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D 7.3 Exploitation Plan M24

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Deliverable Summary

This document describes the ExCITE exploitation plan, part of deliverable D7.3 of WP7. The plan focuses mostly on commercialization of the Giraff solution developed as part of the ExCITE project (WP3, WP4 and WP5).

This document is highly confidential and should not be distributed outside the ExCITE project team.

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1 Introduction

This document describes the ExCITE exploitation plan, part of deliverable D7.3 of WP7. The plan focuses mostly on commercialization of the Giraff solution developed as part of the ExCITE project (WP3, WP4 and WP5).

The commercialization plan is based heavily on ExCITE results, both formal (as documented and, in many cases published) and informal (based on the daily experiences of implementing and supporting Giraffs in the field).

Giraff Technologies AB, based in Västerås, Sweden will be the organization executing the commercial part of the exploitation plans described here; therefore this document refers to “Giraff” (the brand of the commercial product/service) rather than ExCITE itself.

The plan addresses the EU market broadly known as Ambient Assisted Living (AAL) which for purposes of this plan is defined as all products or services that address the stated AAL goals¹²:

- Extend the time people can live in their preferred environment by increasing their autonomy, self-confidence and mobility
- Support maintaining health and functional capability of the elderly individuals
- Promote a better and healthier lifestyle for individuals at risk
- Enhance the security, prevent social isolation and support maintaining the multifunctional network around the individual
- Support carers, families and care organisations
- Increase the efficiency and productivity of used resources in the ageing societies

2 Summary

This document outlines the foundation of the ExCITE exploitation plan, with particular emphasis on the Giraff commercialization plan. It describes the fundamental marketing strategy and describes a “ready to execute” marketing plan in preparation for proactive marketing and sales activities in 4Q 2012 and beyond. Giraff has now built a considerable foundation of relevant experience through the ExCITE project and via direct municipality dialogues.

The foundation of the plan is the selection of a “customer intimate” market discipline for Giraff, which means the customer value proposition is “best total solution” and focuses on a deep understanding of the customer’s organization (initially targeting the municipality) and processes relative to home care. For the AAL market this means always striving to understand better than anybody the entire social care process, from elderly needs assessment, to how the various users interact with AAL technology, to procurement, deployment and support of AAL solutions. This decision profoundly affects the organization and ongoing development of Giraff Technologies itself.

The primary stakeholders are elderly residents, their informal caregivers, professional caregivers, service organizations (initially focusing on Swedish municipalities) and academic/technology institutions. It is clear from early experience that elderly care is a deeply personal and emotional topic across the first 4 stakeholders (excluding academic institutions), and that understanding their fears

and concerns is essential to defining their needs. The needs across all 4 stakeholder categories can be summarized as *“balancing cost with quality of life.”*

These needs define the main messaging that will appear in all public representations of Giraff including the web site, marketing materials and presentations. The key Giraff messages to the municipalities are effectiveness, economy, simplicity and support. The supporting messages to the other primary stakeholders are confidence, peace of mind, independence and quality of life. There is also a “cool” factor with Giraff that can be an effective marketing tool.

The initial target economic buyer is the Swedish municipality, specifically the social care organization and the political committee for elderly care. The strategy is to develop a sales model through experience with the relatively well-defined social care structure in Sweden that can be duplicated throughout the EU (and ultimately globally). The sales process leverages personal references and the fact that the municipality social care organizations tend to be a tight-knit group all across Sweden (and this seems to be true for all EU states with highly organized social care programs). The process starts with a contact in the social/elderly care organization, with a goal toward reaching the elderly political committee (directly or indirectly) where the procurement decisions are ultimately made.

The first objective in selling to the municipality social care organization is to “hook” them on the Giraff concept, which is primarily achieved by a first-hand demonstration (or as close to that as is practical). Seeing the Giraff in action is required for most marketing messages.

The next objective is to establish the economics and cost savings, and then finally to convince the care organization of the ease of Giraff deployment by showing each step in the deployment and support process. The key to a customer intimate strategy in this market is to remove risk via step-by-step hand holding that convinces the municipality there are no major financial, political or operations risks to deploying Giraff. The better Giraff understands the home care business the more convincing this dialogue will be.

The final objective is to demonstrate the entire implementation and support process to help organizations get past the fear that a great concept can become a reality nightmare once the real work of deployment begins. Giraff will leverage its experience with the trial deployments in place today to achieve this goal.

While Sweden will be the primary initial focus, a parallel objective is to develop a sales model that is effective in all EU states (and ultimately globally). Outside Sweden (and probably inside as well) distribution or sales partners will be required to extend the range of Giraff’s limited support resources.

Supporting marketing materials are already in development (in Swedish and English, and some already in other languages as well) and will include a new web site, a private portal for care organizations, product brochures, and presentation materials for the municipality. These materials will support the concept of the municipality as a Giraff “distributor,” something they are ready and willing to do if properly supported.

A key element of “municipality distributor” strategy is to execute “pull” marketing in support of the municipality’s “push.” This means that while the municipality demonstrates the practical value of Giraff to its constituents, Giraff must generate demand – i.e. make the constituents want to have it.

The marketing programs include a permanent Giraff demo, a training program, identification and attendance at relevant Swedish (and EU) conferences and the establishment of a Giraff seminar called “Connection Days.”

This document does not include financial information or sales forecasts. The financial aspect of the commercial plan is a separate topic. Furthermore, no sales forecast – conservative, aggressive or otherwise – has any credibility without specific data to reference in terms of sales cycle, the likely shape of the “sales funnel” (statistics on how many customer dialogues advance to the next stage, ultimately to a sale) and how many customers can be realistically approached given the resources of a start-up company. The purpose of this plan is of course to begin the sales execution that will provide this data and experience, and to develop from it realistic sales forecasts. For now, it can be said about financial planning that a minimum 50% gross margin is required on the product and service aspects of the solution to create a viable company.

Perhaps the most important element of all in the commercialization plan – funding – is mentioned here but not discussed in the main document. Giraff is a severely under-resourced organization today (as is common with most start-ups in this market), with enough outside funding to provide the necessary matching for the AAL ExCITE and FP7 Giraff+ projects but little beyond that.

Venture or “risk” capital funding is exceedingly difficult to find in Sweden and throughout most of the EU, and it creates a “Catch 22” dilemma for Giraff and many other companies. To acquire outside funding it must demonstrate market traction (the obvious goal of this commercial plan) yet to execute that plan it needs outside funding. It is not clear how to resolve this dilemma but the hope is that enough traction can be achieved within the scope of the ExCITE project to attract continued funding after the project ends. Developing a funding strategy is an entirely separate project on its own, and is in progress within Giraff.

3 Giraff Value Discipline

What is Giraff's value discipline? “Value discipline” marketing theory maintains that any commercialization strategy must start with an analysis of the organization and its market for the purpose of selecting a “dimension of excellence.”¹ The ExCITE/Giraff commercial exploitation plan is based upon this theory. It describes 3 possibilities and maintains that an organization must choose one *and only one* of these dimensions to focus on and excel at, targeting its customers and narrowing its focus until it can dominate the chosen market through the chosen market discipline. The organization must maintain threshold standards in the other dimensions of course, but must focus on only one in order to be a market leader.

This choice is fundamental to the business and impacts every decision not only in marketing and sales but in all aspects of operations, financial planning, product/service development, production, customer support and even fund raising. Selecting a value discipline is often regarded as the single most important decision a company can make (assuming it is conscious of the need to select one).

We describe the three dimensions here and analyse them from the perspective of the AAL market.

1. Operational excellence – also known as “best total cost,” for AAL means a company is known in the market as the consistent, no hassle proposition with great prices and quality. In this strategy Giraff is not known as an innovator; the customer just expects Giraff to deliver the product and the customer (care organization) already knows what to do with it – place it in the home and start saving money. One might refer to this discipline as “the McDonald's of AAL solutions.”

This discipline has some appeal for the AAL market given the complexity of technology solutions being proposed at the research and even commercial level. A “no hassle,” “plug and play” proposition would be a welcome relief from the confusion in today's market and Giraff could have the right price point for this approach if the cost savings can be validated through experience.

It may be a good choice in the future; for now, though, it is hard to imagine Giraff will be a “no hassle” implementation and operation. Furthermore, there are no similar solutions in the market to contrast such a value discipline against, and it is unlikely that in the near term customers will consider the solution enough of a commodity to value such a proposition.

2. Product leadership – also known as “best product,” for AAL this means a company has the best product with all the right features, and that customers are willing to pay for those features. It would mean that Giraff constantly innovates and delivers leading-edge products to the market. In product leadership the product is often premium priced but considered worth it and “asked for by name.” This strategy implies that customers believe Giraff works better than other solutions, and even when other mobile telepresence solutions are available Giraff will always be a step ahead. One might refer to this strategy as “the iPhone of AAL solutions.”

Product leadership could be a compelling approach if Giraff chooses to compare itself to associated AAL solutions like ippi, myJoice, ACTION or even Skype. Product leadership is also the most common strategy of choice for technology providers even if they do not make it consciously. However, such an approach places Giraff in the same category as other AAL communications solutions, most of which are lower cost, and requires Giraff to justify its price point based on comparison to those solutions rather than comparison to status quo. This approach also assumes that users know enough about what they want to understand the value of Giraff over those other solutions.

This approach is possible but the entire Giraff concept is probably too new for customers to make fair comparisons yet (as they would compare the features of different smart phones, for example). Furthermore, there is so much focus in this industry on advanced features (via various funded projects and advanced robotics commercial efforts), that a product leadership approach could easily lead to a Giraff solution more complex than it needs to be right now.

3. Customer intimacy – also known as “best total solution,” for AAL this means that a company understands the customer's requirements, processes and business better than anybody. It would mean that Giraff is not necessarily the cheapest or even the most complete from a product feature perspective, but has the best total solution because it fits into the customer's business better than the rest. One could call this approach “the Airborne Express of AAL solutions.”²

There are arguments for all three disciplines. The most important characteristic of the AAL market driving the selection, however is that the market is still emerging, still being defined and most customers don't even really know what it is yet. They are wrestling with cultural and philosophical issues regarding elderly care, perception and misperception at the individual user and broad political levels, cost structure, technology fear, etc.

For Giraff (and perhaps any company in this market) it means that to be successful the company will have to work with customers to sort through these issues. Indeed, some customers already say that Giraff implementation is only 20% of the total effort required, the rest being implementation challenges within the care organization.³

Early commercial efforts with Giraff already make it clear that the AAL market today is a high-value niche play that requires significant investment in understanding customers' needs, possibly even better than they do. These are the classic traits of a customer-intimate value discipline; therefore customer intimacy is Giraff's best strategy at present.

Stated in terms of market adoption theory, Giraff is "crossing the chasm"⁴ in the AAL market and therefore should be attentive to the elements of the "chasm" strategy. First and foremost it means the product or service must be tailored to very specific customer needs to make sure the early adopters are able to achieve (and demonstrate for the followers) the value of the Giraff concept (in the case of the AAL market, measured by economics and quality of life). This is the de facto Giraff market approach so far and now must be formalized in a comprehensive commercialization plan.

Other key traits of customer intimacy that deeply impact not only the Giraff marketing strategy but all aspects of its business:

- Great flexibility in accommodating the customers' business process, and being able to bring to bear a full range of services even if it means bringing on other partners at low margin (or even loss) to Giraff.
- Willingness to establish bonds with customers and users like those between good neighbours.
- Willingness to prioritize what a specific customer wants versus the larger market (assuming that is even known at this stage).
- Building a market strategy around customer relationships more than advertising and promotion.

Finally, a customer-intimate value discipline means that Giraff will likely have to adopt a "consultancy model" as a way to enhance differentiation, give customers a greater sense of control and generate additional revenue to pay for what is an inherently more expensive market approach. For example, Giraff is already sold today as a service proposition (Giraff purchase plus a yearly support and license fee) but it may not go far enough toward this chosen discipline. Broader consultancy services will be likely required as the market develops.

4 Stakeholder Analysis

Who are the Giraff stakeholders? The next element in the commercialization plan is to develop an understanding of who the users or “stakeholders”⁵ are: *who* should care about what Giraff delivers, *what* they care about and *how* that makes them care about Giraff. Based on early feedback from the ExCITE project and other commercial experiences, stakeholders can be segmented into 5 (ultimately 6) categories:

1. Elderly – those living at home, and in some cases staffed facilities who can benefit from the Giraff solution. Non-elderly who receive care – chronically ill or mentally/physically handicapped – are also stakeholders but not AAL’s primary focus. Elderly are care about their needs and just as importantly, their fears, which (according to the AAL charter and other studies⁶ and experience) are:
 - a. Isolation and loneliness,
 - b. Becoming a burden to family and friends,
 - c. Loss of independence,
 - d. Maintaining financial security and
 - e. In some cases, fear of being required to adopt technology they are not comfortable with.

The needs that follow from these fears revolve around assistance with their daily lives such that they maintain as much independence as possible; i.e. *preserved quality of life*.

2. Family and friends – also known as informal caregivers, are the people who are often already caring for their elderly. Again, experience shows that family and friends’ needs are driven mostly through concern for the well-being of their loved ones:
 - a. Diminishing health and safety,
 - b. Deteriorating quality of life,
 - c. Guilt about not providing more assistance or attention, especially when the caregivers do not live within easy visiting distance (and sometimes even more so when they do).

Their needs can be summarized in one word – *confidence* that their loved ones are safe and content. They also want to provide them help when they need it, through a combination of their own efforts and care services. To the extent that they are financially responsible for care, they also need economical solutions.

3. Formal caregivers – social workers such as *hemtjänst* in Sweden and special services providers who visit elderly in their homes or staffed facilities. The concerns driving their needs are:
 - a. Not being able to provide quality care in the face of mounting financial pressures from the care organization (which most often translates to time pressure for caregivers). This concern is especially deep when the caregivers have developed a

bond and true caring affection for their clients, something most care models encourage them to do but do not provide the tools for them to do it.

- b. Having to work with technology they are not comfortable with.
- c. Being replaced by technology.

Their needs are primarily about being more *efficient* and *reducing stress* (mostly related to time pressure) in their work. Security (for their job) is also a concern, even though it is well documented that the ratio of available caregivers to elderly is rapidly shrinking in every EU state. Where solutions involve technology caregivers also need it be exceedingly simple to use and maintain – this includes excellent support from the technology provider.

4. Care organizations – municipalities and equivalent private organizations who deliver elderly care. Giraff will initially focus on organizations that are funded by national health plans, thus making the economic buyer easy to identify and profile. Their needs are also driven by concerns/fears:
 - a. Deteriorating quality of care in the face of mounting financial pressure.
 - b. The growing gap between elderly needing care and available caregivers, and how they will deal with it.
 - c. Being “politically correct” in the public eye with respect to balancing the delicate issues of elderly care.
 - d. Being “left behind” by care innovation.
 - e. And the opposite fear of being left behind; becoming “bleeding edge” adopters by attempting to implement solutions that either are not market-ready or that they do not have the infrastructure to properly support.

These concerns can be summed up as “*political correctness*,” and sometimes more directly described as a fear of “*looking stupid*.” Care organizations want to avoid this by finding ways to make their business more efficient while maintaining the level of their services. This balance is usually a political “hot potato” for the municipality and the appointed officials who make the major budget decisions (which can be leveraged to advantage in a market strategy). In the AAL context this means they need technology solutions that:

- Truly improve care and/or efficiency, based on a solid use model and experience
- Will be accepted by elderly and all caregivers
- Are manageable by existing staff
- Have a cost model that provides fast, if not immediate payback

5. Academic/technology institutions. Early experience indicates that these organizations are important in at least four regards:
 - a. They are a marketing resource that can introduce Giraff to care organizations, particularly outside its home base in Sweden. Their interest in conducting research leads them to develop relationships with care organizations and users where they already have credibility via their academic standing. Examples include ExCITE partners such as Örebro University and University of Málaga, and other Giraff

partners such as University of Amsterdam and University of Potsdam.

- b. They are an early implementation support resource that can manage initial trials and help guide the care organization through issues of user acceptance and measuring benefits. Again, current ExCITE partners such as ISTC in Rome are excellent examples of the advantages an organization like this can bring.
- c. In some cases they are potential ongoing technical support organizations that can give Giraff a footprint in other countries where it otherwise would not be able to maintain adequate presence. While universities are unlikely to provide long-term operational support, other technical organizations aspire to do exactly that; an example is the Danish Technological Institute in Denmark and their connection to the Danish municipality network known as Carenet.
- d. They are a tie to the technical and AAL community in Europe, important for overall visibility, access to technical resources and grant opportunities which provide funding for work that is closely aligned with the company's commercial interests. The ExCITE project is an excellent example; others include Hjälpmedelinstitutet (Swedish Handicap Institute) and Danderyds Sjukhus (Danderyd Hospital in Sweden).

Their needs are not defined by fear and concern as the other stakeholders but by their main objective, which is to find suitable research projects (and funding) that further their own academic pursuits. Even as Giraff enters the commercial phase and its technology becomes more commonplace over time, it will likely continue to appeal to this stakeholder segment and should continue to focus on it. Giraff is technically interesting enough to build a research project around, yet is connected to the real world and offers access to real home environments. This trait is highly coveted by academic institutions seeking grant partners because real-world research is a critical factor in successful proposals and often difficult to achieve.

- 6. There will be a sixth category in the future – major suppliers in the AAL market (e.g. Siemens Medical, Intel, Philips Healthcare, etc.) They are focused on more pure medical markets today but as medical and home care converge through the AAL market they have a growing interest in participating in this market. An example of a company closer to today's AAL market is Tunstall in the UK, who provides alarm and monitoring services for elderly and their care organizations. Once companies like Giraff have shown some market traction and demonstrated a successful sales, adoption and support cycle these organizations can help scale and achieve channel control, which will be a key (perhaps "the" key) competitive barrier.

A final note on stakeholder values that is critical to this market: the feelings most people have about elderly care (and therefore their values) are *deeply personal and emotional*. Almost everyone has a personal story about a family member or other loved one that requires care, and many of these stories have a tragic element, for example someone who was forced into a nursing home for lack of adequate care at home.

Strong feelings are a powerful marketing force that Giraff can capitalize on, particularly in resolving feelings about peace of mind, guilt about not doing more, and desire for independence. However, these feelings are a “two-edged sword” and must be managed carefully because as they can also create equally powerful negative feelings; for example around the fear of reduced care services, diminished quality of life and even fear of being cared for by an impersonal “robot.”

5 Stakeholder Messages

What are the marketing messages to each stakeholder? Based on the stakeholder analysis above, the key messages are straightforward and basically define the “ready to execute” content of all outward representations of Giraff including branding, the web site, presentations and marketing materials. These messages form the basis of a 3-dimensional marketing communications matrix consisting of the stakeholders, the venue or media for the communication and the content or message itself. (This matrix is not provided here but is under development). The messages for each stakeholder are:

1. Elderly

- a. The Giraff keeps you socially connected (reduced isolation and loneliness).
- b. It allows you to receive help and supervision on your own terms (no loss of independence).
- c. It allows your caregivers to visit you conveniently, anytime from anywhere (no burden to your family).
- d. You are in control of who visits, when and how (independence and control).
- e. It requires nothing of you, no user interface (no technology adoption required).
- f. Your privacy is assured.
- g. The Giraff is unobtrusive in your home.
- h. It is fun for you and your caregivers to use (no burden to your family).
- i. It allows you to live in your own home longer (quality of life).
- j. Note that Giraff does not directly address the elderly fear of financial security, at least not in a market like Sweden where the public sector pays for elderly care.

2. Family and friends

- a. Giraff increases the level of attention and “checking in” your loved ones receive (addresses health and safety fears).
- b. It enables your loved ones to maintain their lifestyle (quality of life).
- c. It allows you and your family to give them the attention they need without undue stress on your own schedule (guilt fear).
- d. Giraff allows you to visit your loved ones anytime, anywhere (convenience, ease of use).
- e. The user interface is easy to use and requires no special equipment (convenience, ease of use).
- f. It lets you confirm that your loved ones are safe any time (confidence).
- g. Giraff is fun!

3. Formal caregivers; experience shows this group actually subdivides into 3 subgroups:

- front-line caregivers (e.g. hemtjänst in Sweden)
- social managers (who manage the caregivers)

- care specialists (physiotherapists, psychotherapists, etc.)

In the detailed market execution these subgroups will need different messaging in some venues but the top-level messages are the same:

- The Giraff makes your job easier and more efficient (addresses the fear of stress due to time pressure).
- In many situations it actually improves the quality of care via the “hands behind the back” concept (a phrase used by hemtjänst to describe the idea of coaching an elderly person through a physical task instead of doing it yourself; this is generally considered to be the best way of providing care but takes more time and patience).
- The user interface is easy to use and requires no special equipment (addresses fear of having to hassle with technology).
- It does not threaten or replace you but rather extends your presence; you are more, not less valuable than before (job security fear).
- You can visit your clients anywhere, anytime and fill up gaps in your schedule (efficiency).

4. Care organizations; this also subdivides into 2 subgroups:

- executive managers who run elderly care in the municipalities
- politicians who sit on the strategic/budget committees.

Again, some different execution will be required but the top-level messages are the same:

- Giraff is a proven concept with a track record of success in deployments (this message is a bit premature now, but hopefully will become valid in a relatively short time). It is known to maintain quality of life while saving money (fear of deteriorating quality of care).
- Giraff makes you look smart to your constituents – forward thinking, innovative and effective (fear of being left behind or “looking stupid”).
- Giraff does not replace people but extends them. It does not de-personalize, and in fact some elderly prefer Giraff visits because it maintains their sense of integrity/privacy.
- It has a proven business model that saves money without requiring any up-front investment (again, a bit pre-mature but needs to be validated as quickly as possible).
- It has a proven record of being readily accepted by all users/stakeholders.
- It is reliable and well supported; the Giraff team is always there when you need them. They understand the elderly care process in the municipality and know how to support it (bleeding edge fear).
- Giraff will evolve according to your requirements, as the Giraff team is constantly assessing and responding to ongoing user needs.
- It is politically expedient because it allows the municipality to boast improved care while cutting cost.
- Other care organizations (and perhaps other organizations such as academic institutions) can attest to all the above. This is especially true of the Västerås municipality and its *e-Hemtjänst Program* (described below).

5. Academic/technology institutions:

- a. Giraff is the perfect research conduit into the real world. It offers access to real users in all categories.
- b. There is an existing valuable body of knowledge built upon real experiences and through working with other academic institutions.
- c. Giraff has shown that it is willing and able to participate in research projects.
- d. Giraff is a flexible computing and communications platform including APIs and the organization is willing to allow experimentation with other devices (medical instruments, sensors, displays, etc.)

A critical note regarding stakeholder messages: *The messages are significantly different for each group and could even be in conflict in certain venues.* For example, a key message for care organizations is cost savings, which they interpret in the positive light of efficiency and political advantage. However, a family member may interpret the same message in the negative light of diminished services and quality of care for their loved one. A major challenge in the Giraff (and indeed any AAL) commercialization plan is to manage and balance these messages, including controlling their exposure to each stakeholder group. This challenge has major implications in particular for the Giraff web site as described later.

Next the stakeholder analysis must consider: *What are the most likely objections and how does the commercialization plan address them?* Experience shows there are 4, although none of them are in the majority of responses and are usually stated as questions rather than skepticism:

1. *Is the Giraff really an effective way of providing care?*

This concern can come from any stakeholder. Most people immediately say “I get it” but some are skeptical. To address this point the communication strategy should be to never argue the point or question stakeholder perceptions, but simply show them real examples of use, through a demo, video or reference to a deployment and let them decide for themselves. It is also important to emphasize that Giraff provides social connection and not physical care. By clearly defining its purpose the messaging can avoid “things Giraff doesn’t do” being positioned as shortcomings. This can be supported by real-world facts and statistics. Of course, the ExCITE published results will likely prove to be the best evidence of all that Giraff is effective.

2. *Does the Giraff really save money?*

This comes mostly from those with operational or financial accountability, i.e. the municipality elderly care organization or political committee. While there are no real-world data yet there are models that have been developed by municipalities⁷ and they are an excellent starting point for education on this point. There are also numerous previous studies showing cost savings for Giraff and similar solutions^{8,9,10} that will be referenced in Giraff messaging.

3. *Is the Giraff is safe and reliable?*

This can come from any stakeholder. Giraff does not have a long-term track record yet, so the best way to deal with this is (again) to show them the Giraff in operation, pointing out its relatively slow speed, light weight and soft base. Regarding reliability, the 40 units in the field today can be referenced; also that the Giraff uses off-the-shelf components (CPU

board, display, camera, etc) that have long proved their reliability in other applications.

4. *Will the Giraff cause me to lose my job?*

This clearly comes from social workers, and perhaps sometimes by politicians who represent social workers or are sensitive to this concern. The message focus here should be that Giraff extends and enhances human presence rather than replacing it. The messaging here should also remind stakeholders that Giraff does nothing on its own but is completely dependent upon remote operation.

In most cases, the objections are addressed most effectively by showing the Giraff in action.

A key item that factors into all of the market messages – especially to the decision makers in the care organizations – is the announcement in August 2012 by the Västerås municipality in Sweden that they have formally adopted 4 ICT solutions (including Giraff) as part of their *e-Hemtjänst Program*¹³. This program makes Giraff and other solutions a formal element in their elderly care organization and services. It means Västerås has moved past the “trial” phase and to the “program” phase. Therefore, Västerås becomes a critical reference customer for Giraff that other customers can look to as an example of success. The *e-Hemtjänst Program* and Västerås municipality will be prominently included in many of Giraff’s marketing materials

6 Initial Target Customer Base

Who is the customer – the economic buyer?

In most AAL solutions there are multiple “buyers,” those who must approve the sale and implementation. At the broadest level, the Giraff buyers are all the stakeholders as described above. However, there is always one and only one “economic buyer,” the entity that takes financial responsibility for the sale, and the economic buyer is always the ultimate target of any sales strategy.

Initially, the target economic buyers are the municipalities and other social care organizations in Europe – particularly in the EU states that have strong national health plans with some level of mandate for elderly care. This approach offers start-up companies like Giraff (and nearly every supplier in the fledgling AAL market) the huge advantage of a clearly identified target customer. The initial focus will be Sweden because of Giraff’s location and Sweden’s strong national social care system, but obviously the marketing approach is EU-wide. The expectation is that the initial Sweden focus will create a sales model that can replicated in other EU states.

Within Sweden the focus will be on care organizations in the following priority order:

1. The municipalities (e.g. Västerås stad), or *kommun* who are tasked with the responsibility for elderly care in the Swedish care system
2. Their corresponding alternative private providers (e.g. ProAros in Västerås) who compete with the municipality but are still funded by it (so the economic buyer at the top level is the same)
3. National private care organizations (e.g. Carema) who truly compete with the municipalities and often seek competitive advantage in unique solutions for elderly care

The economic buyer specifically is the organization within the kommun (or private provider) responsible for elderly care (which is often different than for handicapped or chronically ill, which is usually managed by the county or *län*). In Sweden, in nearly all 290 kommun this organization is a political committee for elderly care that makes major budget and procurement decisions.

It seems intuitive to focus on the largest municipalities with more elderly, presuming they have the greatest sales opportunity; however, this is not always the case. Experience already shows that smaller municipalities with smaller organizations, more resource constraints and more geographically dispersed homes (longer travel distances for hemtjänst) are sometimes more motivated, more flexible and can make decisions faster. Furthermore, an initial sale of even 5-10 Giraffs is a tiny fraction of the opportunity for even a small kommun, so market penetration is not relevant at this stage. Time and experience will determine the best kommun profile, both in Sweden and EU-wide.

Within Sweden, the sales focus will be on deeper deployments (5-10 or more) for a smaller number of kommun rather than selling 1-2 units for a larger number. While it is beneficial to say “X number of municipalities have deployed Giraff” where X is a large number, the reality in the beginning is that it will be easier to support a smaller number of customers, especially given the required customer-intimate market strategy. This approach will also deepen Giraff’s experience base faster and, provide more compelling customer references and speed the development of a repeatable sales model.

As discussed above, academic/technology institutions are also an important “customer” base in the sense that they provide access to funding for tasks that are aligned with Giraff’s mainstream interests. These organizations will continue to be valuable especially in developing opportunities EU-wide where it is impossible for Giraff to provide direct support. Focusing on this target customer base does not require major resources because Giraff already has EU-wide visibility via the ExCITE (and now Giraff+) projects and these organizations know how to find relevant partners. Normal marketing activities including a web site and attendance at major events (exhibits and conferences) are probably adequate to “sell” to these organizations.

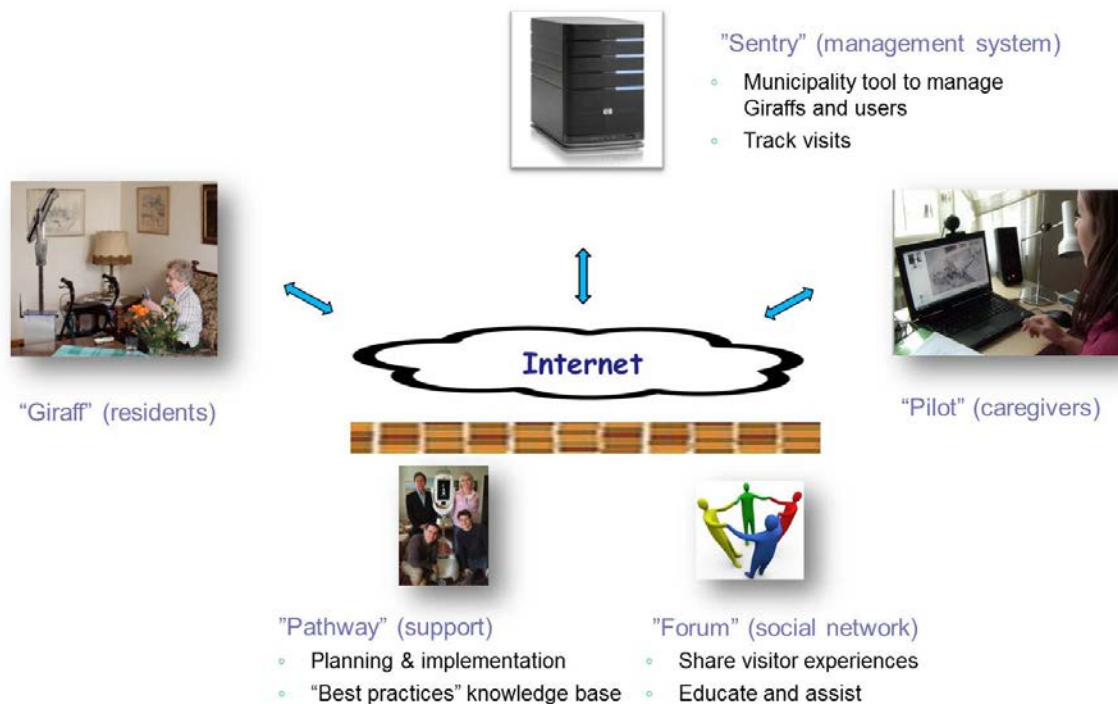
7 Giraff Service Definition

The described market strategy has profound implications for the Giraff product requirements. In particular, a customer-intimate approach makes it clear that Giraff must be defined, marketed and delivered as a complete service solution rather than a product (see diagram below for reference). It is important that stakeholders see Giraff not simply as a piece of hardware residing in the home but rather a solution of hardware, software, services and information that provide social connection for elderly and support independent, quality life.

The original Giraff concept in the ExCITE project consisted of the “Giraff” mobile telepresence device and the “Pilot” client application used for visitors to connect to it. It became clear early in the project that an additional element – now called “Sentry” – was needed to manage Giraffs and users/visitors, and provide the care organization with a tool to ensure the privacy of elderly residents. It also became clear that a key service element was the ability for a resident to “call out” from Giraff to a caregiver. Both of these enhancements were added to Giraff as a result of ExCITE feedback.

As the project progressed and the need emerged to support the care organizations in implementing the Giraff solution, the concept of a knowledge base – called “Pathway” – was added to the service

definition. Finally, the need emerged to support caregivers (visitors) with information and a communications forum on how to use Giraff most effectively. This element – called “Forum” – completes the current Giraff service solution as illustrated below. These last elements are still work in progress but key requirements for a customer intimate value discipline.



8 Sales Approach and Process

The main tactical sales focus will be on the social care organization within the Swedish kommun. Giraff understands the organizational structure fairly well by now and it is fairly consistent throughout the country. Stakeholder interests are highly inter-related, however, so this approach also requires a supporting marketing effort for the other stakeholders – elderly, their family and friends, and the professional caregivers (hemtjänst) to make the municipality's job of obtaining broad buy-in easier (the “push-pull” strategy as described below). Again, this description is specific to Sweden but the goal is to create a sales model that can be replicated on other EU states.

It is worth noting that such an approach implies Giraff will not initially target the elderly care political committee even though it is the ultimate economic buyer. Early experience shows that it is better to obtain support from the operational organization first and let them bring the Giraff team to the committee. Furthermore, at the “project” level the organization is often able to make a decision without going to the committee.

The sales approach will be based upon user experience references, kommun benefits and the overall customer-intimate approach, not focusing initially on the features of the Giraff solution itself (focus on technical descriptions and feature lists and comparisons is a common trap that technology providers

fall into, missing the key stakeholder interests and the messaging they require). In fact, marketing messages will say little about Giraff from a feature or technology perspective.

The other key element of this sales approach is giving the social care organization a sense of comfort that Giraff will guide them through the implementation process. Many organizations, after the initial excitement about the possibilities of Giraff experience the “deer in the headlights” syndrome when they consider how to actually plan for, deploy and support the Giraff in their municipality. It is critical to show the organization step by step how to put the solution to work in the real world, demonstrate an understanding of their business and enable them to envision Giraff as a success. Reference to other kommun implementations and growing a knowledge base over time is fundamental to this approach.

The sales process is defined in 3 steps:

1. Establish initial contact

In many cases the kommun actually contacts Giraff first based on exposure through references, media or events. A kommun who contacts Giraff is obviously self-selecting for high interest. So far this has been the sole means of contact and it is surprisingly effective given that there have been virtually no marketing effort as of mid-2012.

Assuming Giraff makes the initial contact the first choice is to do so by direct reference from another kommun or organization. Asking existing customers for references to other municipalities is most effective and will probably generate a sufficient lead list to last for a year; the social managers (*socialchefer*) across the kommun are a tight-knit group. In this case, the approach is likely a phone call in follow-up to an email introduction by the referring person/organization.

If no reference available the final option is a “cold call.” Even in this case there is a good chance that someone in the kommun organization has heard about Giraff. This contact is usually most effective as an email, so that the reader has a chance to digest the information before creating an expectation of response (obviously the Giraff proposition is not a “spot sale”). As mentioned above, focusing on the kommun is hugely advantageous because the customer base is completely known, and in fact the specific contact for social care is usually found on their web site. It is important to have a solid marketing foundation for this approach (specifically, a professional web site in Swedish) but in any case these contacts will likely generate a response of interest most of the time.

Regardless of how the contact is made the initial communication will be short: ~1 page (in Swedish), summarizing the concept, referencing a known municipality where possible, summarizing the stakeholder benefits and suggesting next steps, with a link to the Giraff web site and (most importantly) a video of the Giraff in action with an elderly person and his/her caregivers. Fortunately Giraff already has a professional video that works well in Sweden (but not necessarily in other EU states) and has received positive response by most viewers. “A picture is worth a thousand words” is an apt description of the benefit of this video.

2. Establish the dialogue

It is clear from experience so far that the first task is to get people hooked on the Giraff concept, and the best way to do that is to simply let them experience it in a fun way. In many cases the initial exposure to Giraff gets their own imaginations going about the possible use scenarios, even mentioning specific elderly people they care for today.

Therefore, the first choice to establish a dialogue is a face-to-face meeting with the Giraff. The Giraff can operate in “local” mode without requiring Internet access so such a demonstration is easy to do. Experience also shows the best place for this first meeting to take place is at an elderly care facility (e.g. *Norrby dagrehab* in Örebro) so that the social managers can immediately interact with elderly using the Giraff in an informal, non-threatening and even fun environment. If a Giraff demonstration is not feasible, viewing the web site video on a laptop or projector can usually achieve the same results.

Interestingly, inviting a social manager to call a Giraff at the office in Västerås over the Internet is usually not an effective way to sell them on the experience even though they are interacting directly with Giraff. While experiencing Giraff remotely for the first time is usually described as “really cool,” it is difficult for some to imagine the elderly care application in a compelling way because it is all about personal connection with someone they care about in their own home. It can be difficult to convey that feeling when connecting to a stranger in a strange place.

Based on experience so far the sales dialogue will probably be fairly consistent from customer to customer and will almost always begin with someone in the social care organization. They will introduce the sales persons to other managers and then to professional caregivers including hemtjänst. Depending upon the scope of initial deployment there may be an introduction to, and audience with the elderly care committee, although often the head of elderly care has the final authority for a trial deployment (e.g. Eva Sahlén, Director of Social Services in Västerås was the economic buyer for that organization).

At some point in the dialogue there is usually direct interaction with elderly, whether in homes or in senior centers. Many are not comfortable with English so it is important for anyone who interacts with them to have at least some conversational Swedish (and this native language requirement is the case for nearly all European states). They are usually fascinated with the Giraff (and also the idea that Americans brought it to Sweden) so engaging them is not usually difficult. The objective with these stakeholders is simply to demonstrate to the municipality officials that Giraff is fun, likeable, not threatening and would be accepted in the elderly person’s home.

It is also important to involve family and friends in the dialogue where possible. The social care organization will normally (and naturally) focus first on the connection between hemtjänst and elderly, thinking about efficiency, schedules and other logistics, prolonged time living at home and cost savings. These are important issues but they are “cold” messages about the “utility” of Giraff. The connection between family/friends and elderly, on the other hand is an emotional one that focuses on peace of mind, ease of guilt and

confidence in an independent life. These deeply personal feelings are “warm” messages about the “emotion” of Giraff.

3. Establish initial deployment as an easy decision (a “no-brainer”)

Throughout all these dialogues the sales person must drive home the message points with each stakeholder as described previously, through a combination of verbal and written material. These messages are all necessary to obtain support from the social care organization (i.e. they need to know every stakeholder is satisfied). However, the dialogue must ultimately focus on that organization and 3 main points must be established (and supported with all marketing materials) in order to close a sale. Written material will be especially important here because of the complexity of some information and the need to package and forward it inside the kommun organization:

- a. *The concept is compelling.* This point has already been described and is accomplished mostly by letting them experience the Giraff themselves, also by citing other customer/municipality experiences. Again, it is important to show buy-in from every stakeholder group.
- b. *The economics are compelling.* As mentioned, there are no real-world numbers yet but there are cited studies showing the cost savings possible with Giraff and similar technologies. Most social managers accept the idea of cost savings potential, so the main requirement here is to provide references that allow them to “cover their bases” when going to the political/budget committee. A concise summary and “packaging” of this information is needed that managers can forward within their organization.

A price point in Sweden of 75 000 SEK for a 2-year support and license contract does not seem to pose a price barrier for the kommun. Offering also a monthly payment option with no up-front charge makes the price even more compelling. Giraff has established an agreement with Wasa Kredit where the kommun gets a favourable financing rate with no down payment and a monthly payment of ~3 500 SEK/month. Giraff can sign and deliver this contract directly on Wasa Kredit’s behalf. Wasa contracts are limited to Sweden but it should not be difficult to find similar partners in other EU states.

- c. *Deployment is fast, easy and with minimal risk.* This is the most important and perhaps most difficult to establish of the three main points. We must show, step by step with exceeding clarity, how we will support the municipality at every stage of the process. The key message here is that there is a certain path forward and the kommun will never have to worry about being a deer in the headlights:
 - i. The formal procurement process can be bypassed if the kommun defines the Giraff sale as a “project” rather than an ongoing “program.” A simple purchase or lease agreement is all that is required.

- ii. Giraff will support the rollout process to the hemtjänst centers and help the social services organization get buy-in from the hemtjänst, and help train them as well.
- iii. Giraff will support the caregivers (informal and formal) with easy instructions for downloading and operating the Pilot client. This includes supporting test calls to practice before visiting a home.
- iv. Giraff will support the Giraff deployments in the homes/centres, including setting up the wireless router where necessary and making sure the home is safe for a Giraff. Giraff can even be present for the first caregiver visit to give confidence that everything is working properly.
- v. Giraff will train the organization on the Sentry administration system and ensure that all Giraffs and visitors are managed properly.
- vi. Giraff will provide all user and technical support via its existing email and phone contact process.

If the sales process establishes these 3 points there is a high (estimated 75%) probability of closing a sale. Throughout each sales process it is important to continue learning and documenting as much as possible about how the municipality delivers social care today, what are their challenges and how can their business be improved. This knowledge base is likely Giraff's best long-term competitive barrier to entry.

Several other important elements of the sales approach and process:

Project to Program:

Generally speaking the initial sales goal is to establish a Giraff "project" consisting of 1-5 Giraffs with close support from the Giraff organization. The advantages of this approach are as follows:

- The care organization can make a relatively fast buy decision (within 90 days).
 - They can bypass the normal steps required for such a sale, including a formal procurement process, and approval from various organizations including IT, legal and the relevant political committees.
- They and the Giraff team can learn from mistakes on a relatively small scale.
 - The ExCITE project, with its various team members acting as the care organizations/customers for Giraff has been an excellent reference model for the project process.

As the care organization gains experience and confidence in Giraff the next goal is to transition from "project" to "program" phase with a target sale of 5-20 Giraffs (as Västerås municipality is doing, as described above). This is obviously a more difficult step because now the formal processes described above must be followed. Transition to program phase can easily take 1 year or more, even after Giraff has established itself as a viable commercial offering. Giraff must also be prepared to assist the care

organization in “campaigning” the various organizations that must approve the program. Of course, success in the project phase greatly reduces the required effort here.

Fortunately, project sales are more than enough to sustain the company for the next two years. If only 15% of the Swedish kommun purchased an average of 2 Giraffs it would exceed Giraff’s entire forecast for the next 12 months, and experience so far indicates that only half of Giraff’s sales will come from the Sweden (the rest from other EU states).

Short Term Leasing

One note relative to the program phase: obviously procurement and budget planning are major decision factors for the care organization and Giraff must be creative in how it supports these requirements. Several kommun have indicated that a short-term leasing program could accelerate their adoption of Giraff and transition to the program phase. Such a program would require the kommun to commit only on a monthly or quarterly basis the number of Giraffs they need, and not require accurate long-term planning.

In terms of profitability this approach is an attractive option for Giraff because it creates an indefinite ongoing revenue stream for each Giraff. However, it also dramatically increases the working capital needed because it requires a large inventory that is paid for only over time. It is estimated that such a program would require another 1 million € or more to implement.

Distribution Channels

Finally, a note on distribution partners: Giraff is a small organization today and likely will be for at least the next 1-2 years, and has limited ability to scale its support in terms of volume and geographic reach. It will be critical to establish distribution partners – probably even in Sweden – to gain any reasonable penetration before competitors enter the market. The requirements for a distribution partner have been defined and Giraff is in discussions with various candidates in several EU countries including Sweden.

A detailed distribution partner plan is beyond the scope of this document but the work is in progress. The most important requirement is that the target partner must have a presence in the target customer base already, even if it is for a completely different product or service. They must also understand the customer organization and country culture (including native language of course). One example of such a potential partner is the Danish Technology Institute in Odense, Denmark. They are very much involved in assistive technology and have relationships with the Danish municipalities and related organizations. They also have a commercial interest and are actively seeking distribution opportunities.

Another distribution opportunity is strategic partnering, which involves working with other commercial organizations to combine their offerings with Giraff’s to provide a more complete customer solution. The opportunity for Giraff is to find strategic partners that have already established a strong presence in the target market and represent faster validation for Giraff as a commercial entity.

Strategic partnering is also beyond the scope of this document, but an example of such a partner is Tunstall Healthcare Ltd, a UK-based company that provides alarm and monitoring devices and services throughout Europe, Asia and even the U.S. They have a particularly strong presence in Sweden and have expressed interest in partnering with Giraff to offer Giraff as a value-added component of their home solutions. In fact, Tunstall is also a member of the EU FP7 project “Giraff+” and strategic discussions will continue in that venue.

9 Branding

Branding is a key element of the marketing plan because it establishes the value promises in the stakeholders’ minds for the delivered solution – the “brand promise.”¹¹ Much more than a logo, branding is the collection of messages and communications that aim to guide stakeholder decisions and actions in the target market. It represents not only the Giraff service values but those of the company as well.

Of particular importance to the ExCITE project, branding is an important part of the transition from “project” (where Giraff is perceived mostly as a technical development organization) to “commercial service” (where it is perceived as a mature, reliable solution provider). The brand development process is an entirely separate project ongoing within Giraff; its main results are summarized here.

The branding process starts by defining what thoughts and feelings should be invoked in stakeholders’ minds when they think about Giraff. These ideas have been developed by the branding team based on the stakeholder analysis describe above:

Thoughts

- People and connecting people – bringing them together
- Independence and freedom
- Integrity and security
- Efficiency, simplicity and convenience
- Control and choice
- Participation and social networking

Feelings

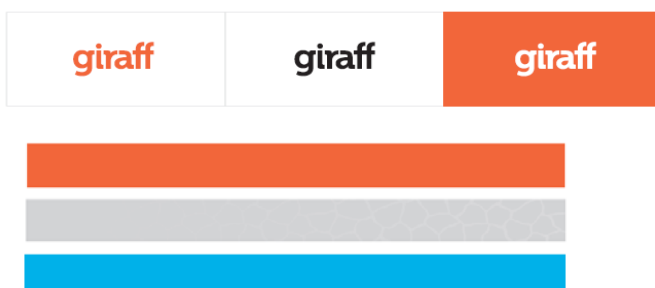
- Warm and friendly
- Yet mature and stable
- Unpretentious, silent strength
- Solid and reliable
- Confident and dependable
- Integrity and caring
- Open and accountable
- Looking toward the future

Based upon a study of the AAL industry and the commercial goals of Giraff, the branding team decided to keep the name “Giraff” because it already has surprisingly strong EU-wide visibility (thanks in large

part to the ExCITE project and other AAL visibility). Also it is a neutral word, not related itself to the industry and to which can be attached the desired brand values. However, the current Giraff cartoon logo will not be continued because it does convey the themes described above. In fact, the team decided against an image altogether because it potentially detracts from the “serious” and “mature” branding themes.

The new logo and colour palette design that will be used in all marketing and public representations of Giraff going forward are shown here:

giraff



Along with the new brand and logo, the team adopted new guidelines for marketing Giraff:

- As much as possible, use “Giraff” as a name, not an object
 - Avoid “the Giraff” (or “Giraffen” in Swedish)
 - Need to give Giraff a personality
- Always show photos or other depictions of Giraff with people
 - Never as bare technology
 - And never show Giraff in real life without people or context (this has profound implications for trade shows and other exhibits)
- Never refer to Giraff as a robot
- Focus on personal stories whenever possible
- Avoid discussion of technology
- Add taglines to logo as needed for the audience, e.g. “solutions for independent life” or “welfare technology.”

The branding scheme and stakeholder analysis also dictate certain requirements for the company’s web site that will require a complete redesign of the existing site. A key strategy of the new web site (and the marketing strategy in general) is to create a “push-pull” effect on behalf of the care organizations. When they introduce the Giraff concept to their constituents (elderly, family and friends, and professional caregivers) they need to focus on the benefits of the solution but without actively marketing the commercial entity itself.

This approach – referred to as “push” to the market/users – creates a sense of *value* for Giraff but not necessarily a sense of *desire*. Making people want the Giraff in their home and family life is the job of

the commercial company, which must create “pull” *from* the market/users. The revelation of this strategy through discussions with the branding organization and even existing Giraff customers is one of the most valuable elements of the commercial plan and fundamentally dictates the requirements of the web site.

In summary, to deliver on the push-pull strategy the web site must:

- Focus on the elderly, family and friends stakeholders
- Focus on “soft” personal messages (managing potentially conflicting stakeholder messages as described above)
 - Confidence, independence, integrity, peace of mind, quality of life, etc.
 - Include personal stories that convey those messages
- Provide a “private portal” for care organizations and professional caregivers (managing potentially conflicting stakeholder messages as described above)
 - This internal site should focus on “hard” organization messages
 - Planning and implementation guidelines, economic models, policy development, political happenings, etc.
- In the future include public and private forums for different stakeholders
 - To share ideas about the usage and value of Giraff
- Have multi-language support with independent content management for each language
 - e.g. different press releases, news on local events, etc.
 - Swedish and English support initially, but with a built-in structure to add other languages as needed
- Include administrator tools allowing for frequent content updates, independently in each language

10 Marketing Materials and Programs

All marketing materials will be designed to support the strategic messages and branding values as described in this document. A critical strategy in developing these materials is to understand that municipalities (and other industry organizations, including academic institutions) *can and will market on Giraff's behalf* (even if only indirectly) if given the right tools to do so.

Early adopters of Giraff want to be known as innovators in social care and want other municipalities to learn about and follow their lead. If Giraff provides these early adopters with marketing tools and materials they will actively use them to promote the concept to stakeholders within their own municipality and to other municipalities. Indeed, word-of-mouth is almost certainly the most effective strategic selling tool Giraff has, especially given the high level of interaction amongst social care managers, especially in Sweden.

Specifically this implies editable content (e.g. .doc or .ppt files as opposed to .pdf files) that allow them to customize, translate or even add their own logo. The marketing strategy must walk a fine line between flexibility and controlling the main messages. This is not easy to do because if the municipalities were to mix “orthogonal” messages (as described above) the result can be quite negative. However, the leverage they can provide over marketing resources is worth the effort to carefully compose such a strategy.

The following summarizes some of the marketing materials and their main characteristics:

1. Concept brochures

Typically one page, front and back, well-produced (glossy color, good quality photographs) and have an uncluttered look, supporting the logo form as described above. As with all materials they should be available electronically (non-editable for local printing), and in editable form for translation and customization. Experience so far indicates these brochures should be highly customized for each venue and event, and therefore very low-production runs are anticipated for printing.

2. Usage scenarios

This should probably be a brochure-style document, one page front and back (print and electronic as described above), and also distributed at relevant events. While the obvious target is the care organization and professional caregivers, this document also has value to family and friends who can identify with particular use scenarios. Early customers and users have defined at least 7 so far:

- a. Continued friends & family care
- b. Hemtjänst support (“hands behind the back” care)
- c. Spouse support (for the “healthy” spouse who is the primary caregiver for the other)
- d. Physiotherapy (“performed with words rather than hands”)
- e. Dementia care (research now indicates Giraff can be effective in this use case)
- f. Senior center visits
- g. Intellectually disabled care

3. Personal stories

A powerful marketing tool because of the emotional nature of elderly care as described in stakeholder values, these 1-page brochures would describe personal stories about real people in real home situations. They are difficult to execute because most people will not want to publicize their personal lives, so details may have to be changed to keep the stories anonymous.

4. Municipality “distributor package”

In keeping with the concept of the municipality as a de facto distributor, in the future Giraff will develop a set of marketing materials specifically for the municipality to use for internal marketing purposes. It is mostly a re-packaging of the materials described here but could include some customization capabilities, giving them access to source files, etc.

Note that the reference to the municipality as a “distributor” is in spirit only – there is no intention to actually pay them to market the Giraff (although a discount on future purchases has been discussed). Their motivation is clear and sufficient without further

consideration; within their own municipality, the wider the deployment the greater the benefit. And to other municipalities, again there is a distinct pride of leadership that appears motivation enough.

Most of the messaging will be delivered in the sales dialogue as defined above, and most efforts will focus on that. These marketing programs, therefore, play mainly a support role for visibility.

1. Permanent Giraff demos

Giraff needs to provide a permanent demo unit in Västerås that users can connect to for introductory visits and test drives. There will be a prepared script that anyone can follow that includes instructions on how to discuss both the Giraff itself and the elderly care application. There will also be a specified route for those who are calling to make practice drives (and perhaps even an obstacle course of some sort to make it entertaining). Ideally there would be a mock home environment to support the vision of a real deployment.

2. Training program

Giraff needs to develop a training program that allows first-time users or potential users to see the Giraff in action from both the Giraff and Pilot sides (probably via a video), see basic documentation on operating Pilot, instructions to download the Pilot client and make a test drive at the office.

3. “Connection Days”

In support of the sales dialogue it would be highly useful to have a defined, repeatable seminar event that can be held at a municipality location (or the Giraff office) to market the Giraff. It could include speakers from other municipalities (Västerås would probably participate, for example) and would also have an element of fun and entertainment.

The content of “Connection Days” (the municipalities like to call events “days” of one sort or another) would be largely defined by the messaging as described in this document and can be tailored for each municipality. The content would also be similar to what we will present at the conferences described above.

4. Industry shows

Interestingly, industry shows are probably not a high priority for Giraff initially. While the Giraff itself is “cool” and attracts attention from most people, it is difficult in a show targeted for elderly/home care to show Giraff in the right context. Applying the branding rule “never show Giraff in real life without people or context,” a proper Giraff exhibition requires a home setting with an elderly person locally and visitors calling in from other locations. This kind of “booth” is expensive and logistically complex to set up. Experience has shown that simply setting up the Giraff in local mode with a laptop, a “rollup” and a stack of brochures does not generate positive visibility and can even portray Giraff as a mysterious and scary device.

5. Stakeholder blog site

As discussed in the Giraff service definition, it will be important to establish a community forum for Giraff stakeholders, especially the elderly and their caregivers. It should be a blog or similar site where people can post their stories, anecdotes and ideas for Giraff uses. Obviously it must be carefully monitored and will take more resources than are available today, but it will be a valuable marketing and learning tool as the number of deployed units and caregivers ramps up.

11 Competitive and Alternative Analysis

There are no direct competitors to Giraff in Europe today, and no competitors specifically focused on home care anywhere in the world. There are 3 other commercial products similar in concept to Giraff, and 2 others under development, all based in the U.S. Following is summary of those products:

1. Anybots - QB

A finished product in the market but not suitable for AAL service at this time for various reasons; they appear to be committed to their current product direction and give no indication of serious interest in AAL. If there is any market focus at all it is in corporate communications.

2. VGo Communications – VGo

A finished product in the market but not suitable for AAL service at this time for various reasons; they appear to be committed to their current product direction and give no indication of serious interest in AAL. If there is any market focus at all it is in corporate communications.

3. In Touch Health – RP-7

A finished product in the marketplace, with a strong focus on clinical health care but at a price point far beyond what is feasible for home care (well in excess of 100 000 €). However, their alliance with iRobot (see below) could have strong implications for the market.

4. Suitable Technologies – Texai (in development)

Willow Garage (and now their spinoff Suitable Technologies) has access to the best technology of any player and likely has the resources to develop it. While Texai is not a finished product it is clear that Suitable will make it so and choose a market focus in the process. There is some indication they may focus on home care but it is not clear at what level or with what features.

5. iRobot – AVA

Although they do not have a product today they have tremendous resources and global

market reach and could easily swoop down and dominate a market if they chose to. Their CEO has publicly stated the company's intentions to be a player in the health and social care market and certainly has the resources to do so. Their alliance with InTouch seems to make clear where their interests lie.

In summary, direct competitors are not a factor in the Giraff commercialization plan at present. Much more important are the indirect competitors – alternative solutions that strive to deliver the same benefits of Giraff but with different technologies and price points. Below is a summary of alternative solutions:

1. PC-based videoconferencing applications

There are many such applications on the market and most of them are free, including Skype, VSee (non-commercial version) and Windows Messenger. These solutions work well for elderly that are comfortable with computer technology, have the mental capacity to use it, are mobile enough to reach the computer (or other device) when they need to, and are not at risk of requiring emergency contact.

2. "Settop" solutions

There are several settop solutions on the market that are specifically designed for use in home care. Some are simple messaging systems such as ippi (www.ippi.se) that provide rich email and 1-way video, while others such as myJoice (www.myjoyce.com) include 2-way video. They are specifically designed to present a simplified UI for the elderly and opinions vary on whether they achieve enough simplicity to appeal to a wide audience. They are also fixed in position like a computer.

3. Monitoring solutions

There are numerous monitoring solutions such as Tunstall (www.tunstall.se) that provide everything from basic alert services (the wrist watch alarm button) to sophisticated alarm and sensor monitoring, including the installation of cameras around the home for surveillance. Regarding surveillance: While some elderly do not mind being watched by an invisible person, most consider this an invasion of privacy.

In summary, Giraff needs to communicate in the market its strengths compared to these alternative solutions. It also needs to target elderly and care profiles that use those strengths to best advantage. Specifically, Giraff messaging must emphasize:

- Giraff removes the UI from the elderly altogether – the visitor does all the work. This provides an advantage over any solution that requires a UI, even if that UI is simplified for elderly use.
- Giraff is mobile and comes to the elderly resident instead of the other way around. This provides an advantage over all fixed position solutions and offers the benefit that the elderly person does not have to move to get to the device, and the device

can come to them when needed, especially in an emergency situation.

- Giraff is able to see the entire home environment, not just the part where the camera resides as in a fixed solution. Professional caregivers say it is just as important to assess the home as it is the person, in order to understand how well they are functioning at home.

12 Intellectual Property

Giraff has 3 pending patents in the U.S. and Europe and 1 granted patent in the U.S. None of these patents are considered critical to defending Giraff's market, and there are no other issued patents in Europe that present a barrier for Giraff. *The key to intellectual property (IP) in this market is proprietary knowledge* of the home care application, including specific hardware and software IP, and perhaps more importantly market knowledge as described above, in the form of planning and implementation guidelines for the care organizations.

At present there are no specific technical IP contributions (such as source code) from other ExCITE consortium members used in the Giraff commercial design. This could change, however, as several software improvements have been demonstrated in prototype form that could be used eventually in the commercial system. The members will deal with the IPR requirements as described in consortium agreement if that situation arises.

References and Notes

1. *The Discipline of Market Leaders*, Michale Treacy and Fred Wiersema, 1996.
2. *From Wikipedia*: Airborne Express was a U.S. shipping company that competed with Fedex, DHL and others. It was not the least expensive shipping choice but was known for its ability to customize its solutions, integrating its processes deeply into large enterprise systems, resulting in an overall better solution and lower cost. It was bought by DHL in 2003.

Airborne became a reference model for “customer intimacy,” particularly interesting because it competed in an industry general considered to require an “operational excellence” approach.
3. Mats Rundkvist, ICT Support project leader, Västerås municipality, Sweden, December 2011.
4. *Crossing the Chasm: Marketing and Selling High-Tech Products to Mainstream Customers*, Geoffrey Moore, 1991.
5. *Strategic Management: A Stakeholder Approach*, R. Edward Freeman, 1984.
6. *Assisted Living Robotics: Telepresence for Elderly Care*, Infonaut AB, Wolfgang Heller, 2009.
7. *ICT Support Care Delivery Cost Model*, Västerås stad, Mats Rundkvist, Maria Gill et al, 2011 (private document).
8. *The Use of Telepresence in Care in Sweden*, Stephan Zwart, Universiteit Twente, Netherlands, 2009.
9. *Designing a responsive support service for family carers of frail older people using information and communication technology*, Lennart Magnusson, ACTA Universitatis Gothoburgensis, 2005.
10. *IT-baserat anhörigstöd i vård och omsorg*, Lennart Magnusson et al, Högskolan i Borås, Institutionen för vårdvetenskap, 2002.
11. *Success Factors in Establishing Your Brand*, Donald Tan, 2010.
12. *Ambient Assisted Living Joint Programme web site*, Objectives and Concept Description, <http://www.aal-europe.eu/about/objectives/>
13. *E-hemtjänst i Västerås*, Eva Nilsson Bågenholm, Svenska Regeringskansliet, September 5, 2012, <http://www.de-mest-sjuka-aldre.se/aldreomsorg/e-hemtjanst-i-vasteras/>