From Firefighters to Futurists:

A Practical Roadmap for CI Development

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Many organizations find it troublesome to implement and develop their intelligence programs. Some manage to create a program and run it, but then have difficulty developing it further. Others set the intelligence fundamental pieces (information collection, analysis, information network etc.) in place and operate a large operation. Nevertheless, they have difficulties developing a world-class intelligence operation where intelligence output is included in the key organizational processes (such as strategy, marketing, sales, and product development) and has a clear impact on the decision making and strategies of the organization.

This article presents a framework for implementing and developing a competitive intelligence (CI) function from its first step to becoming a world class intelligence capability. This framework can also be used by CI professionals on all levels to better understand their existing operations and what is needed to develop it further. A case study shows how this approach has been used by Ciba for developing their competitive intelligence program.

INTELLIGENCE DEVELOPMENT ROADMAP

The GIA Intelligence Framework incorporates the development of intelligence into an evolutionary process. When a company first starts an intelligence program, their management cannot expect to have a world class operation immediately. Rather the program's development follows a certain path where at each step or level it encounters some identifiable obstacles which have several solutions. We have identified five levels of growth from the start level to world class level, and six key success factors that moves the program throughout those growth levels.

In the five levels of the intelligence evolution roadmap, the CI manager has a different role in each one. (see Table 1.) Each level contains obstacles that must be overcome before the CI function can move on to the next level.

The same truth applies to all six key success factors (KSF): the further the program advances through the various levels, the more sophisticated process it needs. For instance, at level 2 the intelligence program's scope can be quite narrow, often only focusing on specific issues in the organization's

TABLE 1: FIVE EVOLUTION LEVELS				
Intelligence Levels/ CI Manager Role	Description			
I. Informal CI The Firefighter	Mainly conducts intelligence activities on an ad-hoc basis with little coordination. Few resources, no identified scope and process.			
2. Basic CI The Beginner	Incorporates the first steps toward developing a structured intelligence program. Based on an information needs analysis, studies some basic aspects of its organization's business environment, but still on an ad-hoc approach. Low degree of future orientation and CI culture development.			
3. Intermediate CI The Coordinator	Processes in place including secondary source collection and advanced analysis but still operates within a rather narrow scope. Commonly implements a CI portal. Still little integration into the organization's business processes.			
4. Advanced CI The Manager	Internal CI processes in place, such as an intelligence network and inclusion in organizational decision-making processes. The CI process output is more coordinated and creates a more holistic picture of the organization's business environment.			
5. World class CI The Futurist!	Integrated into key organizational processes and based on sophisticated intelligence products with a high degree of future orientation.			

business environment, whereas on level 5 all aspects of the environment are considered. Table 2 contains an overview of the key success factors any organization needs to master in order to have a strong intelligence process in place.

Combining the six key success factors with the five development levels creates a 30 box matrix. Each box describes a KSF relevant to each of the development steps. To grow the CI function, organizations need to implement the appropriate steps (see Table 3).

By reviewing the development roadmap, you can identify your present status and what is necessary to move it up a level. The roadmap can also help identify the CI function's future objectives. For example, where do want to be in 2 years? The roadmap will then give you clear insights with regards to how to reach that next level.

After completing a status review, CI functions often find themselves working at different levels for each key success factor.

Over time, most CI functions should reach the intermediate level, where the basic intelligence processes are in place. At that level several specific issues arise and they all must be addressed before the organization can move on toward the advanced and world class levels.

ADVANCED AND WORLD CLASS CAPABILITIES

In order to develop advance or world class capabilities, the following aspects needs attention and development.

Co-creation of intelligence. It is not enough to strongly employ external information sources. In addition, the critical signals from the field that needs to be picked up by sales people, general managers and others who spend much time outside the organization must be integrated into the CI information mix. Input from top management (developed through scenario analysis workshops, war games, and other interactive sessions) are also required to improve the content of the intelligence analysis. This co-creation of intelligence obtains a more varied input of information as well as a great tool for affecting the company intelligence culture since it involves participants from the whole organization.

Intelligence scope / intelligence portfolio. The intelligence operation's focus must be broadened to encompass all aspects of the organization's external environment such as politics, macro economic issues, technology, societal trends, etc. Furthermore the depth of intelligence analysis must be greatly increased, as well as developing a future orientation as an analytical output. Examples of such deliverables might be war game reports, scenario analysis, early warning reports, etc.

Intelligence perspectives. The results of intelligence operations carried out by different units often result in parallel tracks that develop multiple intelligence perspectives for the same issue. These outputs should be integrated into a cohesive perspective before being delivered to the intelligence client.

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Organizational culture support. An organizational culture that supports team effort and knowledge sharing, and has organizational stability, curiosity and strategic flexibility can better support intelligence activities. Companies that master this have intelligence education sessions for new employees, conduct internal marketing intelligence campaigns, and master the art of intelligence co-creation.

Key business processes. Integrate intelligence into key business processes such as strategy, innovation, product development, sales, marketing, etc. Without this integration, it is difficult for a CI function to reach the higher levels.

These issues take time to develop or transform. Many are clearly outside the ability of intelligence directors to directly change. However, CI professionals can influence them indirectly through the efforts of other managers who are willing to become involved since the intelligence output clearly supports their business processes or projects.

FROM EVOLUTION TO REVOLUTION

So far we have described an evolutionary framework. What about a revolutionary one? Is it possible to for the intelligence effort to jump several levels? We have seen situations where CI functions have managed to move from level 1 to level 3 quite quickly.

Some companies have started their CI efforts by outsourcing much of the collection, structuring, and analysis of information. This approach can successfully reduce the internal time and resources required to identify information sources, collect external information, structure that same information and develop a system to store and share relevant pieces of intelligence. The CI staff then focused their internal resources on managing internal knowledge and properly integrating the intelligence output into key business processes. Identifying a short-cut from an intermediate position to world class is more difficult, if not impossible

Key Success Factor	Description
CI Process	All organizations have a CI process, whether it is informal of formalized. Initially, the process can be quite simple and will develop over time. It needs to tie into various business processes such as strategy, marketing, sales, business development, etc. to have a major impact.
CI Organization	Have an organization that can handle planning and direction of intelligence operations, information collection, analysis and communication of intelligence. Initially it often starts with the lone CI manager, but in the end can become a quite complex set-up of steering groups, internal and external networks for collection, analysis teams, IT support.
CI Scope	The scope of the CI operations refers to the areas of the business environment that the intelligence process covers (technology, competition, macro issues, customers, suppliers, etc); the depth of analysis; and the degree of future orientation. Normally, the scope is quite narrow, but the intelligence topics become more complex to analyze and to understand.
CI Culture	The development of an organizational culture that supports open communication, teamspirit, information sharing and focus on shared goals. This is one of the hardest issues to affect for a CI manager.
CI Tools	Availability of appropriate tools for management, information collection, analysis, and knowledge sharing. For example, intelligence portals can be tools to tailor-make intelligence for individuals, and to share and integrate external reports with internal signals.
CI Deliverables	Initially, the CI deliverables are often ad-hoc reports that answers a certain question. Regular briefs, newsletters and a shared CI portal are developed over time. In order to reach the advanced level, an intelligence product portfolio containing branded intelligence products for different purposes and different target groups should exist.

TABLE 3: ROADMAP TO WORLD-CLASS CI					
Level KSF	I. Informal	2. Basic	3. Intermediate	4.Advanced	5.World Class
Process	Reactive adhoc process. Uncoordinated information purchases.	Needs analysis. Info collection from secondary sources. Little or no analysis.	Primary information collection. Centralized analysis with limited scope.	Complete market monitoring. Advanced analysis. Targeted output to key people.	Integrated into key business processes. Applied to key decisions. Future oriented analysis. Early warning.
Organization	No dedicated resources. Unstructured activities.	One person responsible. Increased coordination. External Info providers.	Full time activity coordinator. Centralized info collection. Basic analysis.	Network with dedicated resources in BUs. Outsourcing. Access to localized primary information.	Integration of internal and external efforts. Oriented on key decision making. Steering group.
Scope	No focus. Ad-hoc needs driven.	Limited with quick wins. Increased coordination. External provider relationship.	General. Covers comprehensive business environment.	In-depth. Specific topics and issues within BUs and Functions.	Future-oriented. Focus outside micro-business environment.
Culture	Not understanding value of systematic efforts.	Some awareness. Overall neutral view.	Higher awareness. Shared view of importance. Encourages information sharing.	Increased participation. Top management engagement and support.	Comprehensive support. C-level support.
Tools	E-mails. Shared folders on server.	Corporate intranet for central posting deliverables.	Web-based portal. Structured access to public information.	Fully integrated content production. Alert generation.	Intelligence process support. Collaboration features for end users.
Deliverables	Ad-hoc.	Newsletters.	Structured reports, profiles.	Personalized alerts. Deep-dive analysis. Presentations to targeted audience.	Analyst commentary. Scheduled analysis. Analysis integrated with key decisions.

since it involves the participation of many persons and relates to all key success factors.

CIBA CASE STUDY

(Note: this section of the article was authored by Jens Thieme.) When I ended my first year as the global head of competitive intelligence at Ciba in mid-2007 we had made major progress in:

• researching CI best practices

- selecting the right model (a hybrid of global conceptual lead, strategy and support with decentralized analysis and business planning as core CI impact drivers)
- educating of some 700 marketers in terms of basic CI tools and techniques

Moreover our defined key intelligence topics drove intelligence gathering efforts and provided the basis for our intelligence dissemination system's taxonomy and business planning templates. Enriched with analysis tools, this effort

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formed the very core of our newly targeted market and customer orientation as a company.

Hitting a Wall

However, after completing this first major wave of basic improvements, the advancement of the intelligence effort stalled when we tried to develop refinements that created more professional, sophisticated, and effective decision-making support. CI was one among the countless initiatives within the company that were redefining their business model at the time. In addition, many marketers and executives were content with the existing intelligence improvements and had moved their attention away from the CI developments that were still required. But the development of a global CI function had only just begun.

At this time I attended a panel discussion at the 2007 SCIP European Summit in Bad Nauheim, Germany, which was facilitated by Hans Hedin. His introduction of the intelligence development roadmap provided a way to easily compare the various evolution levels of a CI organization and was perfectly suited to visualize the current intelligence effort in my company.

Convinced that I found a very effective guide for this effort, I planned to evaluate our current level of progress by applying the intelligence development roadmap and also use it as a tool to show my management that our global CI program still required improvement to provide them with optimum CI outputs.

Decision-makers Want to Take Decisions – Let Them Find the Problems First

Behind any of the roadmap's key success factors and their evolution levels are multiple potential solutions, methodologies, tools, and initiatives. By transforming the status descriptions into questions that reflected my company's own environment and internal terminology, I created an intelligence questionnaire for all of our marketers. (See Sidebar 1 for an example of one of the questions developed for the key success factor for CI processes. Similar questions were created for all factors.)

Using this online survey, I asked more than 70 marketing managers across the company to evaluate how they currently experienced the various intelligence key success factors. Any business activity is conducted, experienced and valued differently across multiple departments and geographies, and this was especially true within a hybrid CI model and an organization of this size. The survey was designed to clearly unveil such gaps and variances. The complete survey provided a very realistic picture of how our key intelligence users experienced every single CI feature.

I then presented a table of the survey results to our global marketing and sales board, whose members were executives from the ten business lines (see Table 4). Based

on these survey results our management could apply the roadmap to clearly compare the perceived intelligence status with characteristics of more advanced functions. Asking the question "Are we happy with CI processes in advanced state while our deliverables are not that far advanced yet?" triggered very clear reactions and even immediate suggestions on how to address certain situations and issues shown in the results matrix. Table 4 shows how the survey results were plotted into the roadmap table to visualize out own input. Shading the plot areas according to the percentage of responses clearly showed trends and hot spots.

A Clear Mandate to Fix the Status Quo

The resulting discussions created a mandate for specific actions to fill all the gaps identified by the survey. Management also decided to actively move our CI operations toward world-class status. Many specific suggestions arose during the discussions. For instance:

- Establish CI liaisons who supported marketers in the regions (CI organization).
- Place a CI toolbox on the intranet to provide easy access to all available intelligence tools and templates for the entire marketing and sales organization.
- Demonstrate the value of existing deliverables and expand them throughout the company.

Each of those many suggestions provided a helpful step towards establishing more and better intelligence deliverables and tools

To guide the development of our Key Success Factors we created a target map (see Table 5). With the many ideas

SIDEBAR 1: EXAMPLE OF QUESTIONNAIRE FOR CI PROCESSES

Question:

How do our intelligence processes work to meet your needs?

Answers:

- Ad-hoc process. Reactive, "putting out fires." Uncoordinated information purchases.
- Needs analysis are made. Information collection from secondary external sources. Little or no analysis though.
- Secondary information is complemented with some primary collection of info. Basic thorough analysis is done with limited scope.
- Complete market monitoring and advanced analysis processes. Intelligence drives structured discussions and decision processes.
- Intelligence is integrated with the key business processes and all key decisions. Scenarios, early warnings, risk assessments are being done.

Level		2.	3.		5.
	Informal CI	Basic CI	Intermediate CI	Advanced CI	World Class Cl
CI Process	18%	34%	38%	3%	7%
CI Organization	52%	31%	7%	4%	6%
CI Scope	4%	43%	40%	10%	3%
CI Culture	3%	57%	32%	5%	1%
Ci Tools	37%	48%	8%	3%	4%
CI Deliverables	34%	28%	26%	7%	6%

[Note: percentages do not represent actual survey results.]

Management measures and leads through actionable targeting. Based on the Intelligence Development Roadmap, this approach provided direction for future CI developments. Management supported the process of developing the function further because we could show them where we are at, have them decide how far they want to see it develop, and offer a simple way of measuring progress by repeating the same survey annually.

This approach had an additional benefit: Whenever someone tried to push back after the decisions are made (happens at times, doesn't it?), you can easily say: "Look, this is 100% reality. These are the gaps YOU identified and the measures YOU selected for improvements. When we stick to it YOU can gain the full benefits."

Use the framework to inform your CEO

You can also use the framework in another way to create the best (or at least a good) starting impact. Show the framework to your CEO and ask

generated by senior managers of the Marketing and Sales board, and additional discussions with other intelligence requestors to improve all Key Success Factors, we clearly needed to set priorities and maintain focus. We conducted individual discussions with the business unit representatives to obtain their evaluation of all options and applied a simple rating system that identified the areas of most importance and value to these stakeholders.

Finally, our marketing and sales board selected the top eight major initiatives to implement. We still had many ideas left for a later developmental phase. By applying this process and methodology we established a standard for ourselves that would be applied repeatedly as a baseline for measuring our CI evolution.

Make it Stick

To make the entire effort sustainable and to further strengthen executive management's support, we conducted another small, strategic survey with the Marketing and Sales board (see Sidebar 2). This survey was designed to evaluate the strategic significance and perceived value of CI among those key decision-makers.

This survey (you could call it 'Strategic Significance of CI,' 'Strategic Impact of CI,' provided important insights as to how deeply involved and how conscious management was at the time regarding our CI efforts and developments. This effort identified even more areas for CI to improve, such as communication efforts and linking CI deliverables with final decision making.

TABLE 5: SAMPLE TARGET MAP		
Key Success Factor	Targeted Evolution Level	
Process	Drive intelligence requirements by established processes such as business planning, project framework, etc. Operational processes to support CI.	
Organization	Develop skilled professionals to satisfy intelligence needs and grow with changing demand. Strengthen sponsorship, steering, and leadership control.	
Scope	Provide constant access to chosen insights (business areas, geographies, scenarios, etc.).	
Culture	Manage awareness, understanding and expectations. Management needs to walk the talk.	
Tools	Acquire a selection of analytical and supportive tools, and consistently maintain and improve them.	
Deliverables	Serve intelligence users the most suitable intelligence products on time.	

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SIDEBAR 2: THE STRATEGIC IMPACT OF CI: **SAMPLE QUESTION**

Question: Is our CI function ready to achieve strategic impact? (Please choose applicable answers.)

- There is a written and well known Vision statement for the CI function.
- The Vision statement for CI indicates how CI will operate strategically, tactically and functionally.
- The CI function offers a portfolio of CI services to cover the needs of intelligence users at strategic, business and tactical
- Either a single senior manager or a steering group of senior managers (as appropriate) is appointed to exercise strategic control and sponsorship of the development and operation
- · CI indicates how the intelligence function will interact with other CI functions in the wider organization (where this
- · None of the above or very limited.
- · Unknown.

which level of CI capability the company should be at within the next two years.

We would be much surprised if the answer indicated satisfaction with level 1 through 3. A more likely answer would be level 3 or 4, with the goal of reaching level 5 in an additional two years. You can then use this statement to ensure that these objectives receive the commitment and resources needed to reach them.

In its simplicity the framework provides a clear picture of a CI program's capabilities at different levels. This clarity can often be difficult for top management to develop concerning an intelligence program, at least in the beginning of the process. We hope that this framework will work as an illuminating perspective.

[Author's note: The GIA Evolution Roadmap framework is based on research conducted during 2005-2008. Altogether over 700 companies took part in these studies, and their input has been used to verify the roadmap concept. In addition many companies, such as Ciba, have tested the concept.

We would also like to recognize the excellent research conducted by John Prescott as well as the inspiring stories of Benjamin Gilad. From a European perspective, we are also indebted to the work of Sven Hamrefors, Klaus Solein and Magnus Hoppe, as well as the late Stevan Dedijer, "the Grandfather of intelligence," who started the elusive search of the key success factors for intelligence at Lund university in Sweden in the late 1970's].

REFERENCES

- GIA White Paper (2008). MI for the Strategy Process -Company Cases featuring ABB, Shell, Luvata and Lassila & Tikkanoja.
- GIA White Paper (2008). MI for the Innovation- and Product Life Cycle Process - Company Cases featuring Pirelli, DSM and Boerhinger Ingelheim.
- GIA White Paper (2008). MI for the Customer Process -Company Cases featuring Cisco, Tetra Pak, MAG, and de Telefoongijdes.
- GIA Global MI Study (2005). Interviews with companies in order to identify best practices and intelligence status.
- GIA Global MI Study (2007). Interviews with companies in order to identify best practices and intelligence status.
- GIA Global MI Survey (2008). Survey based on the GIA Intelligence Roadmap Framework.
- Hedin, Hans (2008). "Key success factors for intelligence," Stockholm Intelligence Conference
- Hedin, Hans (2008). "Benchmarking among peer companies," SCIP European Competitive Intelligence Summit, Rome, Italy, October 20-22.
- Thieme, Jens (2008). "Structured executive buy-in to competitive intelligence," Global Intelligence Alliance CI Seminar & Workshop, Helsinki, May.

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