



## Human Processes

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### The Waste of Unused Human Talent

In my last Column for BPTrends (“Big Processes”, <http://bit.ly/big-processes>), I showed how new techniques and tools are allowing organizations to manage and improve processes in which people collaborate flexibly, often across boundaries. In this Column, I will examine a particular opportunity for process improvement offered by this new approach, known as **Human Interaction Management** (HIM, <http://bit.ly/him-theory>). To be specific, I will describe how HIM allows organizations to deal with the “8<sup>th</sup> form of waste” identified by Lean practitioners – the waste of unused human talent.

#### Overview of HIM

It is becoming generally recognized that collaborative knowledge work processes cannot be described using flowcharts, as in mainstream BPM, or by assembling tasks based on business rules, as in Adaptive Case Management. Rather, collaborative knowledge work processes require a new, simpler approach via which business people can describe, and build IT support for, their own working activities.

HIM, a peer-reviewed and widely accepted theory, provides the required approach. HIM is based on 5 principles:

1. Effective team building
2. Structured communication
3. Knowledge creation
4. Empowered time management
5. Collaborative, real-time planning

To implement these principles, HIM work processes are described as **Plans**:

- A Plan divides work into **Stages**, with different Stages having different purposes. In each Stage, the people involved play Roles to provide deliverables. You must be a member of a Stage to have access to deliverables of that Stage. Messages sent as part of a Stage are automatically sent to all members of the Stage.
- The work as a whole is overseen by a Plan **owner**, who adjusts the Plan throughout its life as the work progresses, starting, ending, adding, removing and changing Stages and deliverables as necessary. Others in the Plan have more limited options for changing it, restricted mainly to their own Role.
- A Plan is made from a **template**. Any Plan can be turned into a template for future Plans, thus enabling re-use and improvement of collaborative work.
- Enterprise resources are included in a Plan by defining a **Task** that invokes a Web service, or a workflow in a BPMS that orchestrates multiple Web service calls.

This summary only scratches the surface of HIM, which is a generic framework for describing all aspects of collaborative work (<http://bit.ly/him-theory>). However, for many people the basics are enough. The tool framework supporting HIM, the **Human Interaction Management System** (HIMS, <http://bit.ly/hims-technology>), of which the reference implementation **HumanEdj** is available free, lets organizations apply the approach outlined above to deliver order of magnitude productivity improvement, build dynamic IT infrastructure, maintain effective partner relationships, and continually improve knowledge work.

## The Ghost In The Lean Machine

HIM starts from a different point than process improvement techniques such as Lean and Six Sigma – not with tasks, but with people. This opens up a number of new avenues to explore for process redesign.

Lean, for example, focuses on “muda” - forms of operational waste, seen through variation in output and dealt with reactively:

“The original seven muda are:

1. Transport (moving products that is not actually required to perform the processing)
2. Inventory (all components, work in process and finished product not being processed)
3. Motion (people or equipment moving or walking more than is required to perform the processing)
4. Waiting (waiting for the next production step)
5. Overproduction (production ahead of demand)
6. Over Processing (resulting from poor tool or product design creating activity)
7. Defects (the effort involved in inspecting for and fixing defects)

Later an eighth waste was defined by Womack et al. (2003); it was described as manufacturing goods or services that do not meet customer demand or specifications. Many others have added the **“waste of unused human talent”** to the original seven wastes.” [My emphasis]

[http://en.wikipedia.org/wiki/Lean\\_manufacturing#A\\_brief\\_history\\_of\\_waste\\_reduction\\_thinking](http://en.wikipedia.org/wiki/Lean_manufacturing#A_brief_history_of_waste_reduction_thinking)

The last form of muda, which “many others have added” but Lean theory fails to deal with, is the ghost in the machine. It is impossible to identify and rectify the “waste of unused human talent” using techniques that focus on identifying steps in a straight-through process for transforming inputs into outputs.

HIM offers a means of dealing with the waste of unused human talent, by offering the means to design processes according to a new set of criteria - how effectively people are utilized. Given below in **Table 1: HIM Plan Template Design Criteria** is a set of criteria for knowledge work process innovation relevant to any organization - public and the private sector, profit and non-profit organizations, SMEs and large enterprises, in any industry sector.

Each criterion is accompanied by example indicators that there is an opportunity for improvement and design guidelines for corresponding Plan templates.

Criterion	Example Indicators	Plan Template Design Guidelines
Cross-cutting	Are product development and service skills reused between value streams?	Plan templates should allow maximum sharing of human resources.
	Are different products and services being cross-sold to the same customers?	This applies not only to direct participation, but also to indirect re-use of information gathered, lessons learned, customer and market contacts,
	How streamlined is Plan template design	

Criterion	Example Indicators	Plan Template Design Guidelines
	activity in terms of skill levels and tool usage?	mechanisms of management, and so on.
Agility	Do the same problems recur time after time?  How well does a Plan scale to support increased throughput?  What is the decision-to-change time?	Plan templates should be designed to permit change as often as necessary and as quickly as possible.
Creativity	How many ideas have been submitted?  Of those submitted, how many have been discussed properly?  When the ideas that were implemented are analyzed retrospectively, how many were done in haste and without due consideration?	To foster a learning, innovative culture, it is necessary first to <i>notice</i> and then to <i>act on</i> individuals' responses to the Plan they are part of, and the suggestions they put forward about it. Only some ideas will be good—nevertheless, even the poor ones should be rewarded if made in the right spirit.  Plan templates at different management levels should provide the means for dialectic - <i>thesis</i> followed by <i>antithesis</i> followed by <i>synthesis</i> – leading to emergent behavior.
Flexibility	Can we identify precisely the inputs, outputs and internal dependencies, in order to determine the requirements placed on Plan participants?  Can the Plan spawn customized sub-Plans to deal with specialized situations?  Do Plan participants struggle to cope with the variety of demands placed on them, or customers complain that they are receiving service from unqualified staff?  Can the services or products concerned be personalized for individual customers?	A Plan may need to meet the needs of different customers, and suit the nature and skills of different participants. Hence the Plan template should include enough flexibility in the design to support new situations. The more generic a particular template is, the less onerous management of each Plan instance becomes.  It is something of a trade-off, however, since customized Plans may be more efficient and make better use of specialized skills. A balance must be struck.
Resource Utilization	Do Plan participants regularly offer useful advice to those in different Roles?  Are people dealing with their work too easily, to the point where they seem not to be putting much into it?  Do people have continually to consult others about details of the work they are personally charged with?	A good Plan should capitalize on the human skills present among its participants.  For instance, people are often capable of more than is expected of them.  Alternatively, people may perform badly simply because they are unsuited to the Roles they are playing.
Empowerment	Are tasks carried out in good time, or generally left until the last minute?  Are deadlines slipped on a regular basis?	It is a truism that people perform better, and get on better with their colleagues, if they enjoy their work and feel appreciated. Hence, Plan templates

Criterion	Example Indicators	Plan Template Design Guidelines
	<p>Do users find themselves working overtime, and if so, is it because they choose to or because they have to?</p> <p>Are interactions among colleagues strained, and tempers frayed?</p> <p>Do users demonstrate increased competence over time as they participate in a particular type of Plan?</p>	<p>should be designed so that participation is not unduly stressful, and by itself acts to foster increased job satisfaction.</p> <p>A large part of job satisfaction is the sense that you are learning something as you work, not just repeating the same mundane tasks days after day.</p>
Embodiment of values	<p>Is a Plan designed to make good use of natural resources—avoiding pollution, recycling waste products, and so on?</p> <p>Do people working in a type of Plan have to cover up aspects of their work in order to comply with company policies or government regulations?</p> <p>Is the balance of recompense in a Plan fair—in particular, is undue favoritism shown to workers in a particular location, or level of the organization?</p> <p>Are there ways in which the Plan contributes positively to the communities in which it is carried out?</p>	<p>Increasingly people are recognizing that corporate life should represent—even exemplify—the same beliefs and values that are held up by society in general.</p> <p>Not only is this mandated by regulation in various ways (with respect to the environment, wage laws, child exploitation, and so on) but workers and management at all levels need to know that the organization to which they devote the best part of their waking hours is acting a manner they consider responsible, and can be proud of.</p>

**Table 1: HIM Plan Template Design Criteria**

## Next Steps

To build HIM templates and Plans it is sensible to use dedicated software such as HumanEdj, rather than a general-purpose diagramming tool. This is because the modeling framework is not based on programmatic control flow that can be depicted in flowchart style (as, for example, is BPMN with its swim lanes), but rather on Roles that interact in a structured but non-linear way. A 2-dimensional picture can be drawn of a HIM Plan – and the desktop edition of HumanEdj generates and lays out such diagrams automatically – but this is not the optimal way to define or depict the interactions between Roles as they produce and consume deliverables across different Stages.

Note, however, that HIM Plans and templates are models like any other. HumanEdj stores Plans and templates natively in a standard format - XMI, the dialect of XML defined by the OMG for models, which is supported by many leading modeling tools. HumanEdj also exports Plans and templates automatically to JSON, a data definition notation widely used by Web developers, and an ideal basis for business intelligence reporting.

Various online articles and videos illustrate the main steps in building and using HIM templates and Plans via a Web browser (see **Resources**, below). You may like to download HumanEdj, and see for yourself how easy it is to kick start innovation by providing your organization with the opportunity to introduce process-based management for dynamic, cross-boundary knowledge work.

If you are considering HIM adoption on a large scale, you should also look at the **Goal-Oriented Organization Design** methodology (**GOOD**, <http://bit.ly/good-methodology>) for applying HIM to enterprise-scale transformation. GOOD, originally developed for a large-scale public sector project, is equally applicable to the private sector and scales naturally for use by organizations, divisions, departments, or teams of any size.

## Conclusion

It is often the case that the aspects of process focused on human involvement are handled better in small organizations than large ones. This is because people know intuitively that they should pay attention to such issues, and when direct control over the entire workplace is available attention can be paid to them relatively easily. However, as organizations grow in size, other issues start to predominate.

For instance, people who were part of a large company when it was still a small one often bemoan the loss of a culture that they valued. They may declare that as a result their job satisfaction has changed in inverse proportion to their financial status, and say they are only hanging on until they have gained enough stock options to get out.

This benefits no one. Everyone gains more from a job to which they can give their all, wholeheartedly - and the organization gains most of all. Moreover, it is possible for large organizations to maintain a personal approach and values more typical of small organizations. They just need a new approach to process innovation, focused not on tasks but on leveraging unused human talent. They need an approach based not on flowcharts or cases, but on human interaction.

## Resources

For more information and to get started with HIM, follow the links below:

- HIM theory: <http://bit.ly/him-theory>
- HIMS technology: <http://bit.ly/hims-technology>
- HumanEdj case studies: <http://bit.ly/humanedj-case-studies>
- Step-by-step introduction to the free HumanEdj: <http://bit.ly/humanedj-introduction>
- Step-by-step video guides to the free HumanEdj: <http://bit.ly/hims-videos>
- GOOD method: <http://bit.ly/good-methodology>

## Author

Keith Harrison-Broninski has been regarded as an IT and business thought leader since publication of his book "Human Interactions: The Heart And Soul Of Business Process Management" (Meghan-Kiffer Press, 2005 - "a must read for Process Professionals and Systems Analysts alike", BPM Group). Building on 20 years of research and insights from varied disciplines, his theory of Human Interaction Management (HIM) provides a new way to describe and support collaborative human work.

Conference organizers around the world regularly invite Keith to give keynote lectures to business, IT and academic audiences at national conferences, most recently in Poland, India, the Netherlands, the UK, Finland and Portugal.

Keith is CTO of Role Modellers, whose mission is to develop understanding and support of human-driven processes - the field that Keith has pioneered. Role Modellers' software product, HumanEdj, leads the industry in computerized support for innovative, collaborative human work. Visit [humanedj.com](http://humanedj.com) to try online or download HumanEdj, which is free for individual use.

Keith stays active as a business consultant and software architect, via which activities he continues to refine and extend HIM theory.

More information about Keith and his work is available online (<http://keith.harrison-broninski.info>).

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