**Chapter Nine – Innovation and Ideas**

**Authors who have considered innovation included Thomas Edison and Gerald Haman. Edison suggested --**

***“Genius is one per cent inspiration and ninety-nine per cent perspiration. Accordingly, a  'genius' is often merely a talented person who has done all of his or her homework."*** [***http://www.thomasedison.com/quotes.html***](http://www.thomasedison.com/quotes.html)

***“By conducting thorough and well-rounded research - and learning from our mistakes - we're filling our minds with the raw material of the creative process. This is the "perspiration" part of the creative process. Our subconscious mind churns through all of this material and forges new connections between seemingly unrelated pieces of information. This is the "incubation" stage of the creative process. The subconscious then sends ideas to the conscious mind, usually as vague feelings or intuitions. While the average person may ignore or overlook these hunches, the creative person knows that he or she must record all ideas, no matter how wild or impractical -and evaluate them later. This is the “inspiration” stage.“*<http://www.innovationtools.com/Articles/ArticleDetails.asp?a=26>**

**Gerald Haman, encourages proficiency in what he calls "the new 3 R's:"**

**“*Research, retrieve and record information***

***Review the information you've gathered.***

***Recombine ideas - make new associations between the pieces of information you've gathered.”***

***“Tools are important to everyone. A main block to innovative and creative thinking is “lack of tools” while another block is “lack of time”. Therefore, it makes sense to equip people with a tool kit of “time saving” tools. The tools and techniques that we use all share a common purpose: to help people think better and faster, more efficiently and more productively, while keeping focused goals, challenges and problems. Tools can speed up the process to progress, profits and successful results”.*** [**http://www.innovationtools.com/Articles/InterviewDetails.asp?a=240**](http://www.innovationtools.com/Articles/InterviewDetails.asp?a=240)

**Contextual Analysis satisfies the requirements for a set of tools that makes the individual more efficient in processing information and converting it to knowledge. At the heart of the process is the idea – the *essential data* – that enables the individual to build concepts representing existing knowledge as well as new strategies.**

**Artificial Intelligence approaches have been studied for over 50 years. Early attempts involved trying to mimic expert actions using software. Contextual Analysis is a form of Artificial Intelligence based on the following premise. First, the essential data was recognized to be the authors’ ideas. The identification, extraction, and organization of these ideas were accepted and the method involved could be software driven as well as manual. The fact that software was effective in recognizing patterns meant efficiency and accuracy as well as significant reductions in time.**

**The benefits associated with management of elements in a database meant that accepted operations – sorting, copying, classifying, counting – could be accomplished using software algorithms. The results of these operations meant that software didn’t mimic intellectual operations performed by experts. Instead, the software could yield the desired results by a different route, The process employed was based on well-established practices:**

1. **Identify issues (ideas) presented by author-specialists.**
2. **Organize these informational elements for further use (the idea database).**
3. **Use these informational elements to develop existing and new descriptions of the topic.**
4. **Employ tools to facilitate these descriptions.**

**The primary differences between expert and computer would then be the methods used and the creative paths adopted. Manual methods are time consuming and involve hidden functions that are difficult to learn. The other, using software, is significantly shortened in time, transparent, and quality controlled. Hence, a change in attitude and behaviors is the basic barrier. The intellectual results required by the expert can be realized without sacrificing time, quality, or transparency. Instead, there is awareness of the creative path and how it was accomplished. The need to exclaim – *Eureka* – or *Wow –* is *in response* to a job successfully accomplished!**