Creating Effective Global Teams

by

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CREATING EFFECTIVE GLOBAL TEAMS

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ABSTRACT

This thesis examines various aspects of high performance, globally dispersed teams through an in-depth case study. Aspects explored include:

- Understanding the leadership role in teams where members are physically dispersed,

- Learning how to build and maintain trust within teams that are not located together,

- Examining preparatory steps and management actions that enhance the success of dispersed teams,

- Understanding the relationship between social and technical team activities and

- Learning how technology, physical space and organizational issues influence the performance of distributed teams.

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INTRODUCTION

Teams are difficult to manage when the members are at the same location. Members of teams dispersed throughout the world are a level of magnitude more difficult to manage. Global teams in which some members flow in and out of the team depending on specific deliverable tasks add yet another level of complexity.

Sound advice dictates if global teams are not required to succeed, it is preferable to work locally. However, global teams offer significant strategic advantages. A company that mandates global teams are essential to long-term success can enact a structure and build core global team management competency skills that can provide a significant edge in today’s rapidly changing global marketplace. An enacted structure includes technological, social, political, strategic, and cultural elements.

This thesis is centered on a case study of a globally dispersed team. Through interviews, team dynamics are analyzed in the context of global team theory. The team is dissected from a microscopic perspective by examining the structure and interaction within the team itself. The team is also placed in the context of the organization in which it resides. i.e., a broader organizational analysis framework is applied to assess how organizational and team dynamics are linked and influence each other.

In the first chapter, field research is reported from each individual national perspective. This approach will underscore how national perspectives are rational in themselves and coherent with the local contingencies. At the same time, it will also become evident how the real challenge deriving from the global nature of the project resides in the potential mismatch among the several local perspectives.
The second chapter will examine the team as a whole, focusing on the actual team dynamics. Although globalization has become only lately a major subject of research\(^1\), some conclusions have already been reached in terms of "best practices" for a global team\(^2\). These early findings will be used to identify some of the case-study team practices that currently do not fit the "ideal global team paradigm."

Finally, the third chapter will address the relationship between the specific case study team and its broader organizational context. This approach derives from the assumption that merely comparing actual practices with an ideal type of global team might lead to thinking in terms of pathological or irrational practices. To the contrary, it is the authors' belief that any practice has a rationale that must be understood prior to any assessment or intervention\(^3\). To this purpose, a classical framework for organizational analysis will be forged\(^4\).

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CHAPTER I

The Field Research

1.1 Company Background

The organization studied is called Alpha Corporation in order to mask the identity. Alpha Corporation is currently a division of a major manufacturing company, most likely to become an independent entity in the near future through a pending spin-off.

Alpha operates globally with over 15 strategic business units (SBUs) reporting to five operating divisions. Commodity products divide the SBUs. The company is also organized by technology functions in an effort to enable capabilities transfer across SBUs. The marketing and sales organization resides outside of the operating divisions with a separate reporting chain to the executive team. The organizational structure is shown in figure 1.

1.2 Strategic Issues Facing The Company

With the incipient independence, the environment of the company will change from an exclusive supplier relationship to a competitive marketplace. Company Alpha will then be required to change its current reactive mode of operations into a proactive one. Currently the company delivers on products and changes requested by the parent company. In the future the company will need to anticipate multiple customers’ needs on a larger scale and to develop platforms to deliver versions requested by each independent customer. Platforms are complicated by regional characteristics of new customers. Manufactures in the industry are seeking to reduce the number of suppliers: from about 1200 per product in the recent past, the number is rapidly approaching 350, but should become as low as 100 suppliers per product in the near future.
Currently, company Alpha is primarily a United States-centered company, but it anticipates expanding the foreign customer base. To build a diverse revenue stream prior to becoming independent, the Company is actively seeking contracts both from manufacturers of the final product and from systems integrators. So, despite its intention to move to being a system integrator in the value-chain, Alpha is still for many respects a component supplier.

The strategic issues and objectives facing the company will require new skills and a new business model. The company identity requires a shift from that of a component supplier to that of a system integrator, from a cost driven focus to an innovator focus, from being technology-centered to being customer centered.
1.3 Team Background

The team studied spanned two strategic business units because this particular commodity was also divided by geographical boundaries. U.S./Asia comprise one SBU and Europe/South America another. An organizational change dividing the SBU geographically took place after the team was first formed. Chart 1 indicates the position of each team member interviewed. Thirty-two interviews were conducted in four locations: fifteen in the United States, nine at the European design center, five at the European manufacturing plant and three at the office located in the same city as the customer. Each European office was in a different country. Figure 2 illustrates the organizational structure of the team and each team member's reporting chain. A matrix structure is evident, with each team member reporting to both a team leader and functional manager. As the chart illustrates, the team crosses many functional and organizational boundaries. There are almost as many stakeholders as there are team members.

To a significant degree, virtual teams are self-managing. To be successful in virtual groups, people must have much more independence and decision-making capability than people typically do in bureaucracies. People who form teams that cross boundaries need to know more, decide more, do more. This is made possible by clear purpose and personal commitments together with open, accessible, comprehensive information environments.\(^5\)

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Chart 1: List of Interviews

SITE I (U.S. Design Center)
Platform team leader – Project team leader
Process leader
Electrical engineer
Core mechanical engineer
Lead electrical engineer
Core electrical engineer
Core electrical engineer
Core electrical engineer
Core mechanical engineer
Core mechanical engineer
Core electrical engineer
Simultaneous engineer (plant representative)
Software engineer
Lead mechanical engineer
Electrical engineer
Mechanical engineering supervisor

SITE II (Europe Design Center)
Platform European leader – Project manager
Software engineer
MCAD designer
Senior mechanical engineer
Electrical engineer
Senior electrical engineer
Product assurance engineer
Reliability engineer
Department manager

SITE III (European Manufacturing Plant)
Project leader
Senior mechanical product engineer - Final assembly
New business product leader
Industrial engineer
Manufacturing mechanical engineer

SITE IV (European Customer Office)
Program manager
Project applications engineer
Global account manager
Figure 2: Team Structure

LEGENDA

- Team Leader
- Reporting Manager
- Functional Manager
- Full-time Member
- Part-time Member
- Team Boundaries
This team formed without a clear directive, and is delivering on a project without commitment from some stakeholders. The members are quite experienced and, for the most part, are self-managed.

**Figure 3** highlights the role of each geographical area. The project the team is working on began with negotiations to sell a new product to a new customer. The product is based on new platform of components that are being designed concurrently with the first product. The customer is based in one European country. The SBU management and product design personnel are based in another European country, and the manufacturing facility is in yet another European country. Due to lack of design personnel, the U.S. organization was requested to perform portion of the work to complete the team. There are local team leaders at each site. Deliverables and tasks are divided among the various physical locations.

A further complication centers on the deliverable product. There are actually two interrelated teams. The first team is developing a "product platform" to bookshelf elements for multiple products. The second team is developing the first product comprised of the book-shelved platform components. The teams ramped up slowly, and the first customer for the product platform occurred before the platform was completed, requiring the platform to be developed simultaneously with the first product from the platform. The project has a team leader at both the European design center and in the U.S., as well leaders to interface with the customer and the manufacturing plant. The structure indicates a regional platform for each market could evolve with many common elements. At times team members are unclear as to whether they are working on the first customer product, a regional/global platform, or both.
Figure 3: Geographic Location Roles

MANUFACTURING
- Prototype Build
- Costing Input
- Coordination with Suppliers
- Verifying Design and Parts for Production

DESIGN AND PRODUCT DEVELOPMENT
(North America)
- Electronic Design
- Mechanical Design
- Mechanism Design
- Parts Specification
- Components Design
- Software Development

DESIGN AND PRODUCT DEVELOPMENT
(Europe)
- Physical Interface Design
- Software Design
- Quality Assurance
- Performance Testing

CUSTOMER RELATIONS
- Sales
- Pricing
- Product Specifications
- Contracts
- Program Coordination
- Customer Support
1.4 The United States Perspective

"Have you had lunch?"

The U.S. team leader, referred to as Jim, who facilitated the study welcomes us with, at once, relief and uneasiness. A colleague of his had told him that a previous study conducted by MIT researchers had added value to the team and he is looking forward to a similar experience.

Jim has organized a series of interviews, both in the U.S. and at the international sites involved in the project he is co-leading. He refers to "co-leading," because there are multiple leaders, and even multiple interrelated projects:

- One project designed to coordinate the development of a "platform" for future products destined to the intermediate market niche and

- The other project is the development of the first product derived from the platform concept.

Consultants developed the platform concept at the end of 1998. They segmented the market, demonstrated how current product lines were positioned in each niche, and how those products shifted and clustered in the niches. "Core groups," sort of functional "silos" representing the engineering specialties required to develop the product, began thinking in terms of "platform," i.e., how to create families of parts and common concepts out of the several independent product lines active at the time. To integrate the "silo" perspective, in April 1999 a "platform team" was created appointing a team leader address the requirements for the intermediate niche of the market.

Initially, the team leader could not devote much time to the project because he was still engaged in another project. But he started interviewing specialists in the core groups to recruit team members. Incrementally, and with some difficulty, the team leader was able to recruit three engineers by the end of 1999.
The task is challenging: those on the team believe that the future is in the platform approach and no longer in individually designed products. The entire division is looking at this project: it is a new approach, radically different from the past in that there is no specific requirement from the customer to fulfill i.e., everything must be invented thinking of potential products for imaginary customers. This is quite difficult, particularly for design engineers accustomed to working on demand. The platform is just an abstract concept for most of them. In addition, the leader will have to work across the functional core groups and the current product teams to find and foster synergies, and build on them to change the way engineers approach their work. If matrixes were not complex enough and at times frustrating, this organization looks even more threatening similar to a “cube organization.”

Knowledge sharing should be one of the first priorities. Talking among specialty groups and among product lines seems to be the only reasonable way to build a common understanding of the platform challenge. Within this context, about a year ago a core group leader established an “engineering knowledge base” (EKB), a sort of chat-room or message board where any engineer from any group could post questions, find answers and share lessons learned about technical problems. But the initiative has not been successful this far. The need for the EKB is apparent, but the dominant attitude is clearly evident by the words of an experienced engineer: “If you put something on the EKB, it means that you have a problem, and, you know, my job is not to have problems.”

The first outside customer has been announced from Europe. The customer requirements fit the intermediate market niche. It will be the first “platform product”. But there is no platform yet. “It is a real pity, this customer has come in too early.” “No, no: it is real luck because now we have a real customer to understand the requirements of this niche and build the platform
around it." The feelings are mixed among the engineers. This reflects some confusion around the platform concept itself. Some talk about it as a "real" thing, like a standard "rear box", that requires only a customized physical front interface for each product and customer, while others consider it just a conceptual framework, a series of general rules and bookshelves to apply in each individual implementation. Some think of it as a horizontal "product platform", integrating the several specialized contributions from the core groups, while others consider it as a sort of vertical standardization within each individual functional core group.

To make the platform even fuzzier, a re-organization has recently split the division into distinct, regional business units (BU). Europe is now separated from North America. Despite the technical differences required by the regional environments where the products will have to operate, it is a general conviction that a global platform is both possible and preferable. Will a common platform be the goal or will each BU develop its own concept? Perhaps Europe will even retain the single product approach. Nobody knows, nobody told them and the uncertainty between global and regional platforms undermines the relationship with the European colleagues: "Had the European SBU had the resources, they would have never asked for our help". "Sometimes the U.S. team members feel circumvented by the European design center."

Part of this discomfort comes from the general perception that the best market opportunities will be in Europe. As potential growth ends, they will have the lead, and the future is theirs. Everybody talks about the spin-off; everywhere there are newspaper articles on the boards with updates about it. Some think it is a good opportunity, but in general, though, the morale is down and some engineers are already leaving.

The pressure precipitated by the presence of a European customer has shifted the focus from the big organizational picture and the long-term platform approach, to the very short-term
requirements of building the prototype for the new customer next month. Nobody really talks anymore of a “platform team,” instead feeling fully committed to the “first customer team.”

This is contrary to the official objectives of the unit. Since North America was separated from Europe, management has been fully committed to ensuring the profitability of the unit, dedicating resources to the benefit of a different business unit is not exactly their first priority. However, the cross-unit cooperation is strongly desired by the engineers and some of their supervisors, and they are fully committed to successfully delivering the first product destined to an outside customer. Many of them care about the company as a whole, irrespective of the side of the ocean where the money will flow. They want to contribute to its well being. Others think that this is a fundamental step for the transition to a platform concept. Others are just pleased to be working on a challenging project because developing a product is like making a puzzle--“It's fun: you put all the pieces together … and it works!”

One engineer on the team has watched the project’s birth. He was in Europe for a three-year international assignment at the time the business was sourced. This practice is nearly over. Budget constraints have already brought on some restrictions, and now the reorganization makes it unlikely that employees will be sent overseas. Every engineer disagrees. When you know the people with whom you are working, you understand each other better.

Technology helps communicating effectively. The weekly videoconference is useful, albeit somewhat formal. The net meeting recently set between the two co-leaders has added flexibility, allowing quick and unscheduled mini-meetings that take place on request. Working on the same CAD file while talking on the phone has turned out to be extremely effective. However, nothing seems to be a good substitute for face-to-face exchanges. Some still remember the difficulties and have mistrust at the initial phase of the project. Then the European co-leader
came to the U.S., in fact, he had to come three times before the relationship started to be smoother.

At the time, the two co-leaders agreed to the respective responsibilities of their two design centers for the project. This seems to have been a critical success factor. There is still some gray area, though, particularly when communicating through e-mail. A comprehensive list of direct and “cc” addresses are often used, so that everybody is always well informed. But this causes some misunderstandings e.g., non-requested actions are sometimes undertaken, while highly needed responses are not always given. The U.S. team leader has felt the need to draft a “communication protocol document,” but he does not know if the protocol initiative would be supported.

Although some complain about “lousy agendas,” “a lack of strategy” and “too little structure,” everybody is fully convinced that the product will be delivered on time and will be successful. Some engineers attribute this achievement primarily to the two leaders. They seem to complement each other: where the European is considered to be a “hammer-type” leader, the U.S. leader is seemed to be more of a “resource-kind” of leader.

The two leaders cannot solve everything, though. The major uncertainty relates to the business itself. In fact, there is a strong perception that the business has not really been sourced and that the price has not been agreed. Thus, all this work and effort could end up in an unprofitable business, or possibly not building production units. Perhaps it is because of the customer practices are very different from the usual way of the parent company that the engineers know so well. Information and requirements often arrive late, and lack the necessary level of details. The U.S. team associated the lack of information with the customer interface personnel and have not considered the possible differences of the customer. The difference from
dealing with the traditional parent-customer has caused frustration, which, at times, has been channeled toward the interface personnel.

The U.S. business unit is not deriving any direct profitability benefit from the current project. As a consequence, senior management has a lower level of commitment to the specific product design. However, the feeling is that the reporting manager is confident that the goal that he really cares about – the platform – will be achieved.

1.5 European Design Center Perspective

The European design center is much smaller than the one in the U.S. In the U.S., all the engineers share the same single space. In one corner are the CAD designers; in another are the electrical engineers, the mechanical engineers, the quality experts, and the business developers. Only the software engineers and the lab engineers have separate space because of their need to integrate desk jobs with technical trials. In the middle of the common space is the cubicle of the project leader. He really has immediate access to any person or information that he needs. Even the manager is in the same space. This favors daily contacts between the manager and the team, and helps keep the mutual commitment high. Actually, this design center has the strongest ownership of the first platform project. Profit and loss responsibility for the project product resides with the European SBU.

Here the project and the platform are “a real thing,” not just conceptual work. There is no ambiguity. The leader of the project for the first customer is also leading the platform development. As more and more businesses are being sourced, his workload, and that of the center engineers are increasing. The project leader is currently completing an annual resource planning exercise and there is the strong feeling that the European centers design capabilities
have been saturated. The manager could need to withdraw from the day-to-day operations of individual projects, delegating responsibility to some engineers and concentrating his efforts instead on the coordination of those projects.

Despite these organizational uncertainties, morale is high. The businesses that are coming today are the result of a proactive sales strategy that the European center launched last year. In the U.S., the future does not look gray, rather it is generally seen as a major opportunity because the European market offers the greatest growth potential.

Moreover, a sense of liberation pervades the environment. Now that Europe is a separate entity from the U.S., the general conviction is that greater flexibility and autonomy will allow the European SBU to capture more and more business. However, most of the personnel interviewed from this SBU feel it does not make sense to be a separate this business unit from the U.S. On a personal basis, there is no problem in working with the U.S. colleagues. There is also some case of direct knowledge because of previous common experiences during an international assignment. However, some unfairness is perceived in the compensation structure, and there is consideration being given to building resources on-site to achieve complete autonomy from the U.S.

This plan could be a long and difficult assignment, considering the job market as well as the location of the office. Hiring procedures add another level of complexity. On one occasion, the team leader had to take personal responsibility to take a chance and hire an engineer from a high-tech company who wanted to move to this area because of his companion. Waiting for the full process would have passed this good opportunity to other firms.

The shortage of engineers has made the request for U.S. support necessary, including the area of software development. The original programmer arrived from the U.S. and spent three
months working on the project and interfacing with the customer. Before the module had been completed, his functional supervisor decided that he had to work on another project. Left without enough programming resources to keep up with the rest of the development, the team may have to outsource part of the work. Outsourcing would add another physical location to the product development team thus increasing the number of physical locations working on the project from five to six—four company locations, the outsourced front-end manufacturing to an Asian supplier, plus the outsourced software location.

An internal software developer has been assigned to the project. He is attempting to catch-up, but it takes time to understand the U.S. approach. Even the way they draw electronic schematics is different. In the U.S. each module has a separate schematic, so that a unit is represented by a “book” of schematics, here, in Europe, they use a single sheet of paper for the entire unit. Having two different systems makes it more difficult to find the necessary connections and really understand how the whole system relates to the software. In the U.S. there is a great deal of the mutual learning and helping out that usually characterizes the “communities of practice.” Software engineers are very much willing and used to sharing experiences and support each other to solve unusual technical challenges.

In terms of communication, there are some asymmetric patterns. While the U.S. team feels free to contact directly whomever possesses the relevant information, in Europe the leader tends to relate to the U.S. leader first (“they are his engineers”). On the other hand, it is clear that a European engineer feels like a coordinator, a hub, when in reality communication flows freely to the end destination and eventually in parallel to him, making his efforts overlap with others.

6"Community of practice" is a concept and a living context on which Etienne Wenger (Communities of Practice, Cambridge University Press, 1998) founds her social theory of learning, integrating learning as experience meaning, learning as doing (practice), learning as belonging/community and learning as becoming(identity).
“Shot-gun” emails\(^7\) are seen as a disturbance, and someone is used to sifting them by source: so “unqualified” senders have very little chance to have their messages read. Finally, time zones are considered more as a hindrance, because “you can’t solve your problems on the spot” the possibility to use different time zones as an advantage is not broadly exploited.

I.6 The Manufacturing Plant Perspective

“Tomorrow morning, don’t call for a taxi. You never know what they charge you. I will send you a car with agreed fares … and by the way, if you plan to go out for dinner tonight, I would strongly recommend this restaurant to you. They have great food and the best music.”

We are in a Latin country, and the local project leader seems to perfectly represent what one would expect—warm, concerned about our leisure time, doing his best to give us a good impression of his country. Our first direct contact from the U.S. site had not been so friendly, though. Having received notice of this study from the U.S. leader, the project leader thought we were going to conduct some sort of “audit” activity for the project. Once it had been clear to him that the purpose of the interviews was just research, then things cleared up and the Latin project leader has made himself fully available.

Just two months ago, the Latin project leader was appointed at the manufacturing plant, because management of the plant thought that the project had reached a phase in which more care and coordination were required. This is his first project as a leader and he has no previous management experience. But he is highly motivated and completely committed to the project, which he perceives to be more important than the previous ones. It is part of the new strategy, “It

\(^7\) Sending a message to many people simultaneously, without a clear answer to the question “with whom do I need to communicate?”
will be the first product for the future,” with new technology and a great deal of effort and a “We have to get it right the first time” attitude.

However, the general attention of the plant is still focused elsewhere. This project has yet to be sourced and remains in the “structure prototype” phase. When the business is confirmed and funds released, then it will pass to the “Confirmation Prototype” phase and more commitment will be ensured. For now, a supervisor has even been told to keep this project low priority and maintain concentration on the current ones.

Curiously enough, everybody thinks that the manufacturing issues should be considered from the early stages of the product development. Design engineers would design everything … they have good brains,” but their view is “static” and centered on the performance of the “whole product.” They do not really care whether that product could be actually manufactured. That is why you need manufacturing experts looking at the “dynamic process.” Some tension is inevitable, and there has even been some open argument. But now, the relationship is satisfactory because there is the perception that the manufacturing issues “are listened to.”

Despite the clear need for an early involvement of manufacturing, if the plant is involved at the early stages of the project its commitment to the joint development cannot be very high because the attention and the pressure are mainly destined to whatever is under current production.

Given this attitude, it is not surprising that the local reference for the project changes overtime. An expert engineer from the final assembly line maintained the initial contacts with the U.S. and European design centers. Then a business development employee was involved for the business-related issues. Lately, a local project leader has been appointed to coordinate plant related issues. The challenge for him is trying to catch up with all the several streams of activities
already in place for the project, to coordinate them to ensure that everything is ready for the first prototype to be built at the end of next month. He is attempting to raise local attention for the project, to pull the interested people together for the weekly videoconference with the remote design centers and to be a reliable reference for the local communication web. He really feels like he owns the project, but his leadership still needs to be acknowledged by some components both locally and in the remote sites.

The enthusiasm and increasing commitment of the project leader seem to differ somehow from the general trend of the plant’s mood. At the beginning things were fine, but now there is some absenteeism. Someone points at the management practices, which changed when a North American manager replaced the first plant manager from South America.

This negative trend may change though. The spin-off will bring many opportunities and more businesses. More product lines will eventually be activated. If necessary, a third manufacturing building can be built. There is already a plan in place to modify the organizational structure. All the current models will be grouped under the same unit, and the future models will be dealt with separately. The change could mean that some design engineering capability could be located at the manufacturing plant as well for engineers to make modifications required on the current models. The perception is that the U.S. center will retain the core of the design responsibilities, while part of the European design center could be redeployed and integrated at the manufacturing site.

This envisioned growth of the local responsibilities would satisfy the dominant feeling against any form of interference. When someone thought of creating a manufacturing center of excellence in North America, where new processes were to be studied for an application
company-wide, the personnel were not very happy: "We are the ones who know the process and the people, and "We want to manage with no third parties involved."

1.7 European Customer Office

The customer relations' office is situated in a different European country. In this office, the community is small, but the certainty great. This project is everything they care about. Actually, they all owe this project a great part of their recent fortune. The program manager was a sales engineer until he sourced the business; the development engineer has been hired three months ago to follow this project; and even the global account manager has just joined the company to build a steady relationship with the customer after this initial project had been launched.

The commitment is really high, as well as the pressure. The first deadlines are coming soon and still many details remain to be defined, e.g., ever-changing requirements and the final price. It is difficult to have the customer make some decisions. The executives seem very risk-averse, and to get them to explicitly take a position on any issue is difficult. The new engineer is doing his best; he is even calling for meetings on some key topics, but results are scarce. When design engineers from the U.S. and its European centers call or send e-mails seeking information, it can take days for him to receive answers.

Part of the pressure derives from the great disparity between responsibilities of the program manager and his real authority. He indicated he is responsible "for investments, program budget, control of engineering, cost and materials, deliverables, pricing, and to look for new business opportunities" with the customer. However, it is clear that the authority to accomplish some of these responsibilities is completely out of his control.
Despite that, from the customer perspective, there is no doubt. He is responsible for the project. In reality, having sourced the business, the program manager must have to negotiate with the project leader at the design center about resources and scheduling. Now, having hired the new engineer, he feels that he can devote more time in the “backroom,” where design and development are conducted. He has been working long hours for the last few months, spending 50% of this time at the design center and 50% at the customer site.

Paradoxically, the customer interface personnel play a key role and all the information flows through them. But they are partially isolated from the rest of the team and the company. The marketing manager, who is also co-located, has no formal relationship with the SBU: he is only concerned about future sales opportunities. The European design center has many things to do. More and more businesses are coming, and the leader there cannot be engaged in just a single project. The U.S. design center is perceived as having more responsibilities in this project, but its engineers do not consider the customer’s perspective. It is frustrating. Team members interfacing with the customer do their best to meet expectations, but it is difficult because they from other locations and do not understand what is going on with the customer.
CHAPTER II

“Global Teams Theory” Perspective

This study has the structural characteristics of a “global team”--managers and specialists with various areas of expertise, based in four different sites across four countries and two continents, working together for a specific task, meeting and communicating via non face-to-face interactions across different time-zones.

In this chapter, we will review the dynamics of the team considered as a whole, focusing on some of the key elements of an effective global team. This will help assess the observed practices against the “best practices” indicated by previous investigations.\(^8\)

II.1 Roles And Responsibilities

“There are four aspects of a team member’s role:

- Role expectation – what others think the person is responsible for and how he or she should do it.
- Role conception – what the person thinks his or her job is, and how he or she has been ‘taught’ to do it.
- Role acceptance – what the person is willing to do.
- Role behavior – what the person actually does."\(^9\)

“Role expectation” and “conception” are not always aligned in this team; however, “... the Team Alignment Process is critical for world-class teams because they face particular issues related to the remote locations of the team members and to their multiple reporting relationships.”\(^10\)

\(^8\)For information on previous researches, see reference list.
\(^10\)Tbid, pp. 188-89.
The structure itself is complex. There are two projects with overlapping members as well as local leaders with overlapping responsibilities at the U.S. and European design centers. This results in some confusion related to project ownership, identity and boundaries.

The project ramped up slowly. Personnel were brought into the team as needed, and no “kick-off meeting” was ever held. Clear team identity and strong ties among team members were absent. When members were asked what team they were on and who else was on the team, responses varied. Some only saw themselves as part of a local team while others did not identify with the platform team to which they formally belonged, and only thought of themselves as part of a product development team. This raises particular concern in that clearly defining team membership and creating shared goals early in a team’s existence is understood to be a critical success factor.

The lack of a real team identity is also reflected in the motivation of team members. In fact, not once in our 32 interviews did anyone say that “helping the team succeed” motivated them, nor did any evidence emerge that they felt any peer pressure or personal responsibility toward the team. Team members identified more with their functional background and did not view the team as having a strong influence on their roles and responsibilities. Their motivation remained strictly related to individual accomplishment and the possibility of increasing their functional expertise. For this reason, the case study team can be thought of as functioning somewhere between a “work group” and a “world-class team”.

“Working (Task) Group: Group members interact primarily to share information and perspectives to help individuals better perform their responsibilities; there are no shared performance goals, joint work products, or mutual accountability.

World-Class Team: Team members are individuals who represent diverse functions/areas of expertise, and who are committed and
mutually accountable to collaboratively achieve breakthrough results.”\textsuperscript{11}

II.2 Leadership

The team leadership role is the most critical of the roles.

“A team will only be as strong as its weakest link.”\textsuperscript{12} Aspects of Strong leadership and weak leadership emerged from the interviews. The role of the two co-leaders was never perceived as being neutral. The dominant perspective was that the complementary styles of the two were the key to the success factor for the team. However, others lamented about the “fuzziness” of the project ownership, and still others thought that to effectively lead a complex project required “more structure” and “stronger leadership.” Supporting the “fuzziness” hypothesis, one of the two co-leaders felt the need to draw up a sort of “job description” for his position so as to clarify his relationship within the project, more than within his business unit.

In addition to the two major co-leaders in the North American and the European design centers, the project had two additional local leaders. One leader responsible for customer relations, the other leader is in charge of the coordination at the manufacturing plant.

The first local leader, the customer relations leader, is the person with the largest individual stake in the project. He had been promoted to program manager for having procured the business. This is his first managing experience, and he feels responsible for every aspect of the project without having direct authority over the resources that can make it succeed. It is no wonder that he is working 15 hours a day between two different countries. The result is that he

\begin{itemize}
  \item \textsuperscript{11} Ibid, p.7.
  \item \textsuperscript{12} Ibid, p.94.
\end{itemize}
can be in the wrong place when needs of his physical presence occurs, and the interaction with 
the customer may not be getting the priority needed to make the project a financial success.

Similar and different at once is the story of the plant operations coordinator. Similar 
because this is his first managing experience, he is fully committed to the project’s success, and he has no direct control on any of the variables and decision-making centers that affect the project. However, despite some clear effectiveness in improving the communication flow within the team, and the attendance at the videoconferences, this local leader has not yet gained proper recognition from the other team members at the other locations.

This complex leadership structure is not unusual per se: “While virtual teams may have single leaders, multiple leaders are the norm rather than the exception ... regardless of the titles they use for convenience.”  

However, in this project, no single leader has full control on the resources necessary for accomplishing his part of the common mission. This affects the legitimacy of the team leaders role and creates confusion as to who is in charge. In North America, team members think that the first customer project is the responsibility of the European co-leader. At the European design center, they think that the responsibility is shared between the local co-leader and the program manager at the customer site. The local co-leader himself is reinforcing this view. As more and more businesses are expected to materialize under the new platform concept for which he is locally responsible, he is actually attempting to withdraw from direct involvement in day-to-day operations of the projects. At the customer site, the leadership is clearly and exclusively assigned to the program manager. Finally, at the plant site, there is the clear perception that the North American site has more responsibility for the project.

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With these many discrepancies it is no surprise that there is a mismatch between expected mutual commitment and actual behaviors. Having a single "global leader" would not likely be the right solution for this project. At this stage the company does not seem ready for a completely flexible and boundary less use of its own resources, with engineers and budget assigned directly to a single ownership for a definite objective. However, the unspoken expectations of the leaders involved, and their individual short-term and long-term goals, are so dissimilar, and to some extent, conflicting, that common ground for an effective cooperation is compromised.

Past experiences have caused the four sites involved to think in confrontational ways, and as a consequence each site now thinks of the future events in terms of "win-lose" relationships. The split of the single SBU into two regional SBUs has served to reinforce this attitude.

For the benefit of a global project, it would be highly beneficial for the four co-leaders to clearly communicate their expectations and personal goals. This would help them to acknowledge each other's legitimate objectives, to make a sort of "reality check" to reduce the seemingly impossible to a more feasible perspective, and possibly to reframe the project in terms of common goals and "win-win" relationships. This would yield a more solid base to the project, by enhancing the legitimate action of the local leaders and transmitting a more cohesive image of the project leadership to the team members.

II.3 Purpose

Two requirements seem to be particularly necessary for a dispersed team--a clear purpose and the involvement of the team members in defining it. "Purpose is the most critical factor in
determining the success of a virtual team”\textsuperscript{14} and the best predictor of virtual team success is the clarity of its purpose and the participatory process by which the group achieves it.”\textsuperscript{15} These keystones are unanimously underscored by the specialized literature, which identifies them as the most reliable predictors for the team’s success\textsuperscript{16} and principal regulators of its internal processes.

The case study team has implemented no specific goal setting process. The initial stages of the team’s activity just followed the usual pattern because originally the project did not appear to be any different from the previous ones, beside the fact that it was coming from a new customer. The need to co-design major components of the product in two different locations, and the concomitant requirement to develop a specific project while simultaneously constructing the establishment of a platform concept for future products, made things much more complex than a typical project.

Different courses of action had already been initiated by the various decision centers involved in this project, at the time when the cooperation was finally agreed. The convergence to a common goal has not been easy and complete, particularly as for the interaction between the current product and the future platform.

However, the major shortfall is in the lack of awareness by both the team members and senior management of the unique opportunity offered by this experience as a learning step on the


\textsuperscript{16} “… The team’s goal-setting process is absolutely critical to the team’s success, and all the team members and key stakeholders need to be part of the process if they are expected to be committed to the team’s outcomes” (McDermott, Lynda C., Brawley, Nolan, and Waite, William W., World Class Teams: Working Across Borders. John Wiley & Sons, 1998, p. 185).

“… Not all of a team’s decisions require consensus. However, when a world-class team makes decisions about its goals, these decisions must be consensual” Ibid, p. 190).
road to a global market strategy. Not only would the content of this project be extremely useful for developing lessons for future platform needs, but also even processes and systems enacted by the team would be an extraordinary source of learning.

Some of the team members contend that the current organizational structure will not last long, and the unique SBU will be restored. Others fear or hope that the two regions will stay separated. There are still others who think that the unbalanced distribution between the regions of capabilities (concentrated in the U.S.) and market growth opportunities (concentrated in Europe) will require some form of cross-regional cooperation, something like a global “back-end” and a regional “front-end” to customize each specific product (see figure 4).

**Figure 4: Combining Capabilities and Opportunities**

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"Reaching a common understanding about what this team is intended to accomplish, distinct from any other organizational unit, is the first step in transforming a working group of individuals into a world-class team" (Ibid, p. 52)."
Unfortunately, the last stream of thought has not become dominant, and there is no
diffuse will to learn new ways of conducting business. The potential of global teams themselves
as a tool of organizational learning is somehow lost.

II.4 Commitment

Purpose has always been important if not central to small groups and
teams. In the information era, it takes on a new aura as the source of
legitimacy itself. The legitimacy conferred by jointly held purpose is
uniquely vital to virtual teams. Because of the diminished role of
traditional authority, they need some other guiding force. Virtual
teams develop an inner authority based on their members’
commitment to shared purpose.\(^\text{17}\)

Without a clear team-forming phase and shared purposeful definition, it is not surprising
that initially the several roles involved in the project had levels of highly differentiated
commitment. Figure 5 illustrates actual and expected levels of commitment over time at the four
sites explained below:

- It is understandable that the roles responsible for customer relations have engendered
  the highest level of commitment since the earliest stages of the business sourcing and
development. Still, in the structural prototype phase, when the first build should occur
and the final requirements defined, this component of the team is intensively
  involved.

- The European design center was quickly involved, but had to take the initiative and
  negotiate before raising the commitment of the North American design center.

\(^{17}\) Lipnack, Jessica, and Stamps, Jeffrey. Virtual Teams: Reaching Across Space, Time, and
- As for the manufacturing plant the engagement of the engineers will be very low until funds are released and the structural prototype for the project moves to the confirmation prototype.

- The North American design center engagement increased after the European team leader made multiple trips to the U.S. to rally support and resources for the first customer product based on the new platform concept.

This misalignment of commitment has generated some frustration and misunderstanding, thus endangering the early possibility of establishing mutual trust among team members from different sites. There is also an inherent contradiction between the explicit desire of the plant to be involved at an early stage of the project and have the plant's voice heard, and the real level of
attention/commitment early in a potential products development before the work is confirmed. At the plant, as everywhere, local priorities drove the attention in different directions.

Acknowledging the different perspectives would help the team overcome any possible misunderstanding and contribute to smooth the misalignment. Subsequent improved dialogue would enhance the possibility of effective cooperation.

II.5 Trust

Control is one of the most controversial functions of management from the bureaucratic revolution which limited the arbitrary judgment of the medieval organizations, to team building, which replaces the hierarchical control with peer pressure, to the most recent empowerment, which leverages on self control and regulation toward an agreed on objective. In parallel, management is passing from a directive function to a coaching and mentoring function.

This evolution is reinforced by several trends. One which is the rise and diffusion of the knowledge worker, a key player in the information age, another is globalization, which causes organizations to extract the highest rent from their resources, wherever they might be located.

In the new perspective, control must be replaced by trust. Trust is a fundamental component of an effective geographically dispersed team: “Virtual teams form and share knowledge on the basis of information pull from individual members, not a centralized push.”18

Without real and mutual trust, a team remains unable to tap into the full potential of its member; particular its ability to act as a single entity to prevent and cope with emergencies is greatly diminished.

However, while a co-located team can spontaneously develop mutual trust over an expanded period of time, in the case of a dispersed team, the trust building needs to become an explicit objective of team leader and major stakeholders, to be quickly achieved at an early stage of the project.

In the case study team, no specific action has been taken for the purpose of affirming and consolidating mutual trust among sites and members involved in the project. The team experienced no kick-off meeting, no clear identification of team membership, no agreed operating procedures, no clear understanding of the relationship between the first customer project and the development of one global platform or two regional platforms, no shared vision of a likely future.

On the positive side, some balancing factors include the prior knowledge between some of the members because of previous projects or international assignments, the multiple negotiating visits that the European co-leader paid to the North American site, and some rare social gathering when some people traveled to a different site.

Most team members assign the highest importance to face-to-face interactions, to the extent that, in case of no prior direct knowledge, even professional competence is under question. However, where the two poles of a relationship attribute different relevance to the lack of prior face-to-face knowledge or prior common working experience, clear evidence of asymmetric trust was observed. One pole of the relationship that care less of prior face-to-face knowledge gives immediate and unconditioned trust, while the other pole is more diffident and less willing to give trust, because the latter poles mental model requires traditional face-to-face interaction before trust can be established.
Another asymmetric pattern of trust could be explained by the asymmetric distribution of relative power between the two poles involved—the disadvantaged pole seems more concerned and reluctant to give trust to the more powerful one, while the privileged pole does not perceive trust as being an issue. With a shift of the relative power in a relationship, the concern about the lack of trust changes direction.

At the early stages of the project, when the two regions were assigned to the same BU, the European design center that was directly involved in the first customer project but did not have enough resources to deliver the product, seemed to be concerned about the extent of the contribution to the project from the North American site, where both the headquarters and the core of resources resided. Uncertainty and anxiety were on the European side, as a consequence, the European project leader seized the initiative to cross the Atlantic several times and build a trustful relationship.

At a later stage, when the desired cooperation was obtained and the reorganization separated the two regions into different SBUs, it was the North American community feeling weaker because of the future opportunities on the European market, compared to the perceived lack of opportunities in the local market. Accordingly, the cooperation for this specific project has become more important to the North American design center because it represented an opportunity to consolidate the relationship across regions for future projects, while the European site could take advantage of an unlikely failure to ask for more resources and become fully independent. In this situation, concern and some mistrust characterized the North American perception of the relationship. But trust is not an issue for the European design site toward their American counterparts.
II.6 Culture

It is common wisdom that when “going global,” one needs to learn about the other cultures involved in the same project, to weaken prejudices and stereotypes, and to build mutual understanding.

But no evidence of major misunderstandings or barriers due to different nationalities has been found in this case, despite the total absence of specific cultural training. Only at one site has some internal resentment towards two managers of a different culture been identified but the managers had no relationship with the project, and the resentment did not affect the relationships with the other sites.

The cultural issues that emerged during the interviews were not linked to the global dimension of team. They will be addressed in the next chapter in a general analytical framework.

II.7 Communication

It perhaps goes without saying that communication is a key success factor in any team. In this case, communication flows freely in a networked fashion. All team members are free to speak with whomever is necessary to solve a particular problem. Some of the functions communicated in a more networked fashion, while others are communicated in more of a “hub and spoke” pattern. In a networked pattern team members go directly to the source of needed information or directly to the person needing the information. In a hub and spoke pattern information flows through a single person who coordinates specific activities. The mechanical function personnel seem to exhibit more open communication and communicate directly with the person necessary to fulfill the task. The electrical engineering function tends to take on more of a
hub and spoke pattern and shotgun pattern when information is required. A shotgun pattern refers to asking many team members simultaneously for information. This occurs when a member does not know specifically who to ask for information or is attempting to inform many members who may have a secondary desire for the information. No evidence was found that this difference was a result of function. It is possible the reason is related to the mechanical engineers past working history together.

The communications between the local leader in the U.S. and his counterpart in the European design center local leader are both effective and frequent. However, there is a different attitude. Communication originated by the U.S. leader tends to aim more often at a proactive information sharing, while the European leader tends to communicate more for specific, task-oriented requests. Given the co-leadership status, no structural reason can be identified for this different pattern, nor can it be assumed that the North American culture is less task-oriented than the European one. Rather, this can be a clear manifestation of the different styles of leadership of the two individuals—the “resource type” and the “hammer type.”

In general, the high frequency of e-mails begins to cause the communication to be less effective. E-mails are sometimes sent whenever a thought enters a person’s mind. An analogy is when your co-worker is sitting next to you and you think of something and immediately ask the question. There is a difference when your colleague is on the other side of the ocean and you are communicating by e-mail. The recipient could receive a series of e-mails consisting of your thoughts of the day. The communication has transformed from a dialogue when your colleague is next to you into a series of task questions to be organized and responded to when your colleague is not co-located. The growth of e-mail does not seem to be directly dependent on task accomplishment or complexity, it is more relate habit of the senders to abuse the capability to
send a messages to many people simultaneously, without a clear answer by thinking of “Who do I need to communicate with?” This answer must be explicitly answered before calling someone. The thought process used when making a call should also be considered when sending e-mail.

Communication and buy-in from stakeholders is critical to forming a highly successful team. In this project, some stakeholders were highly committed, while others were not committed at all. Communication with stakeholders is complicated in this project due to the multiple reporting structures. Almost every team member reported to a different functional manager.

II.8 Stakeholders

The case study team is burdened with too many stakeholders. The only redeeming characteristic of having so many stakeholders is that it is difficult for them to dramatically influence the project one way or another. The core team leaders must only get buy-in from individual stakeholders for small portions of the project. A specific example of a stakeholder causing disruption to the project is when the software programmer’s supervisor pulled him off the project before the module was completed, leaving a critical path item without resources to complete it. A lesson from this is the necessity to obtain buy-in to support a specific deliverable until it is completed from every stakeholder involved in the specific deliverable. This is a time-consuming process for the leaders. In this team, where stakeholders are fragmented, the process could become an advantage of the team.

World-class teams, which must compete for resources (primarily, money and people), frequently need to ‘cross their borders’ to influence others for support. If, during the goal-setting process, the team engages key stakeholders and negotiates both goals and resources, the team will be in a much better position to achieve its goals.\(^\text{20}\).

\(^{19}\) See p.18
The customer also has key stakeholders who championed the contract for a new supplier. These customer representatives have a vested interested in the success of the project. Customer stakeholders should be clearly identified and fostering trusting relationships a primary goal of customer interface personnel. The culture of the particular customer organization of the first product is risk adverse. By understanding the culture, the team can develop a process to obtain approval for key decisions more efficiently. In a risk adverse culture, it may be effective to obtain commitment by working with individual stakeholders and getting approval for small changes incrementally, vis-à-vis to meeting with all stakeholders at once in an effort to solicit approval for large changes. The first approach provides some insulation to customer stakeholders in a risk adverse environment. The fragmented nature of the individual process makes it difficult for the customer to track the decision process. The supplier must be diligent in keeping e-mail, faxes, and other documentation of decisions made. Verbal customer decisions should be confirmed by fax or e-mail to provide an audit trail when a fragmented decision approval process is used.

II.9 Technology

Enabling elements of world-class teams include the fundamental use of technology. "Worm holes" or "virtual water coolers" are high-speed video systems that remain linked to enable social interactions. This team is using Net Meeting as a type of virtual water cooler. Two of the core team leaders utilize Net Meeting on an as needed basis. This element has brought the team closer together, since many of the other team members informally join in these secessions.
This allows elements of the project to be shown to other locations. One comment was, “When you see, then you really feel like progress is being made.”

A weekly videoconference fills the need for a more formal visual communication process. Feedback from team members on the weekly meeting was overwhelmingly positive. A small technical issue was highlighted that could influence the social aspects of the meeting. Only one-site is displayed on the screen at a time. There are three sites typically involved in the meeting and most of the interaction occurs between the U.S. and Europe design centers. Because the third site is not shown on the screen often, there is an expressed concern this site is somewhat left out and experiencing a loss of engagement.

The company has a dedicated a tie line phone system, and thus, there is not an issue of the cost of telephone calls between sites. Since there is no pressure to not use phones, telecommunication is used extensively by team members on an as needed basis.

Shared servers enable drawings to be displayed on PCs at each site simultaneously, while discussing issues over the phone. The mechanical functions use this method of visual and audio communication. The electrical drawings are not on a shared server and, as expected, there is less of a need to view schematics simultaneously.

Audio conferences are a regular staple of the mix of technologies used to increase communication. The team uses this method effectively.

The CAD System is causing considerable concern. The system used by this first outside customer and, in fact, by the majority of other potential customers as well, is incompatible with the system. Files continuously have to be converted back and forth when working jointly with the customer. An investment in training and new CAD software could be in order.
CHAPTER III

Three Lenses For Organizational Analysis

In the previous chapter we examined the case study team in the context of global teams theory. This led to identifying some areas and processes that are problematic in nature.

In this chapter, we will assess those problematic elements from three different, classical perspectives of organizational analysis: strategic, political and cultural.21 This will yield a better understanding of the origin of those dynamics, which is the fundamental prerequisite of any effective change intervention.

III.1 The Strategic Lens

Strategy drives the structure of an organization. Key elements of the case study company’s emerging strategy include the following:

- From a single parent to multiple customers
- From an exclusive relationship to a competitive market
- From reactive to proactive
- From a component supplier to systems integrator
- From U.S. centered to expanded geographical scale
- From cost driven to innovation
- From technology focused to customer focused
- From competition to partnering
- Divesting businesses and investing in others

Based on a review of the trends facing the industry, it appears that the company may benefit from a shift from a best product base to a total customer solution base.22 The Delta Model shown in figure 6 illustrates the points of strategic focus.

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22 In their framework, Hax and Wilde (The Delta Model: Discovering New Sources of Profitability, pre-print draft, 1999) define three possible options for a business strategy: 1) Best Product: in this case, the company or business unit is mainly concentrated on its internal processes, and offers either a low-cost or a differentiated product to a “faceless” customer; 2) Total Customer Solution: a company adopting this strategy aims at maximizing its own as
However, the company appears to be frozen until the fate of its future is clear.

“Employees are skeptical the leaders do not know where the bus is going.” Management has indicated it is unknown how/when/if the company will obtain independence. There is a growing mistrust of management the longer the company delays in communicating a clear direction.

Definition of corporate strategic thrusts and refinement of the scope of business, markets, and geographic scope, along with identification of strengths/weaknesses and opportunities/threats should form the basis of the forward business strategy.
Scanning the current strategic grouping and strategic linking of the organization, there appears to be a misalignment of key elements. For example, the SBUs are currently divided by commodity, which puts the pressure on forming highly functioning strategic links. The current strategic grouping re-enforces the component-maker mentality. The majority of first customers appear to be system integrator companies, as opposed to final product assemblers.

The geographic grouping within this particular division is hindering the leverage of a global supplier chain. The resources are still able to keep the value chain intact despite these obstacles. However, cost transfer squabbles and continued misalignment of objectives are certain until structural and strategic alignment is driven from the top of the organization down to the functional teams working to meet customer needs. Team objectives are not part of each individual’s performance criteria. The formal reporting structures are functional thus creating more alignment toward individual achievement in one’s field of expertise than in sharing the common goal of delivering a product.

What are thriving within the case-study team are strong informal systems and processes countering the structural misalignment. The emerging linkages and organizational work habits that have developed over time serve as a foundation that is enabling projects to be delivered in spite of formal organizational boundaries.

The case team exhibited elements of a matrix structure along both functional and product lines. In-fact, the U.S. design center was more of a complex cube structure as evidenced of grouping by geography, systems and customers. In an attempt to align personnel in multiple ways, alignment has been diluted and in some cases, misalignment has resulted. In the UK, where team members and management reside in the same building, the organization appears to be less complex and a closer more aligned structure is apparent.
III.2 The Political Lens

Adopting a “political lens” to analyze an organization means to focus on the interests of
the various stakeholders involved, their resources, their sources of power, and the possible
coalitions and negotiations. From this perspective, five elements emerge:

- The shift in relative power from the North American to the European region
- The strong bargaining position of the manufacturing plant;
- The increasing importance of the software development engineers
- The weakness of the company relative to the new customer
- The extreme vulnerability of the program manager at the customer interface.

III.2.a The shift in relative power from the North American to the European region

The pending spin-off will require the company to play as an independent entity on the
global market. The original exclusive link with the parent company will soon come to an end,
and both parties will be free to seek for more productive relationships.

As soon as this seek future had been announced some two years ago, the Europeans
constituted a sort of “business hunters unit,” which was comprised of a group of sales engineers
whose only task was to get to know the potential customers in the region, promote the products
and image of the company, and procure business. Finally, after two years of effort, the initiative
is achieving some results. The first product for the first new customer has not been delivered yet,
but some other orders are already coming in. Essentially, they are all requests for components to
deliver to some system integrator or to the final customer. Despite the fact that the company
itself possesses system integrator capabilities, these initial orders will represent opportunities to
establish relationships with new customers, and gain their trust for future, more rewarding
projects.
Nothing similar has happened in the North American region. No "hunters," no business from new customers. The market is more blocked and controlled by major players, and little room seems to be left for the new independent company. Both in the U.S. and in Europe the SBUs cover roughly about one third of the entire market, but the remaining two thirds are much more accessible in Europe than in North America.

The different perspective—expansion in Europe versus potential loss of market share in North America—determines different attitudes, i.e., low morale on one side and excitement on the other. The Europeans see a nice future ahead, and want to equip themselves properly for their aggressive strategy. The split of the SBU into two independent regions has not been accompanied by a redistribution of resources, which remain mainly concentrated in North America. Outsourcing is the short-term strategy of the European BU, while new hiring is envisioned as longer-term solution. This cooperation between the two design centers is seen as a form of internal outsourcing, not as a lasting approach to leverage corporate resources that could be underutilized. From this perspective, the need to learn how to effectively work on a global scale is not perceived, and the learning opportunity of this project risks being completely lost.

III.2.b The strong bargaining position of the manufacturing plant

The adoption of a platform strategy should mean "getting manufacturing personnel to work elbow to elbow with product designers, engineers, and marketers, from the beginning and for the duration of the development program." Thinking of the product in the context of a platform and production processes as an integral part of the platform leads to greater innovations.

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Unfortunately, this does not happen in the company. Not only are marketing experts far from the design centers and no direct input is given in terms of customer targeting, but also the cooperation between plant and design engineers is lacking of real mutual understanding. No shared purpose has been set. There is no clear understanding of the common interest of adopting the new strategy. Actually, the whole platform concept is still rather new to the company, which has adopted it after solicitation from an external consulting firm. At the North American design center, think of it as a physical thing, a common body to incorporate in each customized, specific product. Others view the platform in terms of a “family of parts,” a rationalization of subcomponents for an easier design process; still others think of the platform simply as an abstract set of concepts and rules to follow in designing each distinct product. At the European site, although organizationally more evident--here there are two leaders for two different platforms, with real projects assigned to their responsibility--the platform concept is not such a concern. It remains unspoken, while the several projects are evolving more or less as they have always.

Moreover, no clear direction has been taken after the reorganization. The question is, “Will there be a single global platform, or will there be two distinct ones?” Given the fuzziness of the strategy, the manufacturing plant has no reason to see its traditional processes questioned. With no clear motive or purpose to change presented by senior management and the design centers, the production engineers hold the bargaining power intact.

Once realized, the spin-off is likely to accelerate the pace of reorganizations. Nothing is certain, and current equilibrium could change in the near future. Defending their domain today, the manufacturing plant could even be gathering more resources and power tomorrow, and someone is already talking of building design capabilities onsite.
III.2.c  *The raising importance of the software development engineers*

At the early stages of the project, the software requirements had been underestimated. At least, this is the opinion of some of the software engineers. The project leaders had assigned the task to a limited number of engineers within the limited pool of available resources. It is more and more difficult to hire new experts in the field, given the higher attractiveness of the new “dot-com” companies on both continents. Despite the concern of the software developers for their claimed overload, the tasks could not be redistributed.

As a matter of fact, later on some critical milestones (“deliverables”) were directly depending on a timely provision of pieces of software, and the uncertainty about the status of work in this sector has caused some anxiety. It even seemed that the first deliverable could be missed by two weeks because of the software.

Undoubtedly, no one could underestimate the relevance of a timely software development any longer. The bargaining power of the software experts has been reinforced by these events. Their opinion is more likely to be heard next time.

III.2.d  *The relative weakness of the Company relative to the new customer*

“The customer is always right.” The company seems to follow this fundamental rule to its most extreme consequences at this first experience with a new customer. Some embarrassment and disorientation have derived from the practices of the customer, including different ways of assigning the business, some uncertainty about the price, no statement of work, no clear set of specifications, and a never-ending stream of change requests on previously agreed features of the product. The only original fixed detail that has remained is the delivery date.

In the past, the company had a frequent and close relationship with its parent organization. Engineers knew each other; they were even former colleagues. Such problems
never occurred. Today, no similar relationship exists. Some understanding of the decision-making process of the customer is being developed, but the understanding is looked at as a problem and not as an opportunity.

The company knows that the success of this first product can lead to more opportunities in the future. But there is even more at stake. Its brand image and medium-term positioning in the market will depend a great deal on the outcome of this business. As a result, a reactive and defensive attitude is dominant, leaving to the customer the greatest span of discretion in determining the course of action.

III.2.e The extreme vulnerability of the Program Manager at the customer interface

The sales engineer who sourced the business was promoted to program manager. It is his first managing experience, with the first new customer, whose headquarters for the first time are not co-located.

Understandably, the program manager has become the single point of reference for this project for the customer. He has many direct contacts between customer and company at the engineer level. The program manager is the responsible person for the project. He feels responsible for pricing, costs, deliverables, investments related to the project.

However, a program manager needs to shop around for resources that belong to the design centers and their functional sub-entities. He has an assigned budget for minor expenses, but the overall cost of the project has yet to be defined because of the internal-cost sharing still to be decided.

The program manager is in the position of high visibility with no control over critical resources. The only strategy he could possibly implement was negotiation with the centers that control the resources. The negotiation with the European design center has been very successful
thus far, but no such action has been taken with the North American region. The cost transfer between the regions for his project will likely become a major issue.

At the same time, the program manager’s vulnerability has taken the program manager further back from the front-line, and the relationships with the customer have been more and more delegated to a very willing and promising engineer who was recently hired. When the final agreements on the product specifications are to be taken, and the final word on price is established, a more constant and close presence of the program manager at the customer site would be advisable.

As the insights emerged through the political lens, it can be seen that some of the inconsistencies and resistances within the case study team could be better understood if the relative power distribution and the various goals of the several actors is considered. In particular, the political conditions could explain why typical team intervention on issues such as mutual trust and commitment often fail, if they remain at the superficial level of interactions among team members without addressing their respective deeper interests.

III.3 The Cultural Lens

The cultural lens highlights the meanings that distinctive communities give to certain practices. Usually taken for granted and hardly evident to the community members, cultural assumptions become more evident when challenged by some outside player or unusual event; in these circumstances, either they are reinforced and the particular identity of the community is reinforced, or some adaptation/change take place whose evolution is often difficult to predict.

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For their innate structure, global teams are a privileged field for observing the impact of cultural differences and the adaptation/learning process that takes place when distinct communities interact.

The case study team is based in four different counties across two continents. However, no major obstacle seems to derive from the different national identities. All of the members interviewed have a keen task-oriented mindset; all of them seem extremely committed to the success of the project and – ultimately – of the higher organizational entity to which they belong; most of them demonstrate a deep desire to succeed; and those ones who are just happy with their “piece of work” and keep a shorter-term perspective are equally present in the four different sites.

Rather than national identities, professional background and specialization seem to be more important in determining different meanings and expectations. Three sources of cultural differences have been identified:

- Design engineers versus manufacturing engineers
- Modular design versus architectural design
- Customer decision-making process.

III.3.a  Design Engineers versus Manufacturing Engineers

This pertains to the difference between design engineers and manufacturing engineers. This contrast is not new, nor specific to this project or this company. However, the remote location of the two different components adds up to the basic difficulties of conjugating a performance driven view of designers and the dynamic assembly approach of manufacturers. The need to make these two issues compatible is recognized by the company, and there is
simultaneous engineer\textsuperscript{25} at the U.S. design center to coordinate efforts. There is no longer a simultaneous engineer at the UK design center.

However, this preventive action does not seem to be working as effectively as some had hoped. In particular, it seems that designers without prior consultation of plan engineers take many decisions. A major dispute occurred when the European designers removed a usual protection of a component without first explaining to the plant that this modification would accrue a net savings of about one million dollars with no real consequence to safety. A major supplier who resided close to the plant has been replaced by an Asian supplier, again for cost saving reasons, with no prior consultation with the plant engineers. Now, the plant has to coordinate with the Asian supplier, with additional language and time zones difficulties. Because the plant was not involved in the decision to change suppliers the plant personnel are less willing to take on the responsibility of making the relationship with the Asian supplier a success.

It is impossible to determine which is the cause and which the effect, but it is also clear that the attitude of plant engineers toward any change is negative. Design needs to take into account production processes as they are, and no room for rethinking design and production processes as a whole. One of the simultaneous engineers from the plant has the explicit mission to assure that designs take into account the current production processes and practices. Curiously, this contrasts with one of the key tenets of thinking strategically in terms of product platforms, i.e., firms that successfully adopted the platform approach “bridged the traditional divide between engineering and manufacturing with the result that both products and the processes for creating them were simultaneously redesigned.”\textsuperscript{26} The platform strategy introduced

\textsuperscript{25} Manufacturing Engineers on international assignment as expatriates.

in this company by a consulting firm has been launched with just one leg, the design; the manufacturing leg is still tied to the traditional product line philosophy.

III.3.b Modular Design versus Architectural Design

The second cultural difference affecting the project team involves the modular approach to design used by the North Americans designers, versus an architectural approach adopted by the European designers. According to the modular approach, a task or a system is analyzed, divided into coherent subsystems or modules, and then each module is assigned to the specific responsibility of a different entity (parallel working), or developed at a different time by the same entity (serial working). The initial analysis and the definition of the requirements for the interfaces among the subsystems are the most critical steps in the modular approach. With the architectural approach, no parallel working is possible, since the product or task is accomplished as it evolves from prior stages, and no clear subsystems are identified. However, no interface problem is likely to occur, and everyone involved in the project is constantly aware of the interaction of his/her contribution to the whole.

This difference is quite evident in the electronic schematics, with the North Americans drawing a full book of separated module designs, whereas the Europeans use a single chart for the entire system. In general, different mindsets and habits, as well as wrong expectations, have generated frustration and loss of time.

III.3.c Customer decision making process

The final cultural mismatch has been found between the expected and actual decision-making process of the new customer. Used to dealing with the same parent company for years,
the engineers have significant difficulty understanding and accepting the way of operating and doing business with the new customer: requirements are fuzzy, change requests come in one after another, meetings are nearly useless, and decisions are difficult to make. This is almost unacceptable when compared to the task-driven, regulated practices of the past.

Yes, "the customer is always right," but this does not prevent the company from observing the customer's behavior, understanding his/her decision making process, and using it to the company's advantage. The reactive attitude seems not to be appropriate any longer. A proactive attitude of understanding and shaping the environment could be more effective.

III.3.d  The concept of time

The nature of time is one of the dimensions of an organizational culture.\textsuperscript{27} It is clear that the attitude toward the current project is different among the various sites involved. The North American site is more anchored to the past, it is looking backward at the "good old times" of direct relationship with the parent company next-door. The present is characterized by fuzziness, continuous change, and loss of power. The future looks uncertain, and there is the concrete possibility that the North American site will play a more marginal role. Thus, it is safer and nicer to keep focusing on the past. The consequence is a kind of grief for today's events, and a reduced ability to face the challenges with a proactive and forward-looking attitude. Chances are that the future will come as an unpleasant surprise.

At the European design center and manufacturing plant, the attitude is the opposite. Coming from a past of relative dependence on the American headquarters, it sees a brighter future deriving from the possibility of greater autonomy and better regional market opportunities.

As a result, past and even present do not play a role in the reference framework of these sites as central as the future does.

Finally, at the customer interface, there is another perspective. Here, the project is everything—the program manager has earned a promotion as a result of his work on this project, the liaison engineer has been hired because of this project, and even the global account manager has been hired for this customer. From the success of this project, a future stream of businesses with this customer might be sourced. The present is the time dimension more relevant for the team members at this site, more than anywhere else.
CONCLUSION

“When it comes to measuring the success of a team, these three questions are key:

1. *Team performance.* Are the team’s work products meeting the key stakeholders’ expectations/needs?
2. *Team process.* Is the team becoming more competent at doing its work (making decisions, holding meetings, creating outputs, effecting change)?
3. *Team members.* Are individual team members learning and benefiting, in their personal and professional growth, by serving on the team?”28

There is little question that the case study team will deliver the product and most likely will meet the majority of the stakeholders’ expectations. But the team’s performance is only one of many other important factors. The second and third questions are still unanswered. An invaluable learning opportunity could be almost completely lost, both at individual and organizational level.

The case study team could achieve some short-term benefits by enacting relatively simple steps such as:

- Initiate formal entry and exit into the team
- Clarify roles
- Agree on success criteria
- Reach a common understanding on what each team member has to gain from being on the team
- Link each member’s team and individual objectives to the project goals
- Obtain commitment and deliverables upfront with each team member and supervisor
- Improve the 24hr cycle management
- Foster team consistency
- Re-energize the team via a “mid-point rally” consisting of a combined social and goal re-enforcing function.
- Create a social function with the participation of all team members.

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In addition, team members could begin a dialogue to reflect on what is working and what is not, learning the key lessons in terms of team process. Irrespective of organizational issues such as global and regional platforms, and one or two SBUs, it is clear that the company is undergoing a dramatic change, and that there is a real need to learn new ways of operating at all levels and in all corners of the organization. This project could serve as a prototype for many future engagements with new customers and remote sites. The team members would be much better-off realizing this quickly and attempting to benefit as much as possible from this learning opportunity. They could develop competences essential not only to their organization’s success but also to their own success. This requires not just acting, but also reflecting.

Given the many uncertainties and lack of direction from higher levels, the responsibility to develop this shared vision at the team level and the will to learn falls completely on the team leaders. It is up to them to help team members see this project as an opportunity to foster enthusiasm when skepticism could prevail, to enhance mutual accountability and belonging when everything seems to push them apart. The challenge for the leaders is difficult, but this is the way strong leaders emerge.

It is clear, though, that longer-term organizational benefits can only derive from addressing structural and strategic misalignment issues. This is a task for the senior management involving the entire organization. Global teams represent a good way to leverage resources utilizing expertise across an organization, both geographically and structurally. For global teams to be successful a system must be enacted and a structure designed to foster team skills and leadership advocacy from all levels of the organization. No organization can win or even survive in the global marketplace without including these major changes in the core of its mission.
REFERENCES


Gerber, Steven C., and Pennito, James W. Virtual Teams At Work: One Manager’s Story. Leaders for Manufacturing Program, MIT-Sloan School of Management, 2000

Hax, Arnoldo C., and Wilde II, Dean L. The Delta Model: Discovering New Sources of Profitability. Pre-publication draft, 1999.


