



Intellectual Parts: What Are They?

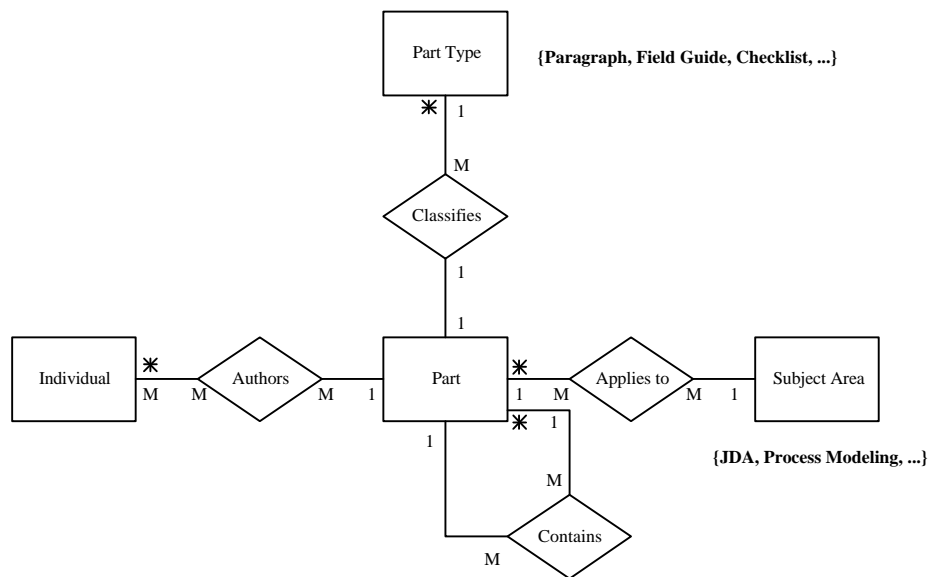
Steve Farrell

Parts are Parts” so they say. In the industrial arena, machine parts are made, stored, and then combined to form machine products. In the knowledge business, intellectual parts can be made, stored, and combined to form intellectual products.

An “intellectual part” is a component of information that encapsulates one or more subject areas for a particular purpose. The purpose usually includes a particular audience at a particular level of detail. Examples of intellectual parts are:

- A paragraph describing Data Warehousing — a quick overview for executives;
- A course book in Event Modeling — at practitioner level for system developers.
- An illustration contrasting ‘compromise’ and ‘optimize’ — an overview for JDASM participants.
- A sample ERD fragment for an order-invoice business — a pattern for a model facilitator.

At Advanced Strategies we have been busy for years thinking about the structure of parts and developing them. Here is a picture of the components:



The Structure of Intellectual Parts

A good intellectual part should have the same characteristics as any well-designed ‘module:’

- High cohesion — It should focus clearly on the intended subject;
- Low coupling — It should be clear in and of itself, without having to be seen in context with anything else;
- Reusable — Parts should be able to be combined to form larger aggregate parts;
- Accessible — You need to be able to find it and use it when you need it;
- Modifiable — Intellectual parts will change over time, as we learn more about the topic.

Types of Intellectual Parts

For our purposes at Advanced Strategies, we have defined many types of parts, including the following:

- Slogans (or sound bites);
- Paragraphs;
- One-page specs;
- Briefings;
- Reference Manuals;
- Model Fragments;
- Articles
- Course Books (for classroom use)
- Text Books;
- Exercises;
- Field Guides;
- Checklists;
- Templates;
- Work Guides;
- And many, many more.

How We Use Intellectual Parts

We use parts in just about everything we do. Here are a couple of examples:

Methodology Parts: We offer parts to clients who are building methodologies. Sample parts include:

- Templates — for example, a risk assessment form together with instructions for its use;
- Steps to consider when considering purchasing an application;
- Checklists — for example, a “Data Modeling Inspection Checklist”;
- Graphics — for example, a collection of illustrations (e.g., PowerPoint slides) illustrating the concept of “Business-Driven.”

By offering these parts, we can assist our clients in selecting just the ones that are of interest to them. This is true if we are helping them develop their entire methodology or if they already have a methodology in place and want to supplement it with additional topics.

Presentation Parts: We use parts to build ‘custom’ products for our clients. Sample parts include:

- Overview of JDASM;
- Core principles in developing systems;
- The role of Focus;
- Exercise to distinguish between events, processes, and objects.

By combining these parts into a training course or an executive briefing, our clients can obtain a custom product without the cost of complete customization. It also insures a high quality product when we build with parts that have been used and tested in previous products.

How You Can Use Intellectual Parts

Any information-based item you build for your work is, potentially, a ‘part.’ If you identify the type of parts you regularly use, you can build a library of parts. This will enable you to reuse parts as you build new products in the future. Like most good approaches, this isn’t anything new. Everyone reuses pieces of his/her work, to some degree. The difference, like always, is moving from art to science. You need to understand your goals, formalize your structure, and follow through on saving and reusing your parts. The first step, of course, involves identifying the stakeholders, followed by developing a focus statement and modeling your requirements.

And Finally,



Advanced Strategies, Inc.

As you may have guessed, this article is now one of our parts. The next time someone wants to know what we mean by an 'intellectual part'...

Advanced Strategies' "Parts" are available for single use (for single projects), for company-wide use (for incorporation in company processes or products), and via integration with our services. For information on contents of our "Parts Library" or pricing of parts, please contact Abe Wong or Margaret Wright at (770) 936-4000.