**Targeting EPPI
via**

Human Asset Management

*A White Paper
by Guy W. Wallace*

Introduction

By now everyone is acutely aware of the need to continuously improve the quality of their products and services by controlling their processes and the key variables within each process.

These improvement efforts should be targeted on, and then result in,

- A higher conformance to the requirements of each customer/user
- Faster cycle times
- Lower costs
- Economic value to the enterprise

Targeting EPPI℠ is Guy W. Wallace's *methodology set* for Enterprise Process Performance Improvement. Too often improvement efforts miss critical schedules and ROI forecasts because unexpected, and typically expensive, follow-on projects are needed.

Targeting EPPI's methodologies bring predictability and control to the very tricky and complicated task of improving complicated, intertwined processes.

Targeting EPPI takes a systems view of an enterprise and its processes and uses financial and other business scorecard indices within a planned, controlled set of steps to systematically but quickly target improvement initiatives. Those improvement targets are approached with a clear understanding of the possible other-process entanglements and resulting costs.

Those additional efforts often bog down improvement initiatives and wreck timing and outcomes. The plan is in ruins. The devil *is* in the details, and in slowness. Salvation is in both the accuracy and speed. We believe in speed, but not in haste making waste.

Haste makes waste when there is a failure in planning: either no planning at all or planning a project scope too big and cumbersome to be feasible. Targeting EPPI addresses both issues.

Targeting EPPI is a model we have been evolving and using in our consulting practice since 1982. It has been *proven in* on many projects with Fortune 500 concerns in the hundreds of projects we have conducted during the last 20 years. Additionally, we have published articles on various aspects of this methodology, as well as on project results, since 1984.

Targeting EPPI

Targeting EPPI is all about systematic, but quick, analysis for targeting worthy Enterprise Process Performance Improvement. Ultimately the targets for improvement initiatives will involve addressing either the human assets within the targeted processes and/or the environmental assets. This white paper overviews both, and then addresses the Human Asset Management Systems.

Targeting EPPI is systematic. And if done correctly, only the high-payback problems and opportunities will be addressed.

We don't believe in shotgun approaches or trying a little of this and a little of that and then waiting to see what shakes out. We don't think a group of shareholders standing on the sidelines would cheer about those plays being run by the management team and the individual performers on the field. Not at all.

We do believe in being organized with a plan and being very deliberate. But quickly.

We don't believe in improving everything everywhere just because we can pick a target and see improvement opportunity. Too many times a fix in one place creates a break in another. Too many big and difficult opportunities are bypassed due to the attention being given to the little and obvious opportunities.

We do believe in seeing problems, issues, opportunities, and needs in a systemic manner. We believe in "think global, act local," as well as balancing the potentially conflicting needs of all of the various stakeholders of the enterprise.

We don't believe in magic or quick fixes. If it sounds too good to be true, it probably is. It seems complicated because it *is* complicated.

We do believe in the power of a group of dedicated people working on common goals. We think that they should be working for the benefit of the shareholder first, second, and third. Again, only the high-payback areas will be addressed. That's Targeting EPPI.

Targeting EPPI focuses attention on the important improvement initiatives that must be conducted in parallel and in the end, work together. Some call it *working on various fronts*. Others call it *multitasking*. Some initiatives are related, others are not.

Once an EPPI effort has been completed, promising improvement targets are funded and planned, then pursued using various improvement methods appropriate to the *intervention type*.

EPPI is intended to be robust to other improvement approaches, from SPC and TQM, to ISD and HPT, to Six Sigma and many other improvement approaches and methodologies. We wish to create a model for getting those specific efforts up and running only when they make *systems sense*. We wish to promote a *systems view* approach to the planning for and the management of Enterprise Process Performance Improvement.

Four Targeting EPPI Phases and Three Key Analysis Steps

In Targeting EPPI there are four phases and three key steps.

The three steps are either used directly within each of the four phases, or they influence the thinking and planning of the activities within a phase.

We will cover the steps first and then the phases where they are used.

Targeting EPPI Steps

The EPPI steps are intended to systematically map the enterprise processes and target improvement efforts with a clear understanding of all potential impacts to other enterprise systems and processes.

The three Targeting EPPI steps are

1. Map the Enterprise and Its Systems/Processes and Target Step 2 Efforts
2. Map the Processes and Model the Performance and Target Step 3 Efforts
3. Derive the Human and Environmental Enablers and Determine Gaps and Target Improvement Efforts

Targeting EPPI Step 1: Map the Enterprise and Its Systems/Processes and Target Step 2 Efforts
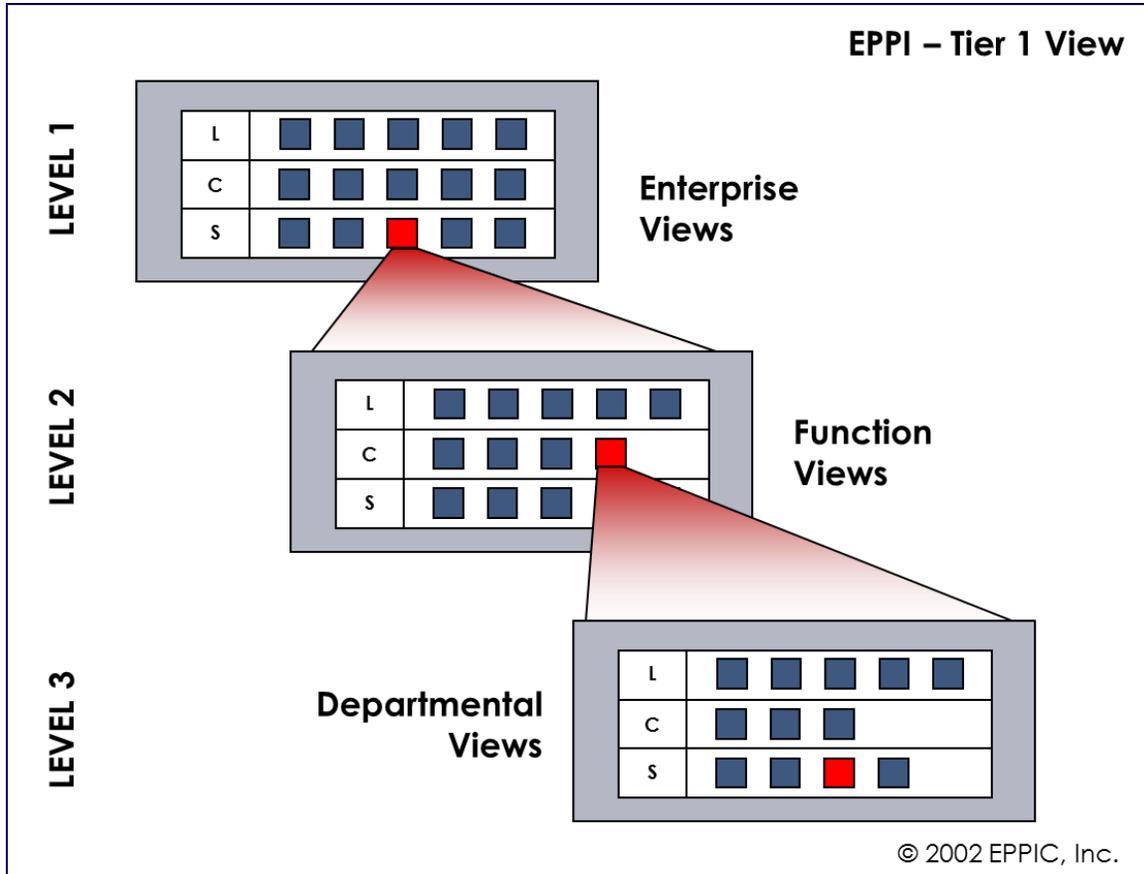

This is where the enterprise's organizational *systems and processes are mapped* by the "functional owner" to target improvement areas.

This could be driven by an unbalanced balanced scorecard based on any current, existing results for the business's metrics that are deemed unacceptable or have been determined as candidates for improvement due to benchmarking efforts.

All enterprise processes are mapped into their "home" functions and systems that are categorized as either leadership, core, or support (L-C-S). This step is akin to first creating and then reviewing a schematic in a troubleshooting routine to determine the probable cause for an electrical short.

This effort concludes when the probable targets for the enterprise's problems' root causes are determined and targeted. Those targets are addressed in the next step.

Targeting EPPI Step 2: Map the Processes and Model the Performance and Target Step 3 Efforts
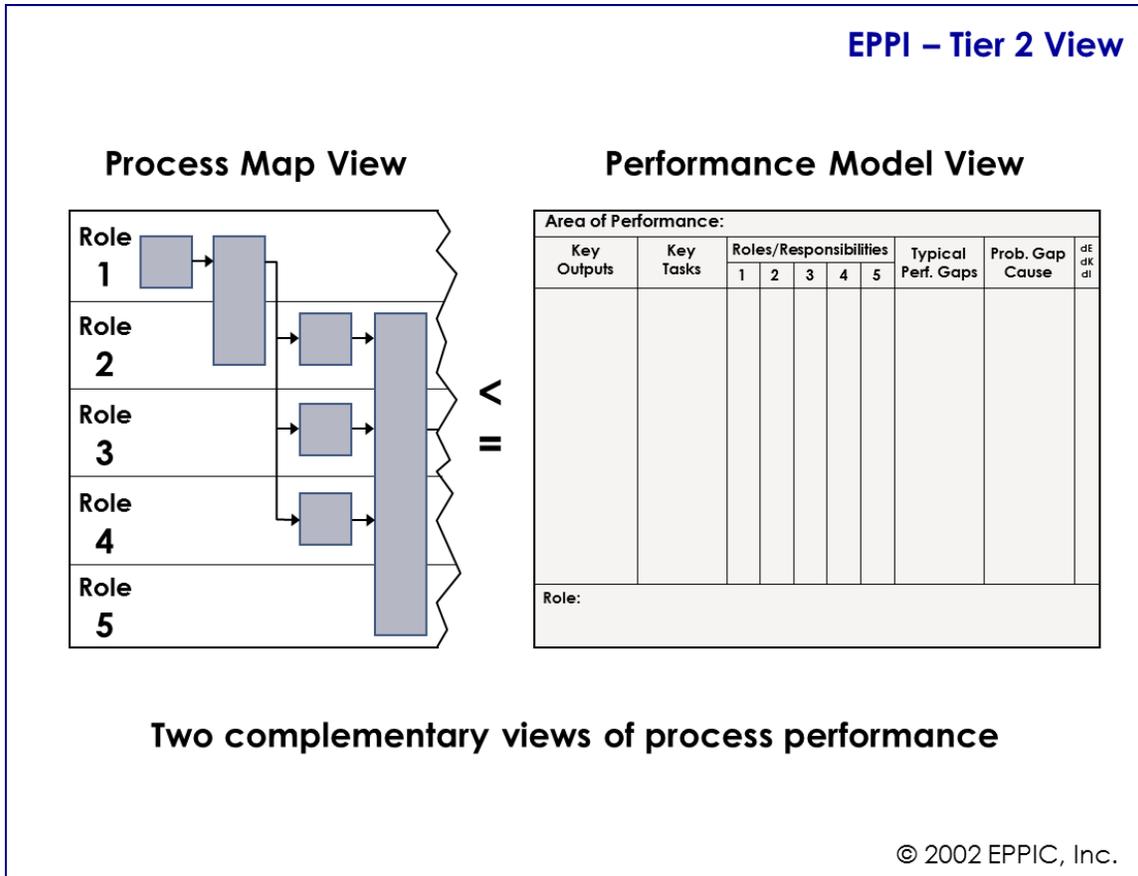
In this step, those targeted functional systems and processes for the probable root causes are both *process mapped* and *performance modeled*.

This level of detail is needed to target where in the current, status quo system/processes the next steps should be taken.

Targeting EPPI Step 3: Derive the Human and Environmental Enablers and Determine Gaps and Target Improvement Efforts
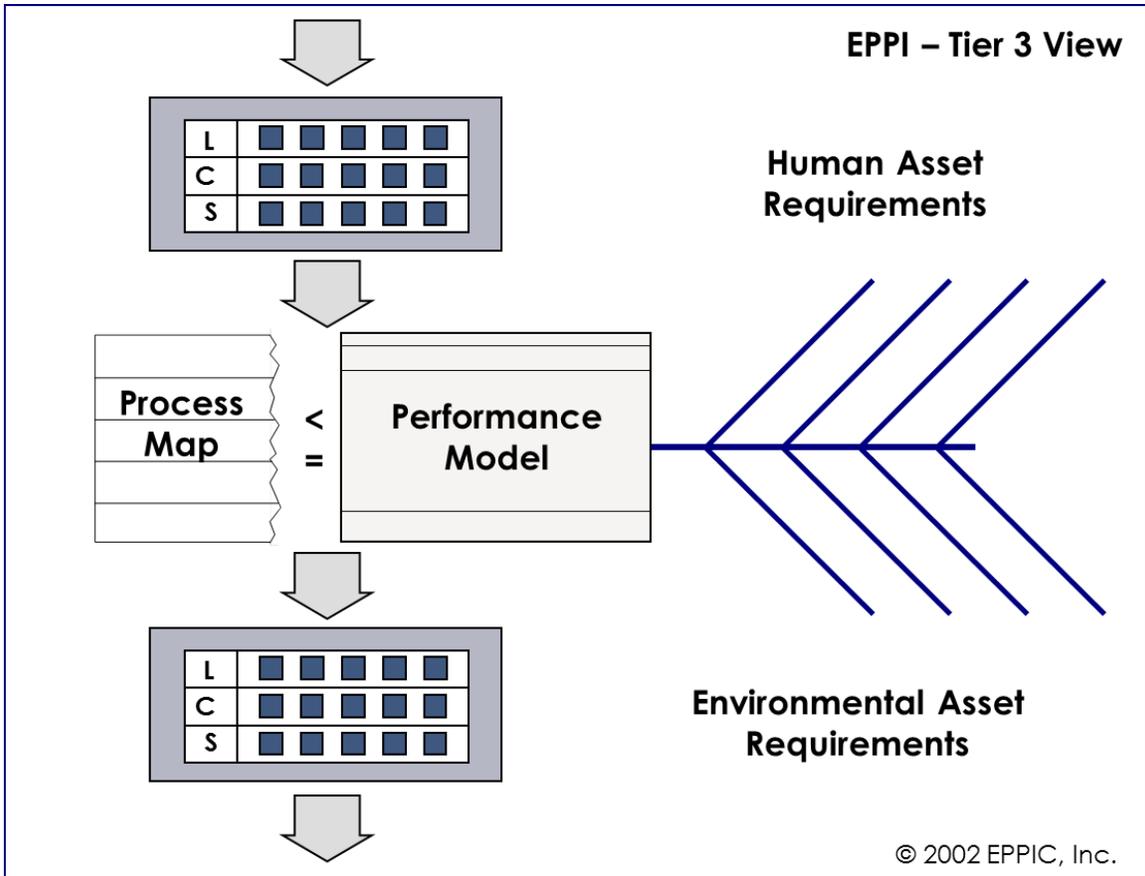

This is where all of the necessary *enablers* for those process performances are both determined and assessed. EPPI categorizes all enablers including *human assets* and *environmental assets*.

Once the deficiencies in the necessary enablers are determined, the impact to process performance for addressing those can be determined. The R (return) can be calculated for the I (investment).

Again, the concepts, models, tools, and techniques for conducting these three steps are used in each of the four phases of Targeting EPPI.

Targeting EPPI Phases

There are four phases for a Targeting EPPI effort.
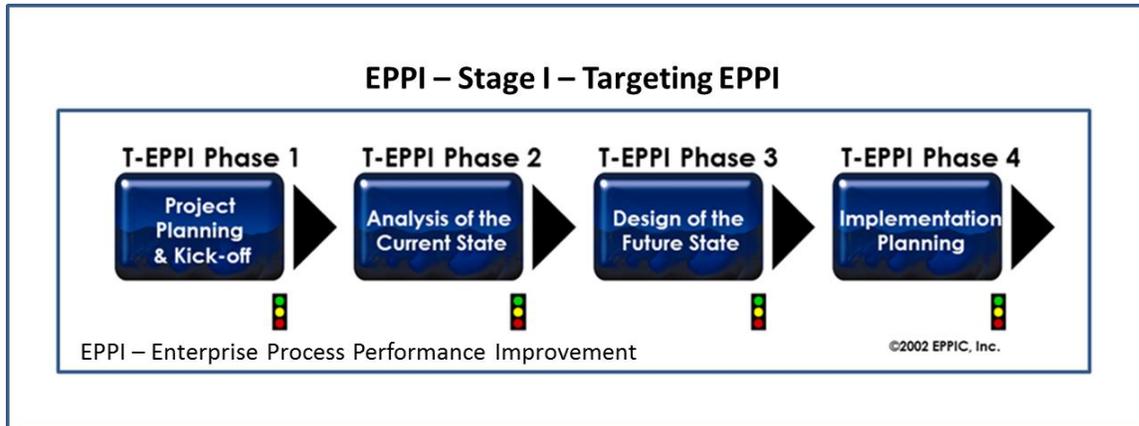
Targeting EPPI Phase 1: Project Planning & Kick-off

In this phase, the Targeting EPPI *plan* is created, and a Project Steering Team has been recruited, oriented, and met with in order to review and then amend, approve, or kill the planned effort. The three steps are used here to influence the overall planning efforts of the four phases and are begun here (as appropriate to the specific effort and the teams involved).

Step 1 begins here in Phase 1 and may end here, depending on the size, scope, and breadth of the enterprise; otherwise, Step 1 would be completed in Phase 2 by a designated Analysis Team. In Phase 1, the Project Steering Team deliberately targets Phase 2 efforts based on current business results and perceived future opportunities and threats.

Targeting EPPI Phase 2: Analysis of the Current State

The *current state* is determined, mapped, and targeted in this phase using Step 1 guidance (if completed earlier in Phase 1; otherwise, Step 1 is completed here). Then targeted Step 2 and 3 efforts are completed, as outlined above and specific to the original plan.

The results of the analysis meeting(s) are shared in a "gate meeting" with the Project Steering Team. They will review the data, assess the target problems/opportunities determined by the Analysis Team, and agree upon the specific targets for the succeeding Phase 3 efforts.

Targeting EPPI Phase 3: Design of the Future State

In this phase, the *future state* is determined and targeted using both the models and data from the Phase 2 efforts as starting points. The same core teams would be used with some additional members to broaden and/or deepen the team's expertise, as necessary.

The Project Steering Team is brought together again to review and assess the data and to select specific targets for the Phase 4 efforts.

Targeting EPPI Phase 4: Implementation Planning

Here the specific implementations are planned for any post-Targeting EPPI process improvement interventions—where the missing/deficient enablers are put in place/fixed, or the process is re-engineered and then the enablers are righted.

This phase may need to plan multiple sets of project efforts, some of which will need integration efforts between them to ensure their effectiveness post-rollout.

The Project Steering Team

A Project Steering Team (PST) is brought together to review the implementation plans and to select Targeting EPPI projects.

The PST recruits the best from the functional/
organizational ranks and helps them leverage the process performance situation to their best advantage.


The PST will target/focus the collective follow-on improvement efforts. They are the only ones close enough to provide an understanding of what else is linked to the current situation and what else may be impacted and/or need to be impacted. Then proactive planning will be conducted to address *everything* necessary to make the targeted improvement ultimately effective.

The Planning of Post-Targeting EPPI Initiatives

The phases and steps of Targeting EPPI help to take all the surprises out, and help to ensure that the intervention is going to achieve the promised ROI and add economic value of the forecasts.

 Again, the Targeting EPPI steps and phases don't solve the problem or take advantage of the opportunity. They lead you to the trough. Once there, you'll have to plan how to best quench your thirst for high-payback returns on your improvement initiatives investments.

We liken the four phases of EPPI to a *systems engineering* methodology, followed by a *product/service development* method. However, the product/service development methods in this case are really the specific improvement methods to be employed post-targeting, such as process re-engineering, SPC, Knowledge Management Systems, Six Sigma, etc.
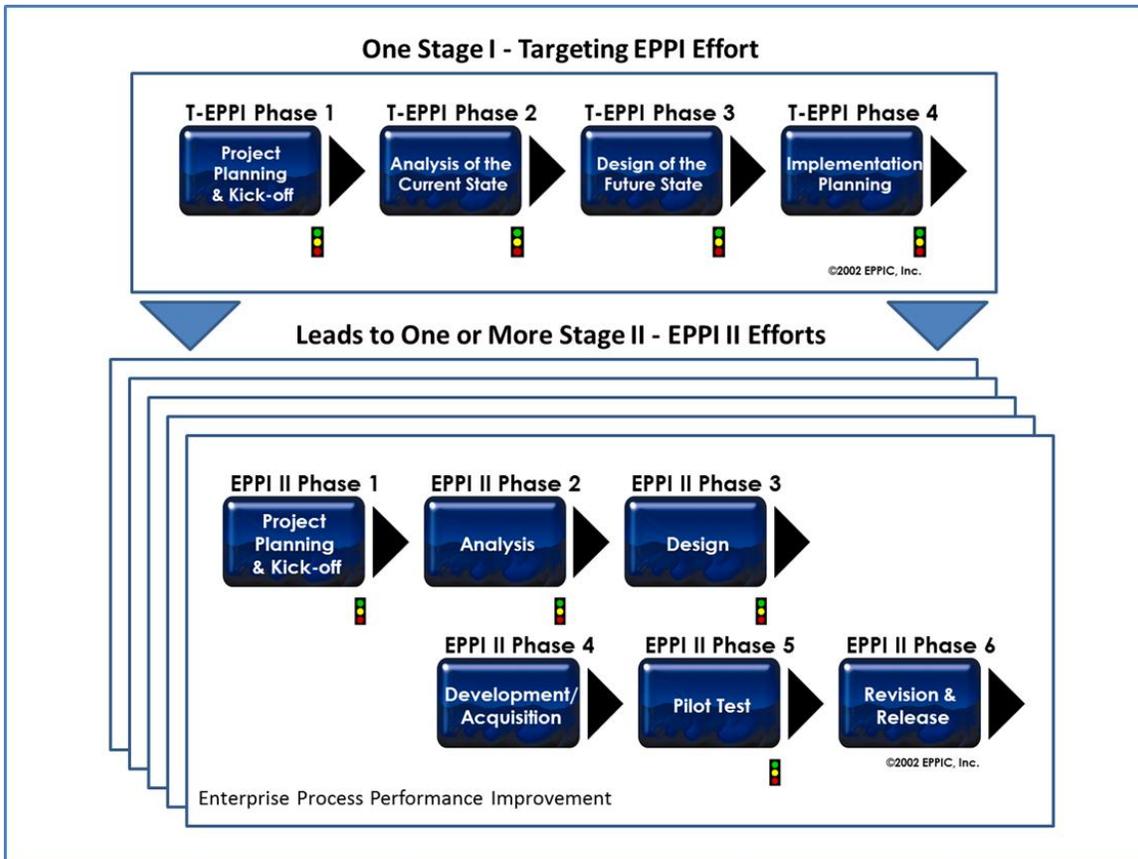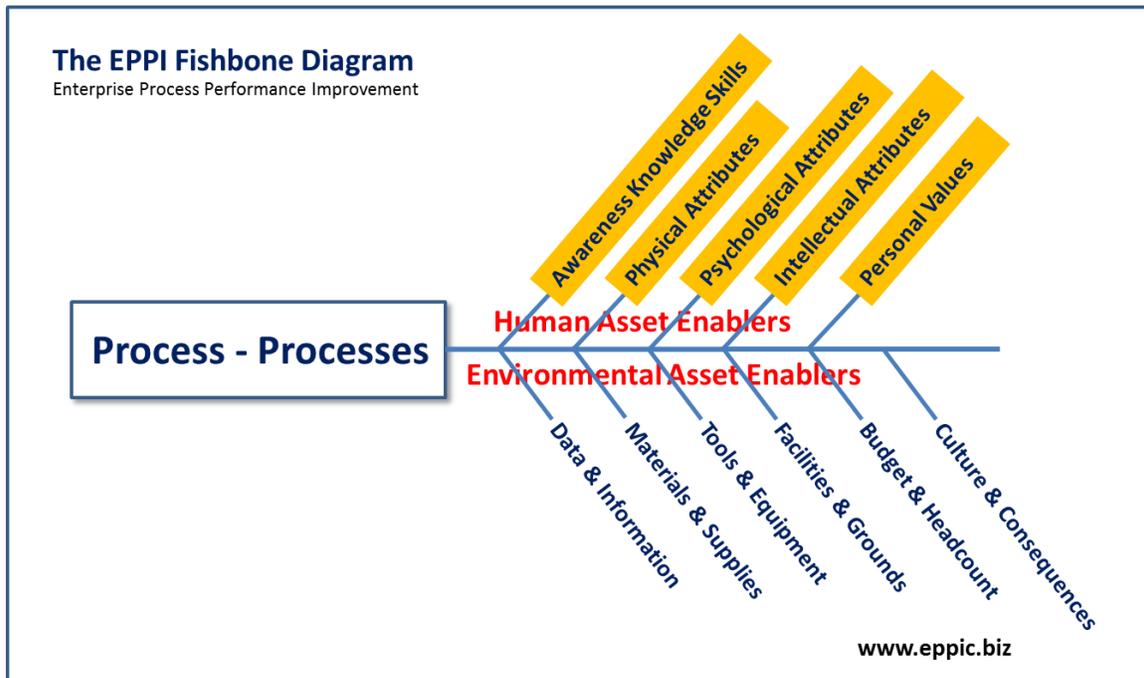
Human and Environmental Asset Requirements

The human assets required for high performance of enterprise processes can be systematically derived and viewed via Targeting EPPI models, methods, tools, and templates.

This set of concepts and models is used in Targeting EPPI's Step 3.

The Human Asset Requirements

The following human assets, or key human variables, include both "individual" and "group/team/organization" items within each of the following categories:

- Awareness, knowledge, skills
- Physical attributes
- Psychological attributes
- Intellectual attributes
- Values

The EPPI Fishbone Diagram
Enterprise Process Performance Improvement

Awareness Knowledge Skills · Physical Attributes · Psychological Attributes · Intellectual Attributes · Personal Values

Process - Processes

Human Asset Enablers
Environmental Asset Enablers

Data & Information · Materials & Supplies · Tools & Equipment · Facilities & Grounds · Budget & Headcount · Culture & Consequences

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The importance of getting a handle on what's really needed from the human variable, and then what's currently missing in an effort to improve process performance, is driving enterprise management and many of their suppliers to create and test concepts, models, and tools such as

- Competency Management Systems
- Enterprise Resource Planning Systems (ERP)
- Knowledge Management Systems (KMS)
- Performance Management Systems
- Learning systems ("e" and otherwise)
- Etc.

These potential solutions need to be viewed within a larger contextual framework

The Environmental Asset Requirements

Processes must have a balance between human assets and environmental assets. These two complementary sets of assets need to be in place in order to ensure value-adding processes. Human assets work with/manipulate the environmental assets in order to *process* an output.

One can't effectively improve human assets without an understanding of the environmental factors within the processes in which humans perform.

The following are the categories for environmental assets:

- Information/data
- Tools/equipment
- Materials/supplies
- Facilities/grounds
- Budget/headcount
- Consequences (+/-)
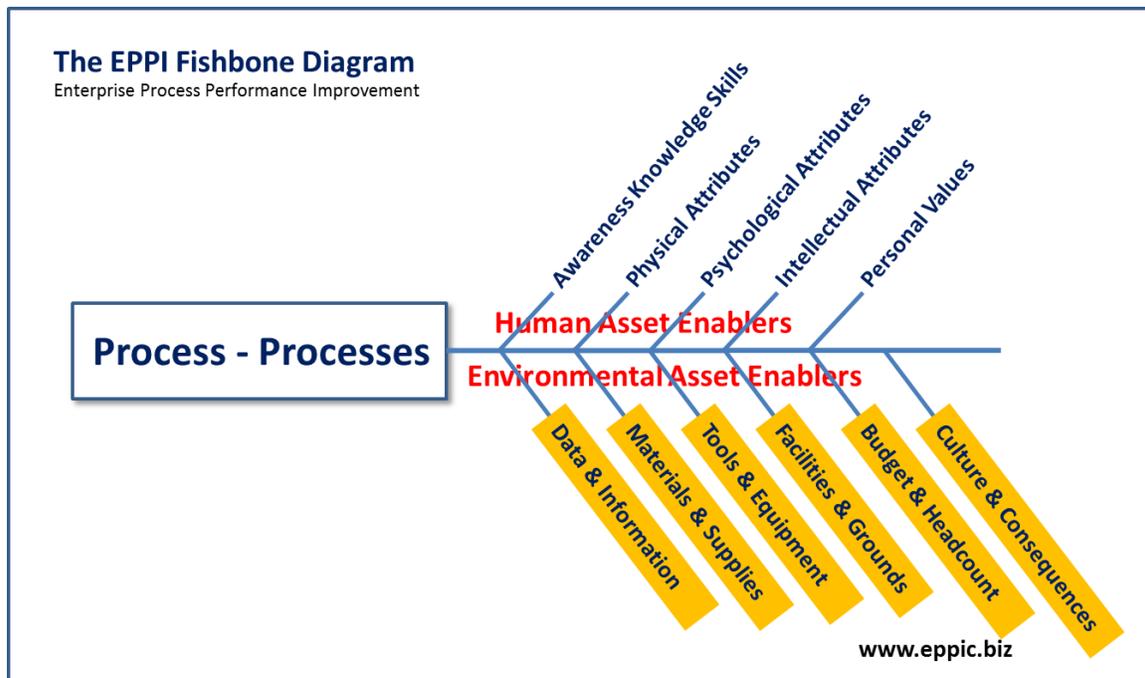
Some processes don't have to be in control; this implies that all need to be in control. Control won't make up for a bad business plan or reconcile with other goals within the enterprise. But it is still a critical component to pulling off the business plan.

The stakes are high or high-impact processes. High-stakes poker is played at a high-stakes table for a reason. Failure is usually not a viable option, for it can result in the death of the enterprise.

Again, our focus here is with the *human asset* side of process improvement and *not* with the *environmental asset* side.

The Human Assets of Targeting EPPI

Humans bring several types of attributes/capabilities to the enterprise processes that they work in and to the environmental assets with which they work. Again, these are

- Awareness, knowledge, skills
- Physical attributes
- Psychological attributes
- Intellectual attributes
- Values

Awareness, knowledge, and skills come in many types and varieties. CADDI uses 17 knowledge/skill categories to systematically tease these out, once we know what the process performance requirements are. For each knowledge/skill "item," one performer might need to be only aware of what other performers need to know much more about, while yet another group of performers may need to have an actual skill level.

> *Physical attributes* include "items" such as the five senses: sight, hearing, touch, taste, and smell; as well as height, weight, strength, endurance, etc.

> *Psychological attributes* include "items" such as positive attitude, aggressiveness, risk taking, cautiousness, detail orientation, big picture orientation, etc.

> *Intellectual attributes* can include "items" such as conceptual thinking, concrete thinking, strategic thinking, process thinking, etc.

> *Values* can include such "items" as customer satisfaction orientation, teamwork, diversity, fairness, honesty, work ethic, family, etc.

These human factors/enablers need to be present to some degree to meet the specific process needs. Meeting these needs helps manipulate the environmental factors/enablers, which in turn helps to produce the desired outputs. These outputs are inputs to some downstream process(es).

Human Asset Management Systems

The Human Asset Management (HAM) Systems then provision humans into processes in concert with the processes' needs. The HAM Systems include the following:

- Organization & Job Design Systems
- Staffing & Succession Planning Systems
- Recruiting & Selection Systems
- Training & Development Systems
- Performance Appraisal & Management Systems
- Compensation & Benefits Systems

• Rewards & Recognition Systems

Each of the seven HAM Systems is overviewed below. Once the Step 3 effort has targeted the process(es) and causes for any performance problems, one or more of the following HAM Systems may need to be addressed and changed. As always, it depends.

Organization & Job Design Systems

This system takes the totality of enterprise process performance requirements for an organization and determines all of the *ideal* human assets required, then designs the jobs most conducive to those realities. Once the jobs are designed and the responsibilities defined, the *organization* is, by definition, designed. Just as "form should follow function," we believe that "organization design should follow process performance requirements."

The goal is to get all of the human performance requirements (to perform tasks to produce outputs) sorted. This is done by sorting the process performance *tasks* into *role groupings* and then groups those into *job groupings*. Depending on the volume of performance and, therefore, the volume of tasks, some tasks/roles may be combined with others into jobs.

The job designs then roll up into the organization design. It is a "bottom-up" approach driven by the visible, top-down "end goals" of the process performance.

Staffing & Succession Planning Systems

This system takes the job designs, their process performance requirements, and the enabler requirements, and determines who to recruit, how many, from where, and how.

Forecasting the needs, reporting that data, and feeding it to the other HAM Systems allows for rational succession planning systems/processes that ensure the organization is optimally staffed and that tomorrow's leaders are being prepared today.

Recruiting & Selection Systems

This system takes the human enablers that are deemed "required" in the new hire (or the new-to-the-job transferee) and creates recruiting guides/instruments to identify and select candidates. Some enablers will be showstoppers because T&D cannot bridge the attributes gap. Others will be less important. Some will be ignored. It is situationally dependent.

This system must bring into the enterprise humans that have as much of the human attributes needed as possible.

Training & Development Systems

This system takes the individual and *backfills* them with the missing key knowledge and skills not acquired during the recruiting and selection processes.

Sometimes the recruiting and selection system may not be able to hire to the ideal. Missing awareness, knowledge, and skill might be reasonably addressed by this system. But some items will be too costly to let go with "Recruiting & Selection" and then expect "Training & Development" to pick it up and fix it.

Examples include deep technical expertise, such as an electrical engineer or a programmer. It would probably be best to hire an engineer or programmer with a solid base of expertise and then teach them new things on top of their current levels of knowledge/skill.

But there are some things that "Training & Development" should not be expected to resolve at *reasonable cost*. Physical attributes, psychological attributes, intellectual attributes, and values are somewhat problematic. They might be able to be adjusted/developed, but most likely at too great a cost and too great a cycle time.

Performance Appraisal & Management Systems

This system takes the process requirements to "perform tasks to produce outputs" and provides measurement and feedback to the individual performer and to their management.

Where performance is falling short of the requirements, performance management, including "development planning" (back to the T&D System) as well as last-resort efforts such as "progressive discipline" and possible "termination," may be required to resolve the issue and meet the process needs.

Compensation & Benefits Systems

This system takes the process requirements to "perform tasks to produce outputs," as well as the "performance measurements results data," and adjusts compensation in tune with local or regional market conditions and other compliance drivers.

Pay for performance, knowledge, or skills, is fairly easy to structure, build, and maintain when you understand clearly the process performance requirements and the human enablers. And it is ultimately more equitable.

Rewards & Recognition Systems

This system takes the process requirements to "perform tasks to produce outputs," as well as the "performance measurements results data," and provides nonmonetary (or small monetary) rewards and recognition to motivate the performers.

Recognizing a job well done requires understanding what a well done job looks like.

Human Asset Management Systems Summary

The HAM Systems work in conjunction with each other and with the environmental assets in place (in the process), and as driven by the process performance requirements to ensure that the right humans are in the right place to get the process performance job done.

The end results are that HAM Systems "sing off the same song sheet." The song is Enterprise Process Performance Improvement, and the multiple voices are now mostly in harmony, as opposed to the discord too often found in nonaligned and noncoordinated HR systems.
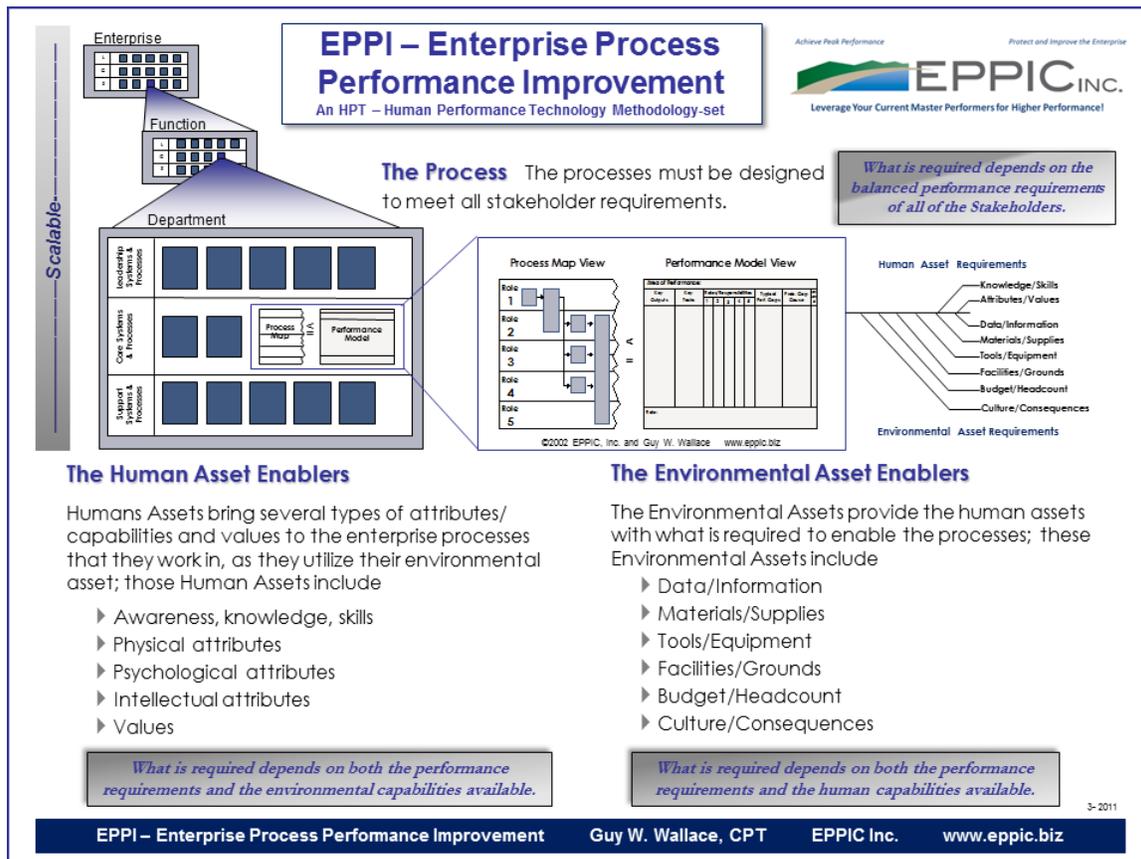
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