The HyLighter Collaborative Sensemaking System

Text Analytics Platform

Visual Analytics Platform

Visual Search

Where machine intelligence and human sensemaking meet
How can individuals with diverse perspectives collaborate effectively to generate actionable knowledge from Big Data within mission timelines?

How can we make smart machines compatible with human sensemaking practices as analysts and decision-makers confront surging volumes of largely unstructured content?
Build Sensemaking Feedback Loops that Improve Each Step in the Workflow

On left, a typical plan-collect-process-analyze-disseminate model for running analytics on Big Data. On right, the HyLighter Collaborative Sensemaking (CSS) feedback loop - results of each iteration inform subsequent cycles toward satisfying the execution of a critical decision.
HyLighter is the Primary Front-End Environment for Users to Interact with Smart Machines.

HyLighter CSS makes smart machines compatible with human sensemaking.
Users Add Color-Coded Highlighting, Comments, and Other Meta-Content

Enables any size group to engage in discussion threads tied to arbitrary fragments of text and images in an organized and efficient manner.
HyLighter Maps the Intellectual Travels of Groups Across Collections

Yellow is mine. Blue is not mine. Green is ours. Orange is the current selection. Enables threaded discussions tied to arbitrary fragments of text, images, and video.
Users Link Arbitrary Fragments Across Collections and File Types

Each fragment and related comment has a unique URL. HyLighter CSS captures the higher-order thinking of users as a layer of social annotation.
HyLighter CSS Establishes a Two-Way Feedback Loop Between Users and Smart Machines

• Supports a systematic approach to the detection of relevant information hidden in Big Data.

• Cycles repeat until system achieves a sufficient amount and quality of data necessary for satisfying the execution of a critical decision.

• Supports practices that increase the ability of analysts and decision-makers to think within a problem space and smart machines to support users in sensemaking.

Users engage in practices that promote changes in brain synapses and machine learning to improve performance of users and capabilities of machines to support users in sensemaking.
HyLighter CSS Converts Machine Analytics to Gray Hylights

Change

Change has always existed. The difference is that for tomorrow, the intensity (i.e., speed, magnitude, and momentum) of change, in almost everything, is so much greater. The introduction of technology only complicates this picture further. Perhaps change expert Daryl Conner explains best: “Never before has so much changed so fast and with such dramatic implications for the entire world.” However, how do those in organizations usually respond to this dynamic, ubiquitous change? They, consciously or by default, resist, ignore, or sidestep the realities and impact of change, all losing and self-defeating responses. They often turn to change management, especially when technology is involved, in the hope that once a change is upon them, they can manage or control the change and its effects—a reactive approach to change.

To increase the potential for success, instead of an organization being just reactive, such as to the introduction of technology, the leadership must become proactive and define and then “join” the desired change, embrace it as a partner, and use it creatively to advance the organization’s and society’s goals. Remember, you can’t have progress without change!

Application of Change Creation

With dramatic and omnipresent change being the order of the day, particularly with technology being involved, it becomes harder than ever to predict the future. To deal with tomorrow, management guru Peter Drucker provides a simple yet powerful answer: since you can’t predict the future, you must create it. That is, organizations must explicitly change, along with technology, and create the future that serves organizations and society best. To do this, an organization and its people must become effective leaders and practitioners of change creation, especially when technology is significantly in the mix.

Change creation, introduced by Dale Lick and Roger Kaufman, is the process whereby an organization and its people:
- invite, accept, and welcome change as a vital component in defining and achieving future success.
- define the future they want to design and deliver.
- develop and implement a change plan that capably transitions its people, processes, and circumstances, especially its culture, from the existing paradigm to the new, desired one.

Change creation is proactive. When organizations enact change creation, they intentionally move from being victims of change to becoming masters of change. This means that leaders and their organizations must:
- take genuine responsibility for leading change; effectively define and plan for the desired change; comprehensively prepare the organization for the planned change; and create the designed future and continuously make improvements while moving ever closer to the desired future.

Just as the branch of the grapevine is pruned back to allow it to bear more fruit, we must organizationally “prune”—prepare for nurture and change—some of what we (a) take for granted and/or believe and (b) do and how we do it to allow for the development of more effective systems. Leaders must often radically “prune” processes and systems to develop the most effective types of systems, including mobility.
The system displays machine-generated meta-content associated with each entity (e.g., category, URL, rolled-up entities, and related entities).
As users highlight relevant fragments, they add context and meaning to gray hylights.
Users search, sort, filter, and run analytics on the report to reveal associations and uncover hidden patterns. Clicking on a fragment links back to its exact location in its source.
A HyLighter Web page that enables the user to navigate from fragment to fragment across multiple documents from the same HyLighter window.
Collective visualizations of the annotation layer provide mechanisms for coordination and navigation across the organizational ecosystem.
Users Disseminate Conclusions through a Three-Dimensional Publication

- Fragments in a publication link to fragments in a HyLighter report and back to their exact locations in their sources.

- HyLighter publications support transparency and accountability and provide an historical record of the thinking of the authors.

Consumers of HyLighter CSS publications have access to the evidence-in-context.
“The ability to learn faster than your competitors is the one sustainable competitive advantage.”

Peter Senge, The Fifth Discipline: The Art & Practice of the Learning Organization

For more information, go to www.hylighter.com or contact david@hylighter.com or call 866-657-6662 ext. 100