



**THE DICHOTOMY OF LOGISTICS**  
**November 5, 2002**

**Executive Summary**

This white paper continues to address the notion that logistics is comprised of two primary components: Macrologistics and Micrologistics; and that logistics is best represented, visually, as a set of gears driving the process (micrologistics); surrounded by macrologistics, which manages the process.

**Macrologistics** is the study and management of the overall aspects, process and workings of logistics.

**Micrologistics** is the study of the operations and the application of the components of logistics, such as transportation, inventory, warehousing, purchasing and customer service. This description incorporates both the gears and cogs.

Our previous white paper, "Logistics is Not a Chain", addressed the introduction of the dichotomy—macrologistics and micrologistics.

This white paper will:

1. Discuss The Logistics Dichotomy
2. Introduce the application of Macrologistics and Micrologistics

**The Logistics Dichotomy**

The traditional view of logistics, primarily because the term is all inclusive; and its scope is so large, forces a company's perceived needs and the available solutions or solution path to be equally inclusive and as large in scope. Likewise, managing the entire logistics process is similarly perceived to be prodigious, and extensive. This characteristic caused the method of approach, problem identification and available solutions to be, singularly robust. Both needs and resource identification are best addressed when the areas of review and concern are simplified or segmented into manageable components. The net result was a failure to see unique problems and the denial of incremental solutions. This overwhelming view has achieved little benefit and its propagation will continue to drive the potential benefits of world class logistics excellence further and further from our reach.

The sheer magnitude of logistics and its pervasive nature positions it to be likened to the corporate octopus. The body represents the core competencies, while the tentacles or feelers reach into the entire organization extracting, delivering and processing the attributes and capabilities of logistics. Logistics as a device, mining the data, and harvesting the opportunities, positions it as the best corporate business discipline that is capable of achieving profit improvement and overall success in operating performance. The impact of logistics, more so than any other discipline, on every business, can be so powerful and enabling that it is of utmost



importance to develop a methodology that will allow the entire logistics capability to prosper within an organization and amongst its trading partners. By re-examining logistics through a telescope, it became clear that segmentation of the term could significantly increase effective management and operations.

Beginning with the premise that logistics could offer significantly more to industry, economics seemed like an appropriate reference (see, *“Logistics is Not a Chain”*). When we compared and contrasted logistics with economics it became clear that the opportunities and benefits that economics achieved after its dichotomy (macroeconomics and microeconomics) could be reasonably applicable to logistics. By linking macro and micro to the term “logistics” a new capability was created. With macrologistics and micrologistics as the primary components of logistics, we now have the ability to focus more precisely and meaningfully on of the subject.

Macrologistics and Micrologistics, as indicated in our previous paper and immediately above, began with our belief and the objective that, *“The impact of logistics, more so than any other discipline, on every business, can be so powerful and enabling that it is of utmost importance to develop a methodology that will allow the entire logistics capability to prosper within an organization and amongst its trading partners.”*

The strength of our conviction is further supported by our belief, “that logistics will deliver the most comprehensive, significant and dramatic value proposition to world wide commerce, individually and collectively”, demanded that we thoroughly examine all relevant business disciplines that, at least, appeared to be analogous. In our search, it became evident that economics was analogously unchallenged.

In pursuit of our objective, we sought a methodology that could be relevant to the logistics discipline and one that professionals in both fields could be reasonably comfortable with. The supportive, study and knowledge base offered by the economics discipline provides such a fundamentally sound structure that logistics’ acquisition of the economics principles, applications and formula will achieve rapid improvement in the following three areas of logistics:

- Deliverables
- Study capabilities
- Benefits

And by linking the two disciplines and harmonizing their respective inference bases and engines, the corporate culture is cross pollinated and many new allies are created. Collaboration, the “holy grail” of logistics, is now an achievable goal, worldwide.

#### **Application of Macro and Micro Logistics (MML) Relating to Solution Selection**

There are, at least, several different arguments that have been advanced, purportedly to identify the reason that purchased and internally developed logistics solutions have not yielded the



anticipated benefits and results. The all inclusive view of logistics demanded that, both the problem and its solution had to be “robust”. Constrained by the singular view of logistics, there was a natural denial that, “simpler is better” or that unique problems even existed, additionally there was an unwavering belief that all problems had to be addressed by a technology solution. Consequently, the dilemma of two moving targets exists; instead of the problem being focused and well anchored, it like the solution is in constant motion. Therefore, the ability to achieve a value match on need and solution was impossible. At best, the solutions have been relegated to, “Rube Goldberg” symptom treatment rather than problem resolution. The result of this failure is demonstrated by very little or no ROI, waste of time and talent and the continuing burden of supporting a decision whose criteria were imperfect.

Another example of this failure appears in an article published in [Eyefortransport](http://www.eyefortransport.com) (<http://www.eyefortransport.com>); wherein it was stated, *“Most shippers still have not made considerable progress in terms of optimization, cost savings, and creating a robust transportation network in which suppliers, carriers, and third party providers can all collaborate and share information to ensure the optimal balance between cost and service.”* The article goes on to say, “those who procure transportation are under the illusion that squeezing a few more discount points from their carriers for a few pennies here and there are the ways that a company can ultimately lower transportation expenditures.”

The above example, while not acknowledging it, clearly supports the importance of the logistics dichotomy, at least, in two ways: in the first instance, the singular view only seeks a robust solution and in the second, the trivializing of the cost advantages to be obtained from effective freight rate negotiations. In fact, both objectives are important; the significant difference lies in the method of approach. The MML method recognizes the importance of freight cost reduction in conjunction with carrier profitability while simultaneously analyzing the issue against the goal of world class logistics excellence. More specifically, it provides professionals with the ability to address the micrologistics functions of effective negotiations and collaboration while the macrologistics impact can be measured and monitored. This approach further benefits the process by providing a continuing improvement cycle whereby the micrologistics functions are enhanced, impact is measured at the macrologistics level, and achieving the appropriate “tweaking” of the micrologistics function. The micrologistics process recognizes unique problems and assigns corresponding discrete solutions; it does so in conjunction with the overall goal of macrologistics, serving up incremental discrete information, incremental connectible information and robust information. Decision criteria are presented at the conclusion of the analytical phase thus facilitating the solution selection process.

Utilizing macrologistics and micrologistics the user is better equipped and can focus more rapidly on problem resolution, process improvement, areas of opportunity, and solutions. This new found **MML** methodology significantly improves visibility allowing the user to drill down more precisely and to focus on an appropriate level of detail than was previously possible. Data collection, using the MML method is more robust, therefore data and information, using the



MML method of approach, are more prolific; process interrogation and improved decision criteria are the result. Consequently, higher rates of success, regarding problem identification and solution matching occur more frequently. The MML tool continues to demonstrate overall efficiencies and economies.

### **Conclusion**

The information presented above, speaks to the limitations of traditional logistics thought and presents the theoretical, practical and general activities and capabilities of macrologistics and micrologistics.

Our next paper on this subject will demonstrate how **MML** overcomes the limitations of logistics as a singular, linear and unfluent chain (traditional method) and how this chain is properly replaced with the gears and cogs.

### **Continuation**

Please consider this white paper as a continuum in this subject area, succeeding white papers will address common issues and address them with common solutions. We encourage our readers to direct any specific questions or comments to [papers@transportgistics.com](mailto:papers@transportgistics.com).

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