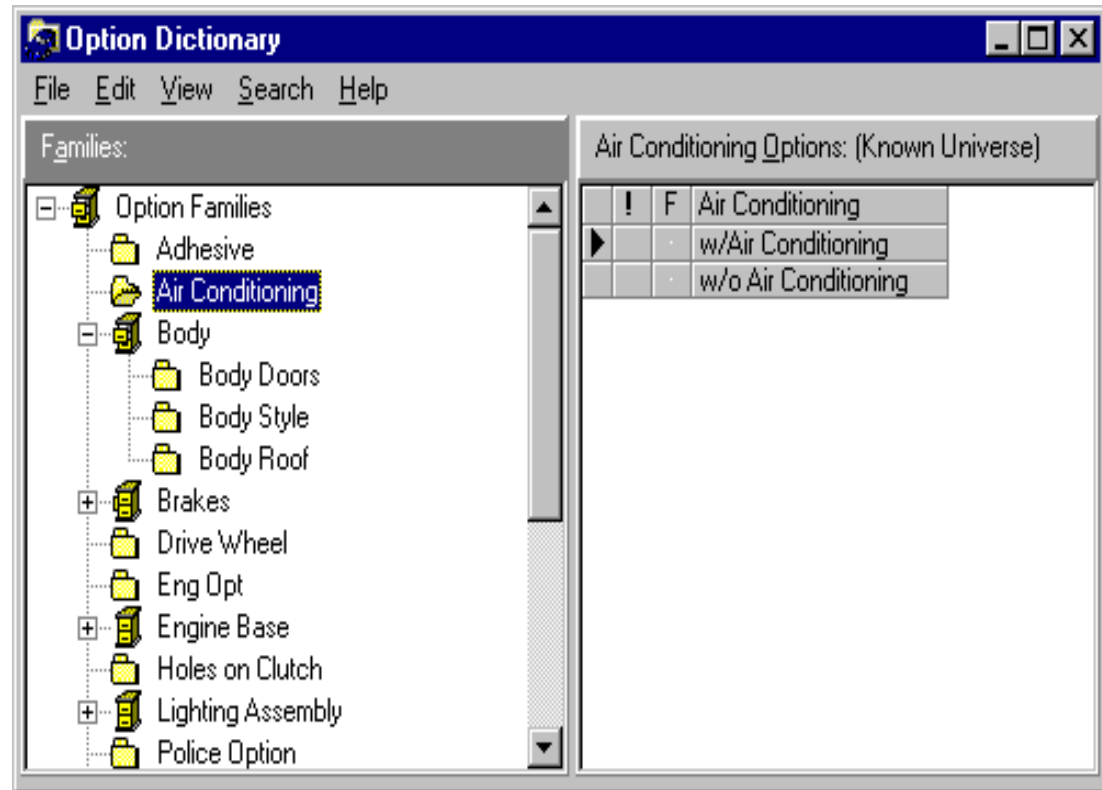
Any Component Type

- ◆ Supports any market you supply:
 - Vehicles
 - Axles
 - Engines
 - Heavy Duty
 - Marine
 - Agriculture
 - and more



Central Option Dictionary

- ◆ Supports option Configurations
- ◆ Central control but allows “pending” additions



Application Screen

OE Application Maintenance

File Edit Search View Tools Preferences Help

Component(s)

Including: 1995 Pass Car FORD MUSTANG

Excluding: 1995 Pass Car FORD MUSTANG MUSTANG GT

Source: FORD FICHE 0199 01/01/1999

Production Range

Type: Serial Number

From: SN# 8929100102

To:

Use: Front Wheel

Location: Inner

DEM Part Brand: Ford Motor Company

Part Number: FRD-BB1

Product Group: Ball Bearings

Part Qty.: 1 Created: 10/25/2000-dow

Qualifier: [w/AC]

Rec 1/1 05/01/2001 dow

Select Vehicle, Engine, Axle or any other component from the valid model table.

Here we selected a **1995 Mustang Exc. GT**

If a new OE part is entered, start the new part process, otherwise display the product group (which must be valid for this component type)

Application Screen

OE Application Maintenance

File Edit Search View Tools Preferences Help

Component(s)

1995
Pass Car
FORD
MUSTANG

Excluding:

1995
Pass Car
FORD
MUSTANG
MUSTANG GT

Source: FORD FICHE 0199 01/01/1999

OEM Part Brand: Ford Motor Company

Part Number: FRD-BB1

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To:

Use: Front Wheel

Location: Inner

Qualifier: [w/AC]

Rec 1/1 05/01/2001 dow

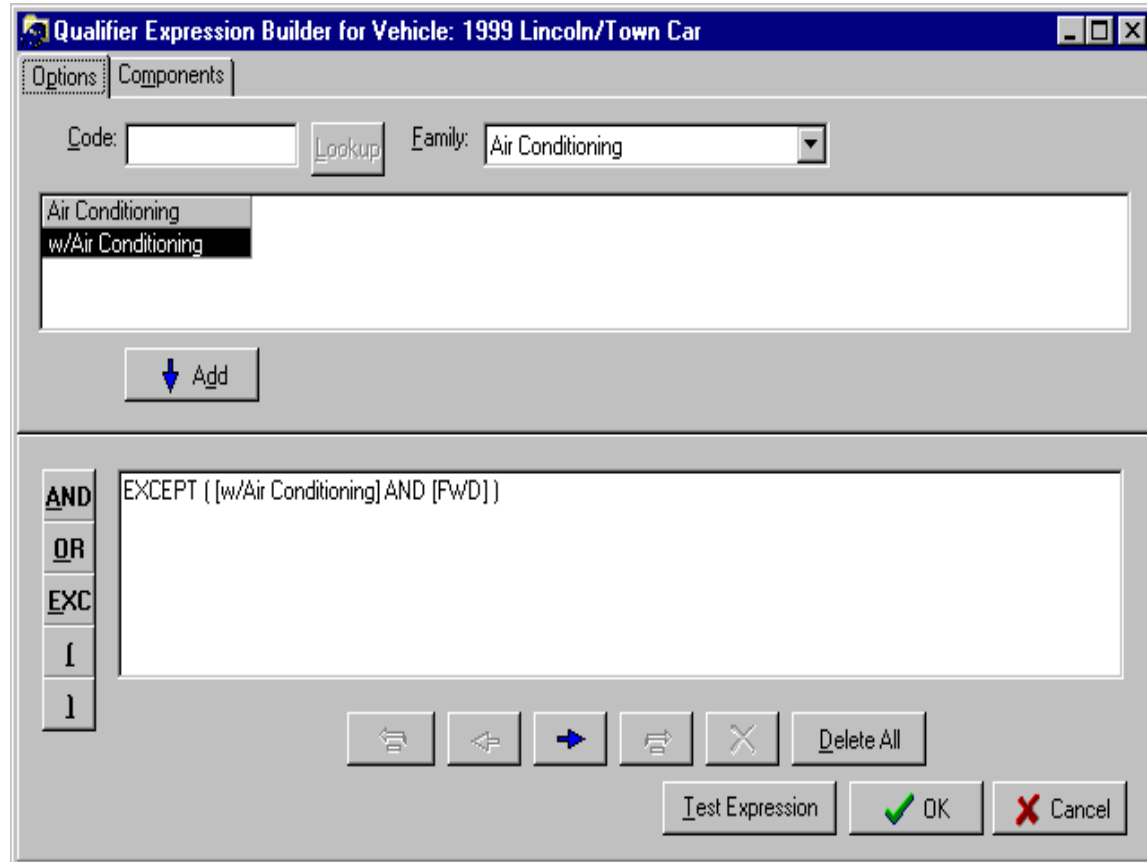
“Split year” production ranges are specially controlled.

Must supply a valid Use and Location for the product group.

Qualifier expressions are created using a special editor...

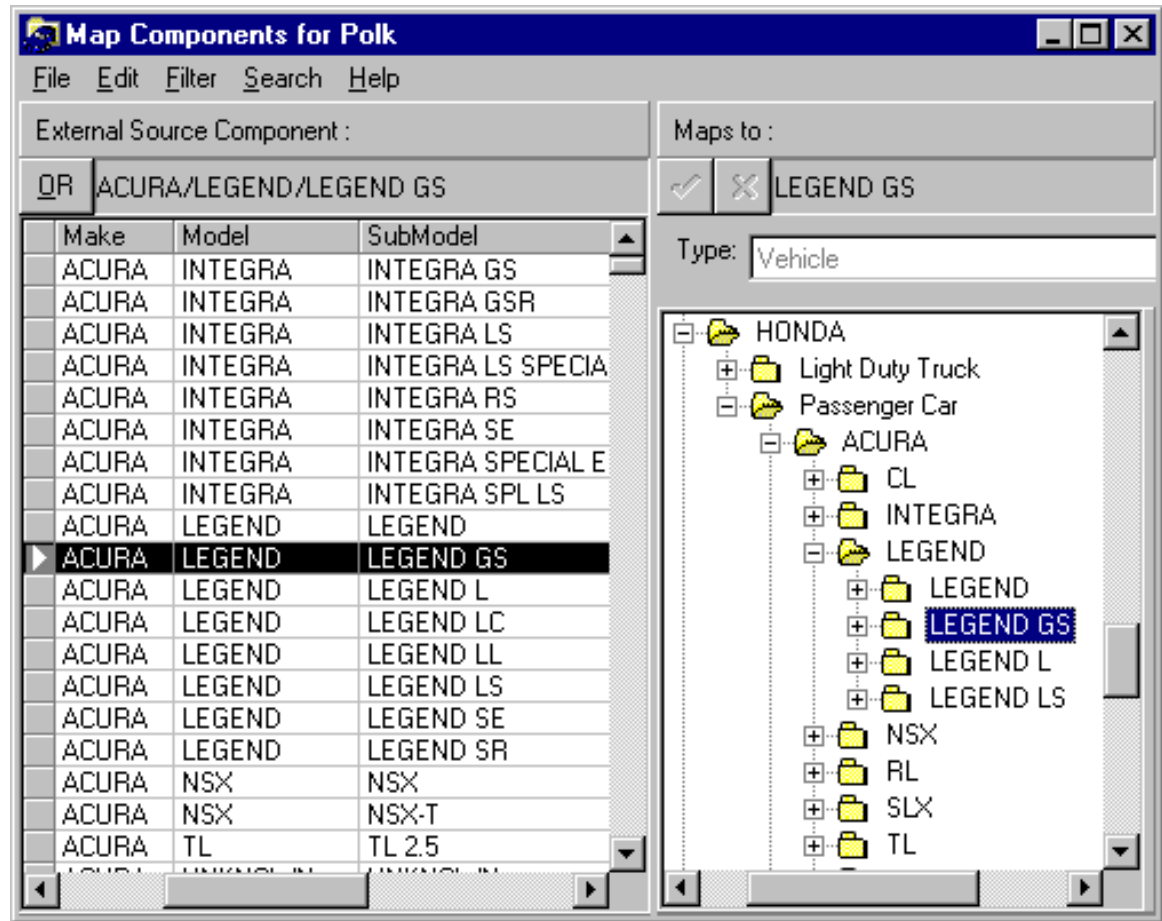
Controlled Comments

- ◆ Every qualifier is validated
- ◆ Supports true “Except logic”
- ◆ Enables true application compression



Communicate with eCats

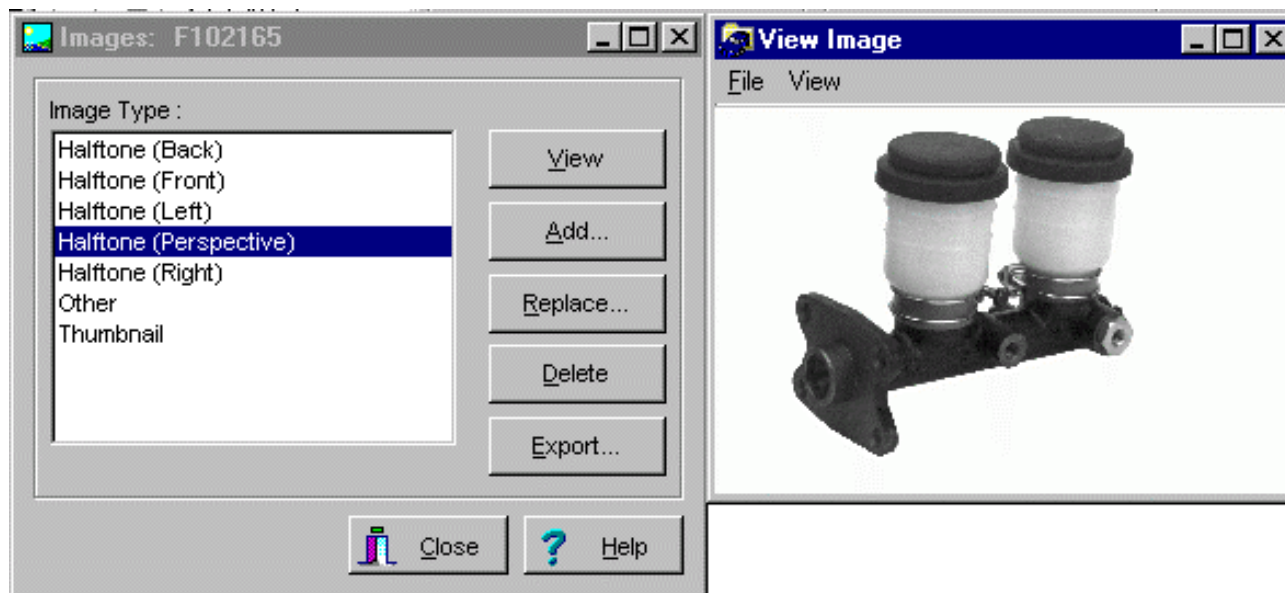
- ◆ Translate your Models to AAIA CCI/Triad, and NAPA* tables
- ◆ Automatically create exact mappings



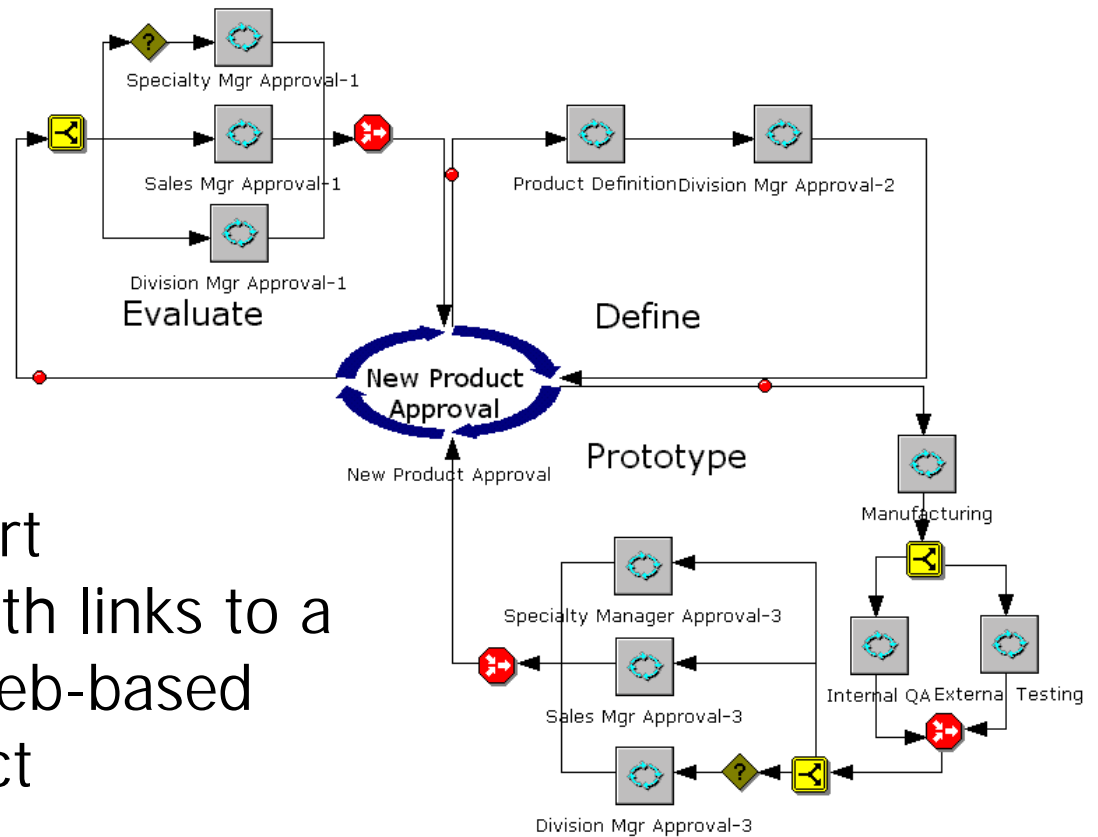
*TAMS now, 2000 planned

Contains Part Images

Multiple Image Types Supported for Parts



Features New Part Tracking



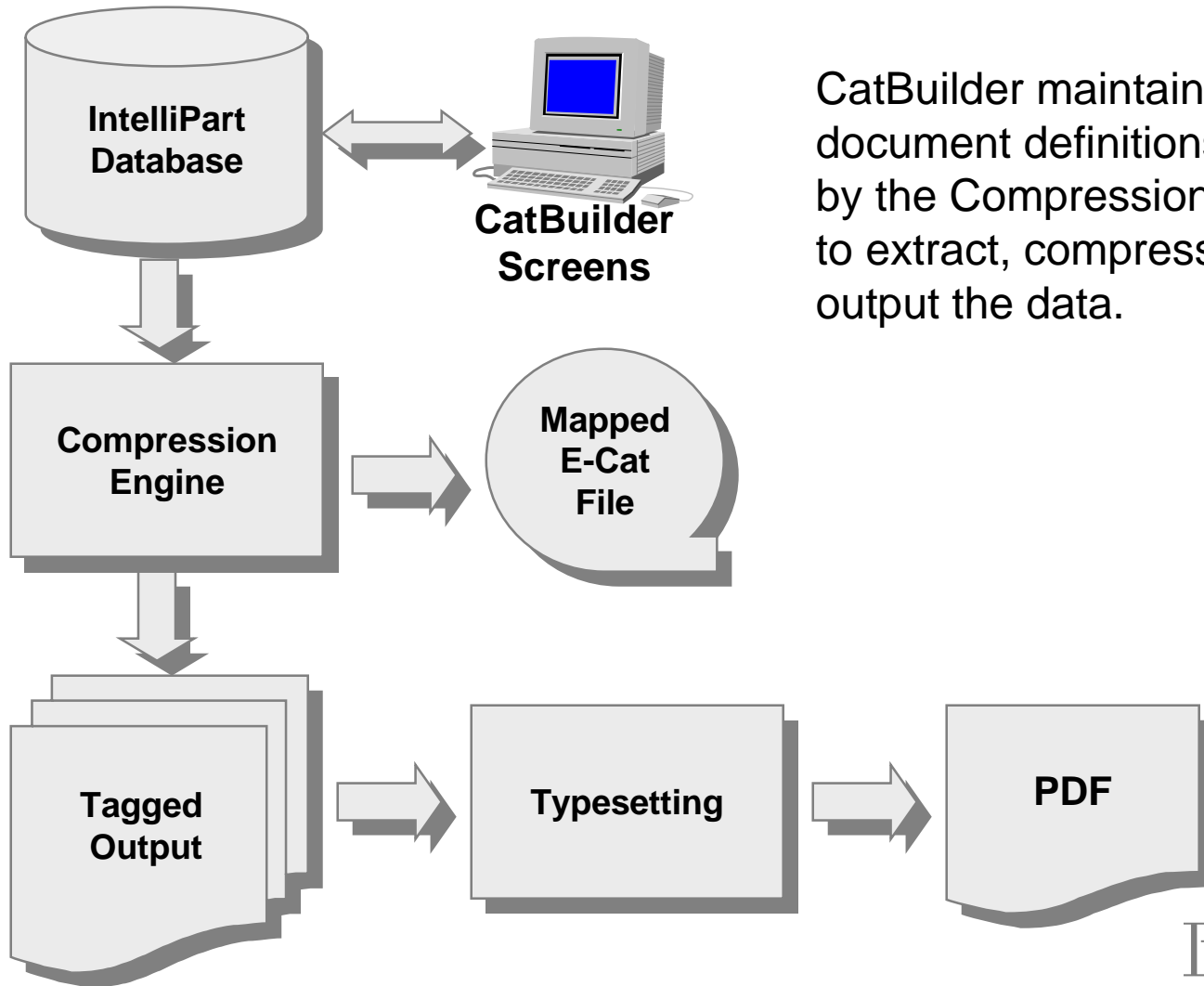
- ◆ Manage New Part Introductions with links to a Customizable Web-based workflow product



Output Deliverables

- ◆ Catalogs / Price Lists
- ◆ Pricing Analysis Reports
- ◆ Competitor Analysis Reports
- ◆ Coverage Reports
- ◆ Buyers Guides
- ◆ New Product Announcements
- ◆ Competitor Interchanges

IntelliPart Publishing



CatBuilder maintains the document definitions used by the Compression Engine to extract, compress and output the data.

Compression Example

Database

Model	Option	Category	Part
Volvo 780	MT	Caliper Kit	F111017
Volvo 780	MT	Caliper Piston	F108901
Volvo 780		Hose	F107213

Valid Options

Model	Family	Option
Volvo 780	TransType	AT
Volvo 780	TransType	MT

Produces

Model	Options	Caliper Kit	Hose	Caliper Piston
Volvo 780	MT	F111017	F107213	F108901
Volvo 780	AT		F107213	

Output Independent

Database Records

Year	Application	Loc	Widget
1999	V6 w/AC		P1
1999	V6 w/o AC		P2
1999	V8	Left	P3L
1999	V8	Right	P3R

Year	Application		Widget
1999	V6	w/AC	P1
		w/o AC	P2
	V8	(Left)	P3L
		(Right)	P3R

		Widget	
Year	Application	Left	Right
1999	V6 w/AC	P1	P1
	V6 w/o AC	P2	P2
	V8	P3L	P3R

		Widget	
Year	Application	w/AC	w/o AC
1999	V6	P1	P2
	V8 (Left)	P3L	P3L
	V8 (Right)	P3R	P3R

Output Independent

Database Applications:

Vehicle	Options	Use/Location	Part No.	Product Group
1992 Nissan Pathfinder	All	Right Outer	TR1002	Tie Rod Ends
1992 Nissan Pathfinder	All	Left Outer	TR1003	Tie Rod Ends
1992 Nissan Pathfinder	All	Right Inner	TR1006	Tie Rod Ends
1992 Nissan Pathfinder	All	Left Inner	TR1007	Tie Rod Ends
1992 Nissan Pathfinder	All		SL2108	Adjusting Sleeve
1992 Nissan Pathfinder	All		CL309	Center Link

NISSAN

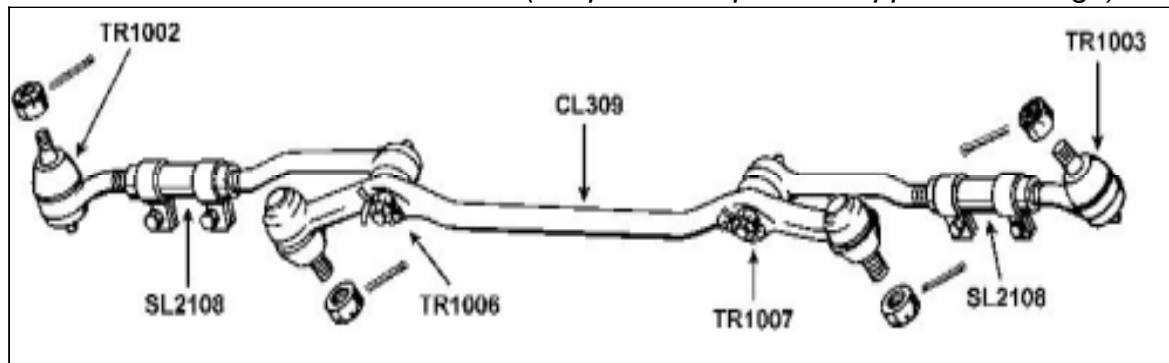
(Tabular Output with Compression)

Steering Products

Year	Model	Options	Center Link	Adjusting Sleeve	Tie Rod End			
					Right		Left	
					Outer	Inner	Inner	Outer
1992	Pathfinder	All	CL309	SL2108	TR1002	TR1006	TR1007	TR1003

1992 Nissan Pathfinder

(Graphical Output with Application Image)



Reformat Qualifiers

IntelliPart can also translate option qualifiers to allow similar applications to be combined on one row

Example:

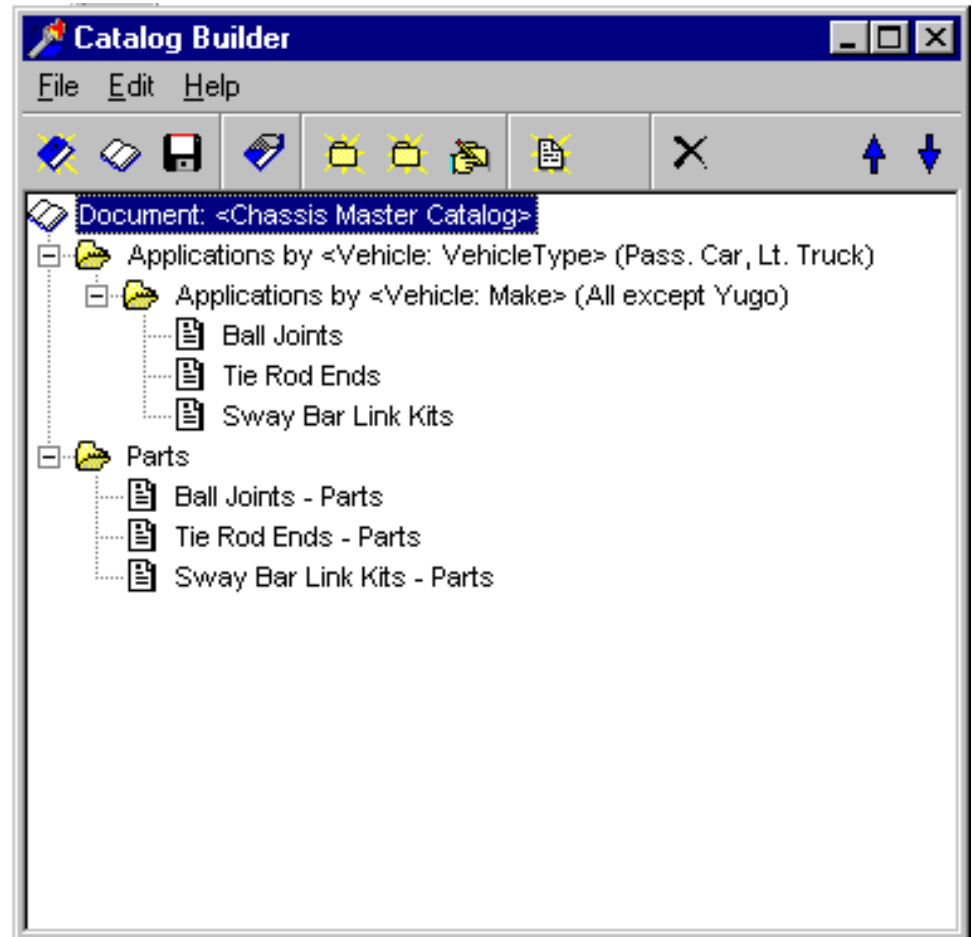
1999 Mustang 6 Cyl	X1 (Prod1)
1999 Mustang 2.3L	Y1 (Prod2)

If the 2.3L and the 6 Cyl are equivalent:

	Prod1	Prod2
1999 Mustang 6 Cyl	X1	Y1

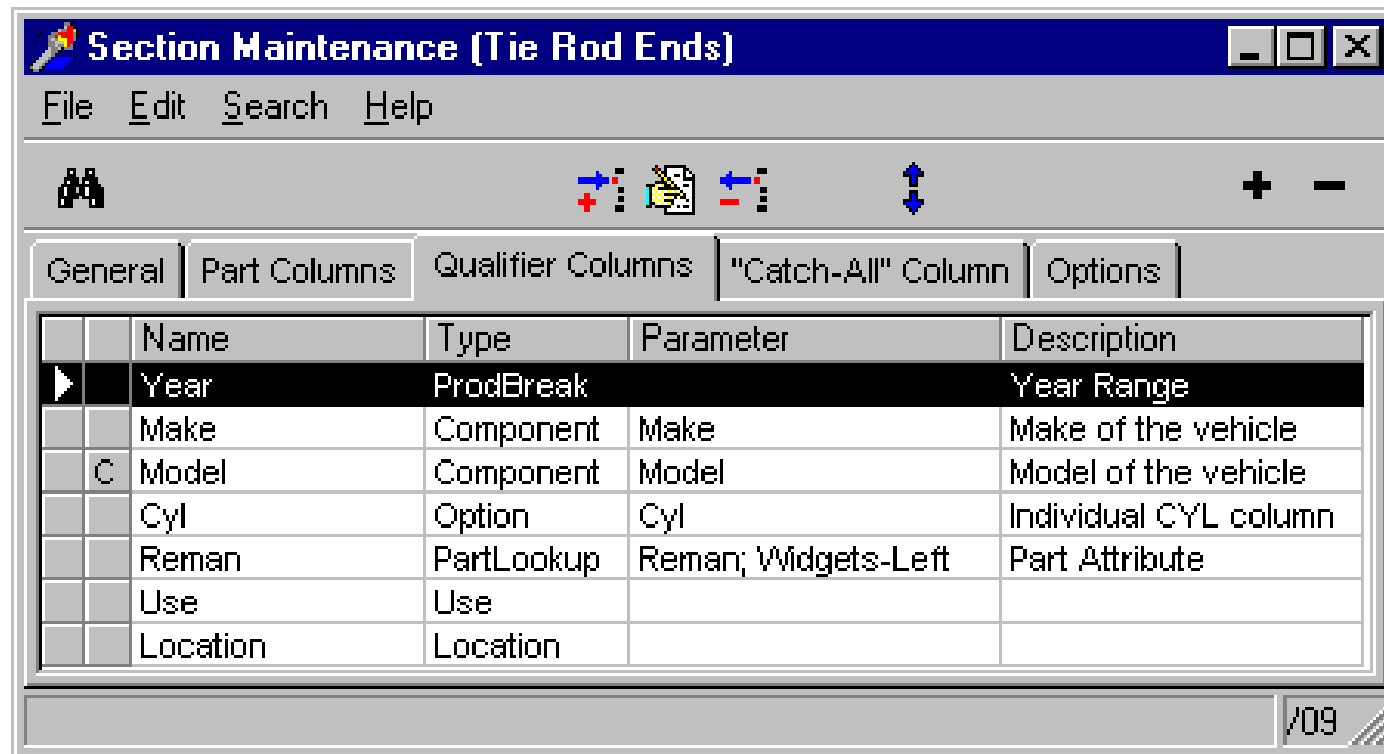
User Defined Catalogs

- ◆ Powerful tool to extract catalog data
- ◆ Compresses applications to minimize output rows
- ◆ Consistent, unambiguous cataloging



Catalog Section Definition

- ◆ Easily define “sections” which can be reused across many catalogs



What does this mean?

- ◆ You can say “yes” to special catalog requests
- ◆ You don’t have to “write” catalogs anymore
- ◆ You don’t have to worry about changing the meaning when you consolidate or split apart sections or listings

Typesetting Options

- ◆ Integrates with professional publishing systems using XML tagged files, or
- ◆ Bundled publishing engine can be programmed to produce custom formatted pages

IntelliPart Support



- ◆ Integration Services
- ◆ Data Conversion / Loading Services
- ◆ Graphics Scanning Services
- ◆ Installation and Testing
- ◆ Instructor Led Training
- ◆ Web Knowledge Base
- ◆ Technical Support

Unique Features

- ◆ Enforces a business process
- ◆ Research is independent from output
- ◆ Complete validation of input
- ◆ True “compression” of applications
- ◆ True qualifier expressions with Except logic
- ◆ Linking of components and migration of options and applications
- ◆ Support for non-vehicle applications with non-year identification

Pricing Structure



- ◆ Pricing of IntelliPart® is SKU based with quantity discounts
- ◆ Licensing as low as \$80,000.
- ◆ A Free Economic Value Analysis is available to show financial benefits versus costs

Questions / Comments

IntelliPart™

Thank you!

IntelliPart™

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