

PM WORLD TODAY – FEATURED PAPER – MARCH 2008

Churchill the Agile Project Manager
Creating Intelligence and Knowledge

Part 19 in the Series

By Mark Kozak-Holland

Most people are very familiar with Winston Churchill but may not be familiar with his “agile” approach to project management and his skills as a PM in the summer of 1940. With an invasion imminent Part 18 looked at how Beaverbrook focused on the problems of fighter production and took an unorthodox approach that brought in ideas and best practices from other industries. This article looks at the second area of the overall project (Part 16) the mechanization and automation of the production of intelligence.

“Knowledge is power” is not a recent quote, it was made in 1597, by Sir Francis Bacon, English philosopher. Knowledge has always been critical in the military, and “intelligence,” has emerged as the most vital military asset. Churchill had to use the limited forces he had at his disposal in the most effective way. He could only do with good enemy intelligence. Knowing the extent of enemy preparation and activity would provide the necessary insight to where and how the enemy was likely to strike and so resources could be better targeted to meet the threat.



Figure 1: Bletchley Park Mansion

Churchill recognized the value of intelligence in battle and was shaped by his previous experiences from the First World War. At Gallipoli in 1915 the lack of reliable intelligence proved a major undoing for him, which crucified his career short term (part 22). Churchill's plan to defeat Turkey out of the war by sending in British warships and troops failed miserably. At Gallipoli, the lack of adequate ground intelligence affected troops as they hit the beaches as they had nowhere to go and were gunned down.

As Churchill came to power in May 1940 he became aware of the secret establishment at Bletchley Park which collected and deciphered encrypted enemy communications (Enigma codes), under Stewart Menzies, the Director of Military Intelligence (MI6). The mansion when it

© 2008 Mark Kozak-Holland

opened in 1938 was located midway between the Universities of Oxford and Cambridge, an ideal source of mathematicians, logicians, for code-breaking.

The first breakthrough was in July 1939 when Polish cryptographers shared with the French and British their Enigma work and results. They had broken codes through commercial Enigma machines and had also developed a mechanical method for finding the ring settings to speed up deciphering. This gave Bletchley a great boost and Enigma was broken in January 1940. But Bletchley was still a fledgling and laborious manual operation, and hit and miss whether messages could be deciphered before an event happened. The time required to break the daily-changing Enigma keys was greatly reduced by Electro-mechanical machines.



Figure 2: Enigma Code

The value of deciphered enemy communications emerged during the Battle of France in May 1940. German Army field commanders filed daily situation reports and British commanders checked their own information against these and built up a more accurate picture. This increased confidence in the potential of this intelligence and greatly raised Bletchley's profile in the military. Prototypes of electro-mechanical computers (Bombes) were completed, based on the Polish idea, under the leadership of Alan Turing (the father of the Turing Machine and a pioneer of computing). Results proved very promising as the operation of deciphering was dramatically sped up. If messages were decrypted in a 24-hour window, this would provide invaluable information on enemy intent and threats, and allow defensive positions to be taken prior to any enemy offensive. A staggering 150 million million million to one were the odds against breaking Enigma so it was unlikely it would be suspected as it was considered highly secure by the Axis.

The necessary investments were made to further automate and scale the operation up as Churchill quickly recognized Bletchley's potential. This was done through more Bombes and the influx of skilled staff which also dramatically optimized the operation. The operation was code named "Ultra", and shrouded in secrecy. A network of listening stations ("Y" Stations) gathered raw wireless signals for processing at Bletchley. The focus at Bletchley was not just on breaking the Enigma code, but as the volume of messages increased putting a significance or priority on key messages going to Chiefs of Staff and Churchill. This proved extremely valuable for the recipients. However, a new unit was set up in the operation to interpret the intelligence, known

as the Shadow OKH. Information was pooled with previous messages to create an enormous bank of organized knowledge.

As a result, of these initiatives:

- Churchill took a deep personal interest in Bletchley and described it as "the goose that laid the golden egg, but didn't cackle."
- To help ensure that Ultra was being used effectively Churchill introduced its systematic use across all 3 military arms. In some situations he was outraged when his commanders did not use it.
- Elaborate security was developed to protect Ultra where Special Liaison Units ensured it went into only to a few key decision-makers to lower risk of discovery.
- Secure direct lines and SLUs were set up to RAF Fighter Command (Bentley Priory) for the use of Air Chief Marshal Hugh Dowding which gave him details of the Luftwaffe order of battle down to individual commanders in the field.
- Ultra intelligence and knowledge could be applied to decision-making, in the War Cabinet and RAF Fighter Command.
- An elaborate decoy system was set up so if actions resulted from Ultra the Axis were fooled in to thinking that the source of intelligence came from elsewhere.
- Ultra was the first concerted efforts to introduce mechanization and automation into the production of intelligence, and Knowledge Management on such a scale.

Churchill took a holistic view of the U.K.'s resources during the war; where intelligence and process integration were clearly greater than the sum of its parts. For Churchill, "knowledge was, indeed, power" and Bletchley Park provided priceless insights into the strategic thinking and tactical intent of the enemy. In a short time Bletchley Park revolutionized warfare and how air wars were going to be fought from that point on.

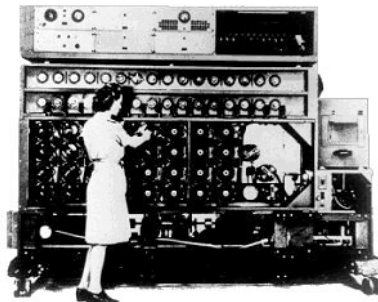


Figure 3: Electro-mechanical Machines (Bombes)

About the Author:***Mark Kozak-Holland****Author*

Mark Kozak-Holland's latest book in the Lessons-From-History series is titled "*Project Lessons from the Great Escape (Luft III)*" <http://www.mmpubs.com/books-LFH.html>. It draws parallels from this event in World War II to today's business challenges. His previous books include "*Churchill's Adaptive Enterprise: Lessons for Business Today*", "*Titanic Lessons for IT Projects*", and "*Avoiding Titanic Disasters: Project Lessons for IT Executives*". Mark is a Senior Business Architect with HP Services and regularly writes and speaks (presentations and workshops) on the subject of emerging technologies and lessons that can be learned from historical projects. He can be contacted via his Web site at www.lessons-from-history.com or via email to mark.kozak-holl@sympatico.ca. Further information on Bletchley Park: <http://www.bletchleypark.org.uk/>

© 2008 Mark Kozak-Holland