

# SUCCESSFUL SOCIAL DESIGNS FOR AGILE AND DIGITAL I.T. ORGANISATIONS

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## EMBRACE THE CHANGE

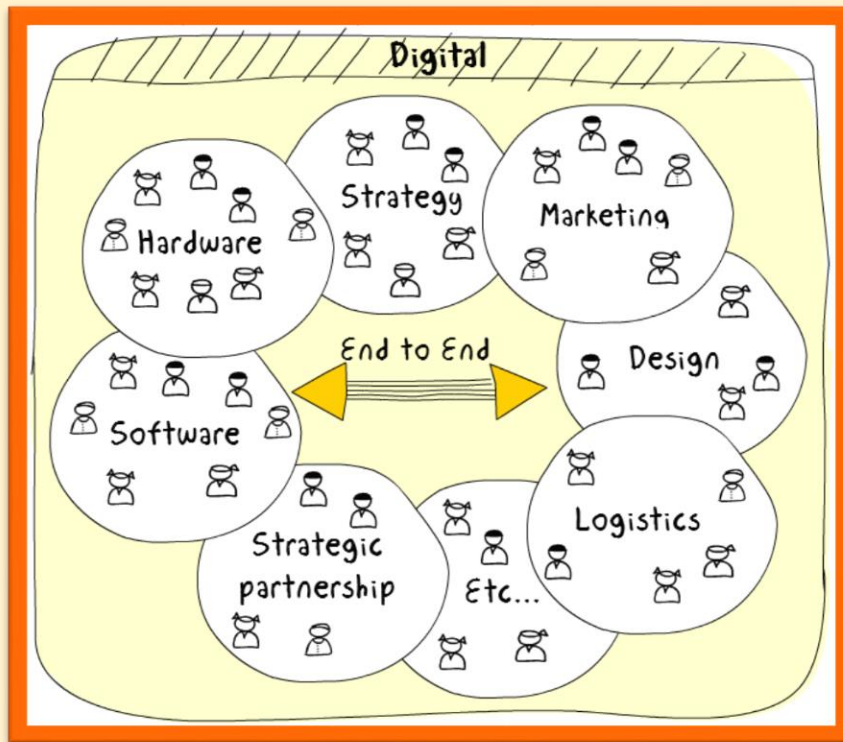
If you are reading this booklet it is because you have the feeling that something is not working as expected and that the desired Agile results have not been achieved or you are curious about how other organisations

have been able to adapt in times of constant change. It is clear that with the turmoil in global markets and the Internet as a means of negotiation, companies have had to seek solutions to adequately and

quickly adjust to changes in order to be able to deliver more value to their customers with greater **speed, predictability, quality and accuracy** in decision-making.

Many companies have become **"digital"**, indicating that their communication with markets, customers and business is almost exclusively through the Web. This change results

in the focus and pressure being placed on **continuous delivery**, which means they have to move away from traditional models. In the latter, changes were first planned and then executed in concise stages. In the new scenario, **variability** is **organic** as a result of the interconnection with the web, social networks and customer feed-back, which has made the traditional model an unworkable solution.



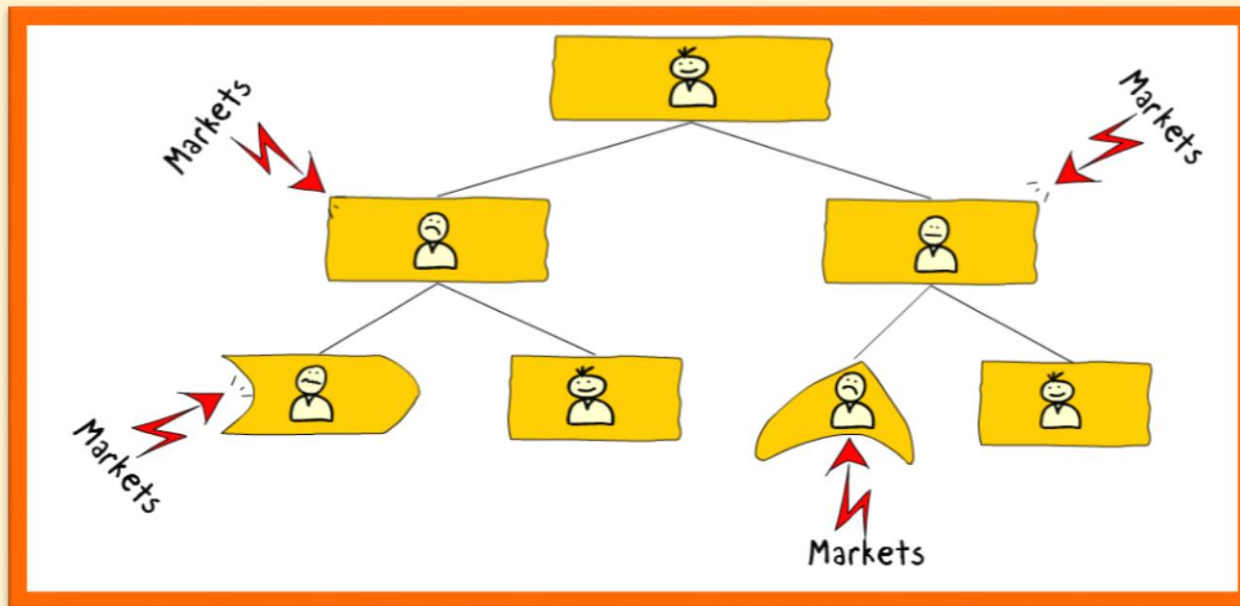
## EMBRACE THE CHANGE

Companies should therefore focus on creating an **end-to-end digital experience** that allows the creation of new working models that not only connect people with the business, but also connect individuals and businesses with the things that boost efficiency and improve their economic gains.

When they start with the end-to-end experience, companies do not usually find it possible to leverage the existing capabilities of the business because skills exclusively oriented to **serve the market** are required. The new challenge requires different **interlinked elements** such as: software, hardware, design, marketing in

close contact with the customer, logistics, strategic alliances, etc. Because of this, the idea that the characteristics of a product can be specified by someone and executed by a team is no longer appropriate. Now the action has to be created by groups that **explore** and test **hypotheses** in order to validate or invalidate the direction to be taken by the company.

People and **discovery** processes are also highly impacted; an employee who contributed in a project or product could be someone who was not previously known by the group but discovered as a result of their essential contribution. In the same way, **leaders** may no longer be entirely elected by management, but recognized by **communities** as valuable individuals that set the future course of the company. This shows clearly that some of the answers must now be based on the unique situations and characteristics of the organisation and its products, which may change from month to month.





## EMBRACE THE CHANGE

These changes lead to the overall **structure** of the company being **affected** by the constant pressure of the markets, which have a daily impact in the form of small changes or adjustments in different areas and departments, thus moving away from the idea of **fixed organisation** and towards the idea of a **dynamic** structure. In turn, there is commonly considered to be a natural tension between different disciplines/areas such as products and technology, front-end and back-end (or services), developers and operations, etc. Unlike the initial intuition, here the best way to take advantage of tensions is not to separate people but to bring them together to work in one team with a common goal to solve a particular problem. Clearly, if the organisation lacks multiple viewpoints on the problem to be solved, it will not be possible to make good decisions and the results will be mediocre (\*r01). This is

especially true if one considers the current complexity of software products and the increase in their "movable" or interconnected parts. Bringing people together could create a different understanding of the organisation from the one existing when they were apart, which would make it possible to detect gaps in knowledge that are masked by the silos and bureaucracy.

*The biggest killer of a company is its own decisions*

In my opinion, many companies have reached a **partial view** of the impact, which has caused them to focus solely on the opportunity to increase their departments and primarily the areas producing software (IT). There are companies that have even opted for scaling techniques associated

with Agile, but not really Agile (\*r02), which has actually aggravated the problem of shortsightedness.

While the latter idea provides profits in the short term, it contributes directly to the increased **complexity** and **complication** of processes in the medium and long term.

There is clearly pressure to choose between making fast or high-quality software, but this is only the result of **friction** between a traditional structure and a new mental model. Many of the things that were considered **right** or **necessary** in the past must now become **questionable** or **avoidable**. It is hard to have to see the list of former good ideas, being abandoned entirely, but if you consider the friction they generate in the organisation, the **people** responsible for initiating change should take a **step back** in order to **move forward** (\*r03).

There is also an additional effect that should not be ignored on the string of "satellites" surrounding the company.



## EMBRACE THE CHANGE

Business partners who provide services or staff (outsourcing or similar) usually find it difficult to establish an adaptation to support the flexibility of the contracting company due to the speed of change. The latter may make them see themselves as apparent obstacles to the growth of their client due to slow adaptation.

## SCRUM AND SOCIAL MODELS

Part of the market has seen a positive opportunity to implement the **Scrum framework** or other Agile models, in order to support their **adaptability** and **survival** (often called "transformation"). There has been an **increase** in the number of **teams**, entropy and geographic disparity (remote

working), which has directly or indirectly increased the outsourcing of services to third parties and their complexity.

If we focus especially on **remote teams**, we must not forget that they nearly always deliver products more slowly, with a greater number of **defects** and **higher costs** (\*r04), which supports an increase in processes or decrease in quality in order to quickly validate or invalidate hypotheses on the desires of customers.

It is then that many organisations begin to wonder how to be flexible and **respond consistently** and quickly to the market without sacrificing their organisational stability. The difficulties are usually mainly focused on the **non-volatility** of

their **structures** and leadership, and on the new types of cooperation required to support change and growth of innovative products.

It is not uncommon to find companies that try to address the problem with **paradigms** from the **last century** or **out-of-date** collaboration and communication techniques, such as the widespread use of emails, video-conferencing between teams but without visibility to the rest of the company, sharing of documents frozen at a precise moment in the past, annual checks of objectives/goals or learning focused on roles that are too highly structured.

All this has not stopped the emergence of the profound changes required in the ways in which **interactions between people** in the organisation and its **structures** and **processes** take place.

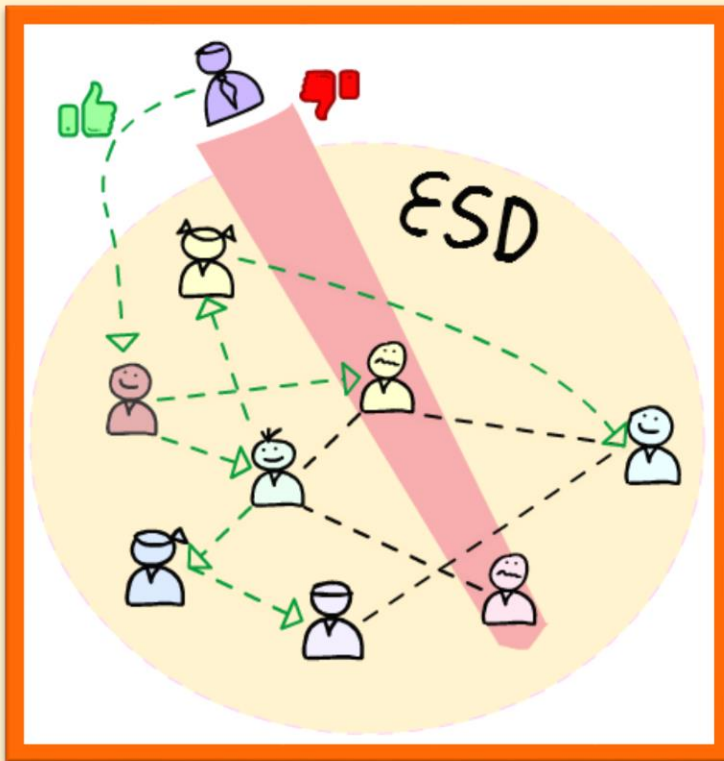
Effective **virtual** collaboration is crucial for the journey towards the invention of a new type of **scalable organisation**, where the boundaries of time and space (distance)





## SCRUM AND SOCIAL MODELS

are compatible with honest **face-to-face** communication and the self-organisation of multifunctional teams, thus supporting a common goal that can **satisfy the customer in a natural regular way with a non-**



**negotiable, innovative, high quality product.**

To understand the steps to be taken, you need to understand the way people **connect** within the company so that strategic decisions are made *en masse* rather than by a committee or small group, and the way in which the **feed-back** is generated from different departments to validate designs or future alignments or the use of short timeboxes, **self-organisation, multi-functional teams** of people with **T-shaped learning model** and the inclusion of **facilitators** instead of leaders, in order to finally **accept change** as a **positive** milestone in the culture. You should always prioritize the transfer or distribution of as much **relevant knowledge** as possible for

a particular moment as quickly as possible. This means supporting new communication channels that are **trusted** by the people who do the work, which effectively **amplify** a positive message (as opposed to traditional "top-down" communication).

*Breaking institutional inertia and emphasizing the difference between what the organisation is today vs. tomorrow requires each new initiative and team to create its own set of tribal values and principles based on who they want to be in the future*

All this involves being able to challenge the existing **mental models** and the values and beliefs of the organisation; this will only be possible through a **new corporate model** that supports change.

## CHANGES AND SOCIAL CULTURAL TRANSITION

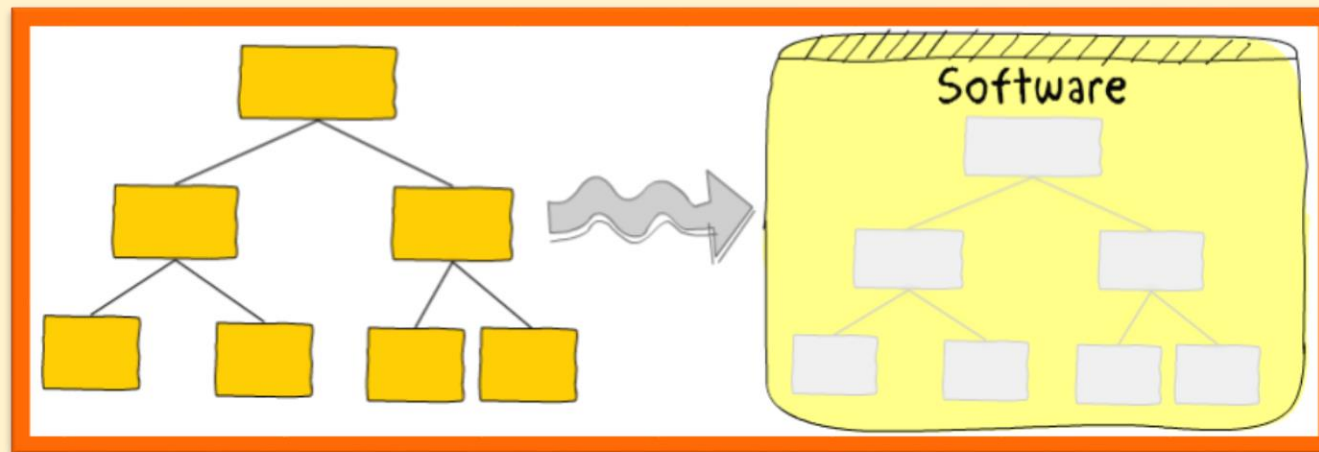
The first part of the **transition** towards the new **corporate model values** should be to support changes as part of the culture, integrating the different areas so that they can discuss the most complex issues and their impact. The removal of **artificial or political boundaries** within the company (**silos**) should also be a primary and **non-negotiable** objective. For example, the idea of teams that write code according to specifications, test and pass to the borders

of operations is no longer a valid model; it is now necessary to have groups that resolve problems from end to end (multifunctional) and make **frequent changes** to the code for which they are responsible (ownership).

The goal should always be to **disperse knowledge iteratively**, supporting the creation of new designs (software, organisation, etc.) and products created by crowds, where the feed-back of the

leaders, the **new talent** discovered and those who do the work is involved. It is therefore important to promote a **continuous learning business model**, distant from the transfer by long-lasting blocks and close to learning through the work itself.

*Many teams reach a ceiling in their performance and motivation because the heads of the organisation do not create the right conditions to support the appropriate social model*



The focus of any activity must be placed in **small instances** with repeatable **cadence**. Learning will have to promote a **culture** where every new idea is a **hypothesis** that needs to be verified, and its potential failure considered a **positive** opportunity for improvement or feedback.

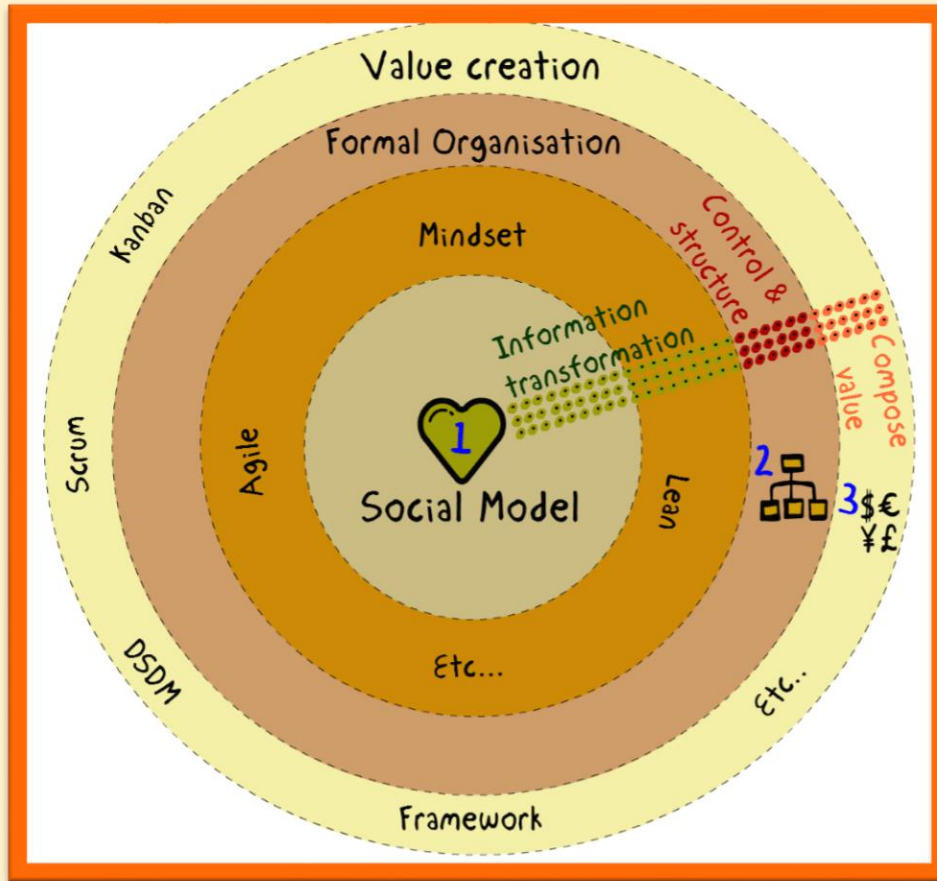


## CHANGES AND SOCIAL CULTURAL TRANSITION

It is clear that the software itself is restricted to the communication structures

of the company and the only way to improve any product will be through a cultural transition and re-design of the structures

of information flow in the organisation to achieve real-time **collaboration** and perpetual growth of the people and the company. The **24/7 pair work** to be discussed later is an excellent option which will generate a partial break with the copy of the original designs, thus creating



divergence and innovation.

Before thinking about accelerating the production of software, or setting out on the path to **Agility**, the company must invest in a **robust social model** that can adapt to the structural challenges of the business.

Unlike the illusion that people have where they see the organisation as just a set of hierarchies, it should be viewed with 3 pillars:



### Social Model Pillar

Core of the organisation: its **social model**; very **informal** and reflected through the interactions between people and its rules. This pillar is more visible in times of crisis and confusion. When this happens, people usually temporarily leave aside **formal organisation** pillar to focus on this pillar and the 3<sup>rd</sup> one.



## CHANGES AND SOCIAL CULTURAL TRANSITION

2

### Formal Organisation Pillar

This is imagined as a **pyramid structure** or organisation chart with boxes representing the departments, in which each one is usually related to the others through reports and metrics. This pillar comes from the **industrial age** and was designed by **Frederick Taylor**. Here, people tend to lose visibility and not understand the context of what business value is related to the work that is being carried out.

3

### Value Creation Pillar

This consists of more **flexible** structures that interconnect and interact exclusively to provide value and innovation to the customer.

They respond to market requirements and may change informally with no need to define a new hierarchical structure. If the organisation is **Agile**, it connects with the mindset and frameworks and associated value chains. Otherwise, it is a rather more complex link that contains a mix of methodologies and formal connections between people.

It should be noted that the **creation of value only occurs in this pillar.**

In other words, in the **social model pillar information is transformed**, in the **formal organisation pillar** information is controlled and structured, and in the **value creation pillar** information is taken and used **to create value for the customer.**

In my opinion, companies invest **70%** to maintain the **formal pillar** and **20% to 25%**

in **value creation**, leaving very little for the first pillar (social).

In order to have greater speed and **adaptability** to the market to increase the **predictability of delivery** and innovation, it is necessary for organisations to focus their energy on reversing the equation. This means investing **50%** in value creation, **20% to 30%** in the social model and not more than **20%** in the formal pillar.

It is then that making the **3 pillars** of a company **visible** serves as a good start to showing explicitly where time, resources and people are being invested.



## THE CHALLENGE OF REMOTE TEAMS IN THE DIGITAL AGE

Increasing production and **innovation** by using remote teams is a challenge for companies that want to **adapt quickly** to the digital paradigm. And although there is **no substantial evidence** to show that money is saved by the use of distributed teams, this is a tangible and unavoidable reality. Experience shows that only teams that are in the same place **double** their production (e.g. located close versus not close but within the same premises) (\*ros). There is not even any evidence of the economic benefits of having remote teams using the waterfall methodology, because the savings do not make up for the lost productivity (\*ros).

If you are considering using the **Scrum** work framework with distributed teams, it is first **essential** to ask if it is possible to have a product backlog ready when the **Product Owner** is not physically present with the rest of the team. There is then a **barometer**

that makes it possible to determine whether a team is **prepared to be remote**; the signs are positive when you can ensure locally that:

- The application created has successfully met the **Definition of Done** (DOD) at the end of the sprint
- All the **Product Backlog** is ready at the start of a sprint
- All the **impediments/obstacles** have been removed by the Daily Scrum meeting or Scrum of Scrums
- The **velocity** of the team has started to rise in recent cycles (sprint).

It should be noted that the fact that the team is ready does not mean that the organisation is prepared to support its distribution in terms of **logistics** (cameras, software, etc.) or **culture** (habits that support being remote). From experience, the obstacles are harder to remove if the

groups are located geographically distant. In this case it will be necessary to have a greater number of **facilitators** ready and available before the start of product development, and as far as possible, in the event that a team is divided, make sure that both **sections** are **similar** (cell division). Educating everyone in values (Agile, Lean or own) and knowing how to **assess motivation** in such environments is critical. Meanwhile, the most experienced facilitators should be available to support new members. Being distributed **magnifies** the **dysfunctions** found locally, so more people or time will be required to do the same job.



## THE CHALLENGES OF REMOTE TEAMS IN THE DIGITAL AGE

There are some preliminary questions to be answered during gestation of the product if you want to consider the possibility of remote teams, such as:

1 Is a distributed project more likely to fail than a local one?

2 Will the project be delayed because it is distributed?

3 Have the dysfunctions inherent to a remote team been taken into account?

Bear in mind that regardless of whether the **members** are local or remote, they have to be **stable** to achieve success. In order to foster personal ties, a maximum loss of people from a group of 20% per year is considered acceptable. Moreover, it is

always advisable for them to be members of the company rather than a supply company unless you want to import a new culture.

It is important to bear in mind the difference between **loss** and **rotation**, the first being an action with a **negative** effect on **shared knowledge** while the second is an activity to **spread knowledge**.

Finally, it should be noted that remote teams generally have more distractions, making it more difficult to maintain their focus (a distributed team will have local distractions in addition to the remote ones).

## SOFTWARE DEVELOPMENT AS A SOCIAL ACTIVITY

One of the main changes to be understood is related to the classification of software development. It is clear that there has been an inevitable increase in the **complexity** and variety of the tasks required to implement a product, including its dependencies as well as the technologies and tools required. This has meant that what was originally seen as an industrial

activity more like an assembly line where staff is replaced by machines cannot be successfully described using this **metaphor**. It is here that there is a pronounced difference between **complicated** and **complex**. The first (complicated) refers to any activity where most processes can be replaced by machines because they are usually repetitive. The second (complex)

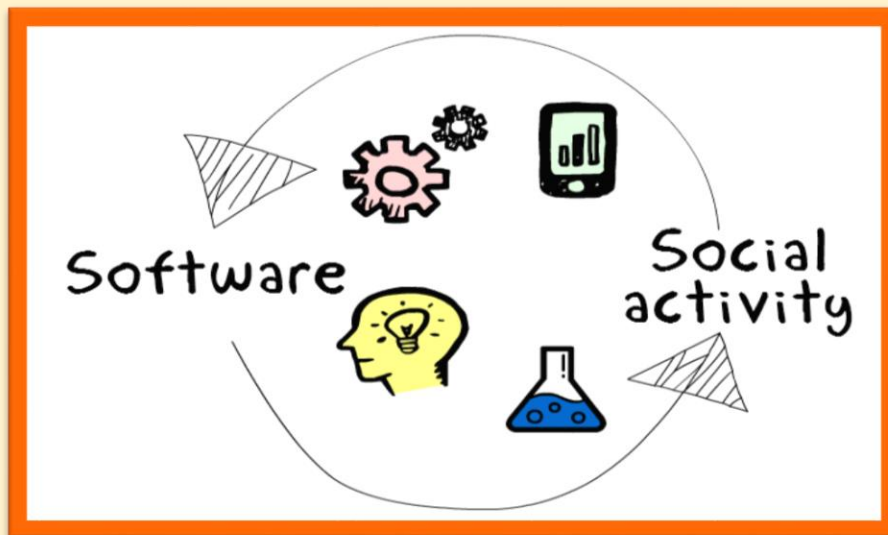
involves high variability; software development is a perfect example of a **creative process** that involves human beings and requires different solutions in similar situations. In this case **knowledge workers** focused on

discovery processes are required.

If each of the **knowledge workers** in a team is seen as a **node** in a neural network containing vital information, the only feasible way to remove some of the complexity in a **sustainable** way is by **magnifying** the **connections** between individuals. This will exponentially increase the amount of information flowing between network points, giving **emerging designs** and simpler and more creative solutions, in addition to shared knowledge.

*The social model should be amplified and conceived as part of the values of the working methods of the organisation*

We must therefore accept that **software development has changed from being an industrial activity to being a social activity**. This last statement implies that certain **rules** should be applied to the **re-design** of





## SOFTWARE DEVELOPMENT AS A SOCIAL ACTIVITY

**digital organisation** and they will have to be integrated into the values and processes of the daily routine.

Therefore, organisational structure must necessarily be adapted to focus on **activities** that can multiply the **fluidity** with which the relevant information flows through networks of people and the way in which it radiates out from the company.

In my opinion, companies where the life of the development of a product is seen as a set of **social collaborative activities** tend to be more successful, maintain people's motivation high and are better suited to the rest of the ecosystem of changes resulting from market demands.

A clear example of the **social model** is where people can choose the **teammates** and **product** with which they feel most comfortable, ensuring their own self-

sufficiency. This can always be done through a **self-organizing** activity on the **first day of work**, thus involving the **responsibility** of people with the success of the product from the outset.

If there are **different business partners** providing teams or people, the mixture of all individuals according to their affinity, no matter who they belong to, will always give better results and less **friction** and **corporate distance** than the imposition of an **artificial barrier** either by direct assignment of people by an internal department of the company or due to the planning of the business partner. This fact will promote **change** as a **positive milestone** in the company, which will facilitate changes in the organisational structure in the event that the market rules change.

As one can see, migrating to the **social collaboration model** means changing the **operational culture** of the daily routine, which is a major challenge in bringing about a real transformation.

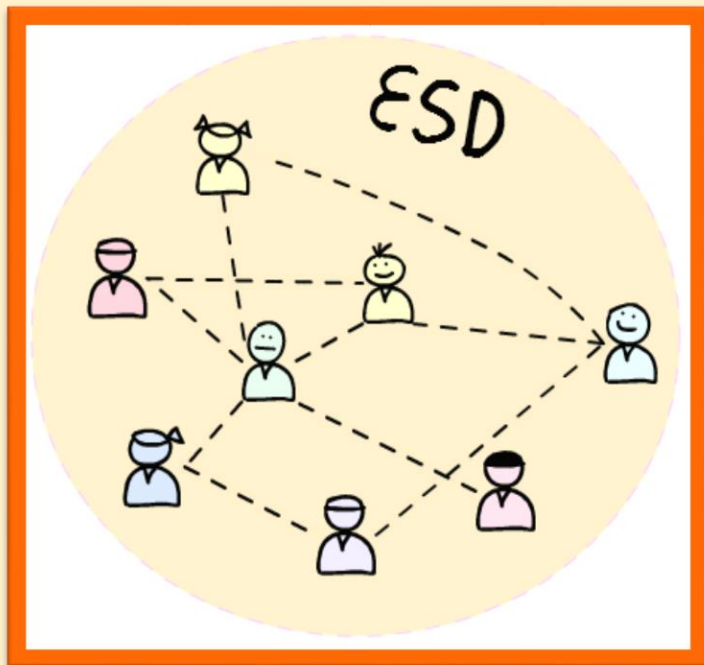




# INFORMATION FLOW AND SOCIAL DENSITY

Large corporations typically see communications as a flow of information that moves primarily from the top (management) downwards (employees) within a hierarchical system.

*How often have you heard in an informal chat in the cafeteria some news that you will find out weeks later through the formal channels?*



It is important to understand that despite the widespread belief, **informal information flows several times faster** and in different directions in the time that it takes a single piece of "data" to pass through the formal channels. This is mainly due to the nature of informal communication and the fact that the **recipient trusts the sender**. I call this **Enterprise Social Density, ESD**, and I define it as *the flow of relevant, honest, informal and effective information between people in an organisation in an environment where they feel safe (\*r07)*. The more

**ESD**, the better the information, quality and transformation of the business.

**ESD**, therefore, promotes an active exchange of information that allows **coordinated actions** through networks of **knowledge workers**, the business and everything necessary to achieve a common goal.

For there to be high **Social Density** in an organisation, it is essential for members of the company to enhance four values: **positive attitude towards change, trust, honesty and high face-to-face communication**. This means actively distancing oneself from bureaucracy and guidelines established without prior discussion and focusing on **informal conversations**. When **ESD** decreases, the information is highly **contaminated**, which makes people begin to stop using **rapid flow mechanisms** and resort to **formal channels**, thus increasing bureaucracy and ultimately the cost of any product or service task or transaction.

## INFORMATION FLOW AND SOCIAL DENSITY

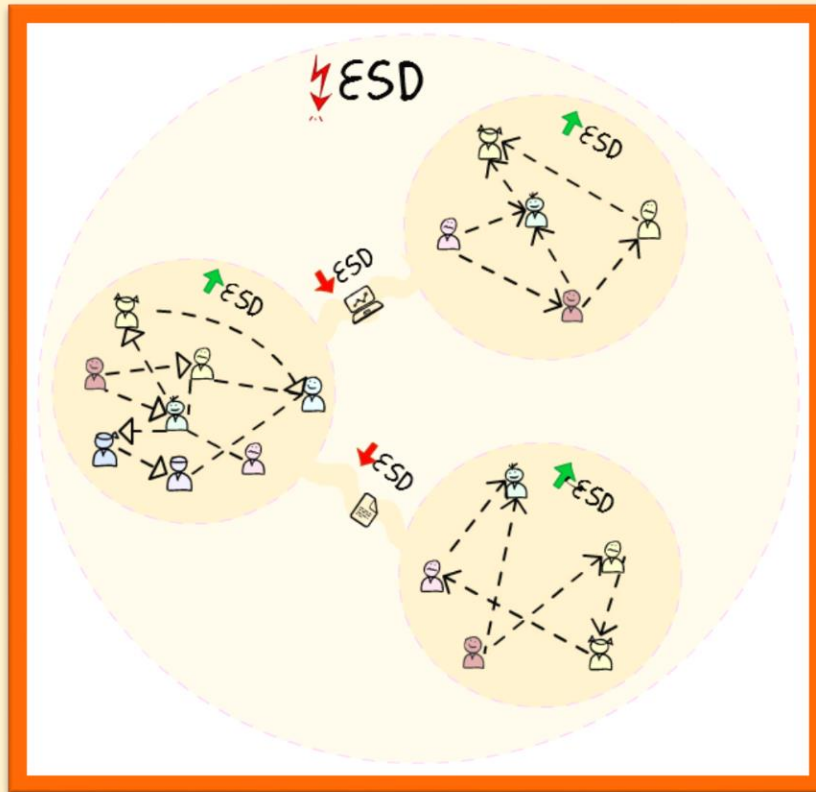
In companies where social density is low, the employees use **indirect** means for the transfer of experiences (email, chat, etc.), which increases **inefficiency** and decreases

productivity, thus increasing spending on dysfunctions, the cost per piece (e.g. Software) and decreasing the amount of **hypothesis** it is possible to verify with the market in a given time.

analyst in a Scrum team) or belong to **different cultures** within the same company (different values or suppliers/partners) without having carried out a process of **acculturation**.

*Organisational barriers and the mix of different cultures always generate friction but can be exploited positively if one takes the social model into account*

Another concern is the **artificial barriers** between people or groups because they generate friction that has a direct impact on the **ESD**. An example is where development groups are divided into those carrying out "back-end" work or services and those carrying out "front-end" work. In this case, one part is usually responsible for behind the scenes systems using more traditional processes while other uses different processes to provide web products and/or mobile applications.



*Enterprise Social Density: flow of relevant, honest, informal and effective information between people in an organisation in an environment where they feel safe.*

An example of low **ESD** is when members communicate under extreme necessity (e.g. to ask for help), work in silos, with defined roles within a team (e.g. using an business



## INFORMATION FLOW AND SOCIAL DENSITY

In some organisations groups are even scattered around different buildings or cities in order to make a physical separation that accompanies the idea of logical division. As a result, teams (e.g. "Front-end") will not be able to imagine the **journey of a customer** towards the **value**

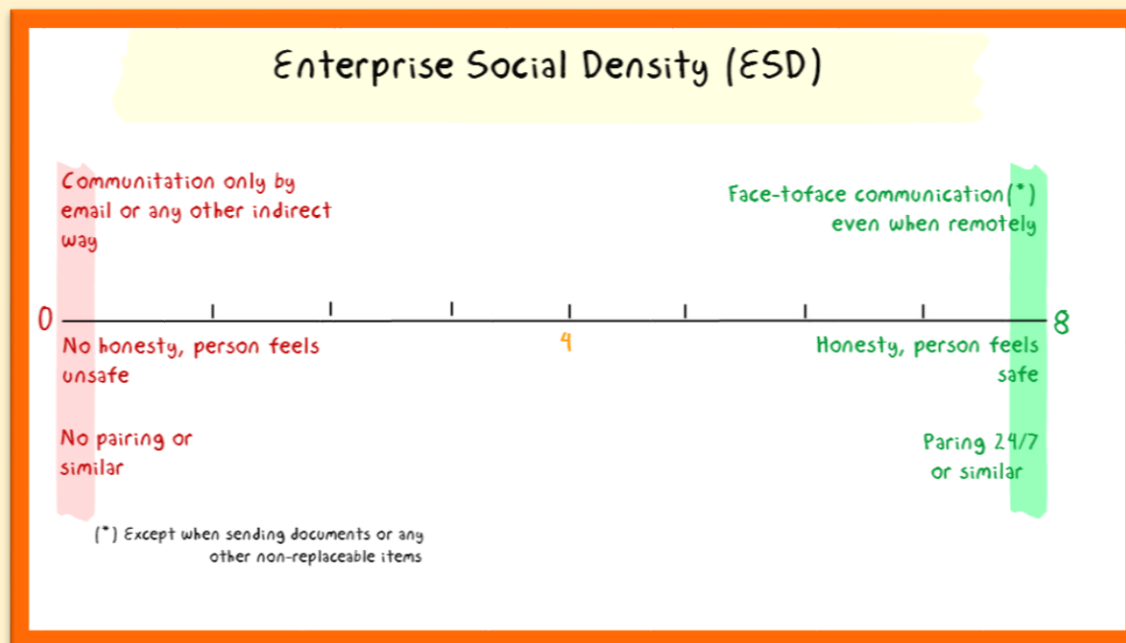
as they will be enclosed in the profit-making practices and models of the back-end systems, the latter being engaged by requests from the former, thus creating a **vicious circle**. This will not only lead to increased knowledge silos, which will increase the **paternity of the code** among

the **knowledge workers** (\**ros*), but will reduce **ESD** causing a drop in the flow of information within the organisation **as a whole**, making the development of a product slower and more expensive. It should be remembered that the higher the **ESD**, the greater the transformation of information within the organisation.

The overall **ESD** of a system will always be the minimum value (**bottleneck**).

In cases where Social Density is very low, the information will tend to flow through formal channels, which not only lack speed but do not establish a **bond of trust** between the parties.

**Enterprise Social Density** is the first factor one should consider increasing if one wants to move towards decentralized and flexible models such as Agile.





## INFORMATION FLOW AND SOCIAL DENSITY

The existence of a very **pronounced hierarchy** or team from **different suppliers/business partners** without a process of **acculturation** within the same

organisation hierarchy may also reduce social density, which obviously seriously compromise the Agility levels of the whole company.

### Honesty in Communication

- 1 I'll accept everything that is said without promoting any idea
- 2 I'll let others give their ideas or present their problems and do some open questions to guide the conversation
- 3 I'll talk about some things but not expose what I think is important
- 4 I'll talk about some things, but discard those that could be problematic for my team or boss
- 5 I'll talk about everything but discard those that could be problematic for my boss or team
- 6 I'll talk about everything but discard those that may be different from others
- 7 I'll discuss everything with everybody but always take care of me
- 8 I'll discuss everything with everyone about what I think

At the same time, we know that a team will reduce its **ESD** if it moves geographically, its members are scattered or do not trust each other. There is even an impact on social density when they move more than **30 meters** apart (\*r09). We will later discuss some ways to work and be successful in the different cases.

*The first challenge is always to conceive or re-design an organisation model to increase Enterprise Social Density*

As a barometer of levels of honesty in the communication of a group, you can use the table to the left. You must remember that this measurement must always be taken anonymously to avoid compromising the results.

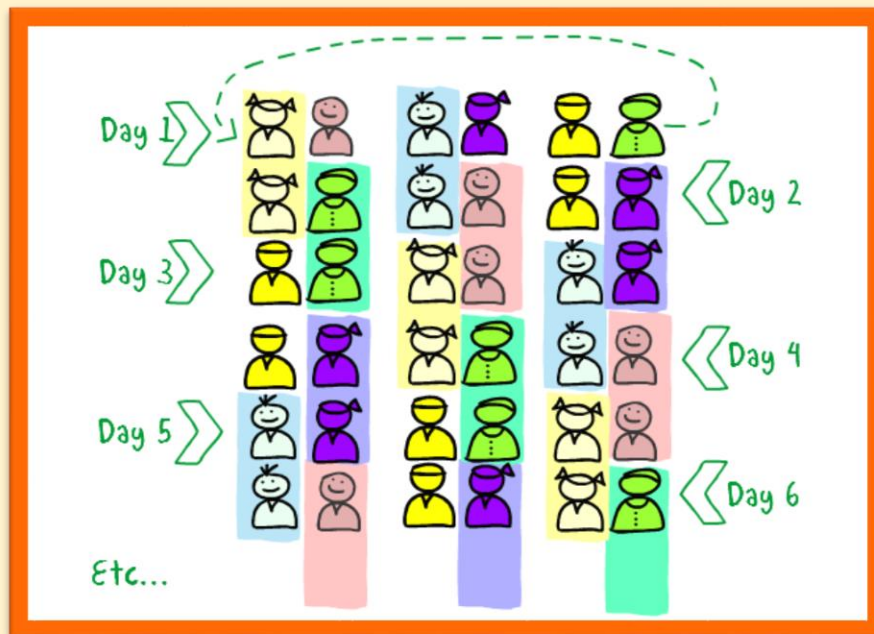
## ENTERPRISE SOCIAL DENSITY AND CURRENT CHALLENGES

The first challenge is to conceive or re-design a team model to increase **Enterprise Social Density** so that information can move freely and without interference.

One solution I have used successfully has been the use of **mandatory pair work with**

**rotation at most every two days** (pairing 24/7).

This makes the flow of information increase, be constant and generate a predictable **cadence**, giving greater flexibility and intelligence to the set of "nodes" of company networks.



This type of "pairing" should be carried out even between members of different **specialities** within a team. In the event that a pair does not have the knowledge to do the task, another pair may join them to teach them.

It is important to note that this practice may take 3-6 months before

people feel comfortable with the new way of working.

**How else is it possible to increase ESD between teams?**

You should always think about **common goals** that involve collaboration and **face-to-face communication**, which will mean the members have to interact and **commit themselves** inescapably to performing the tasks (e.g. common metrics, teamwork, etc.).

*Starting a new habit is always more difficult than maintaining it*

If **Scrum** is used, it is possible to increase the **ESD** between teams by using an adaptation of the **Scrum of scrums** ceremony. This has been used by the framework for a long time for **scaling** and consists of bringing together several **Scrum Masters** a few days a week to talk about



## ENTERPRISE SOCIAL DENSITY AND CURRENT CHALLENGES

**blockages** and **dependencies** between teams (if Scrum is not used, it is possible to use meetings of a similar nature).

The meeting lasts a maximum of 15 minutes and each member must answer the following questions: What did the team do the day before? What will the team do today? What blockages are being set up in other teams? What blockages are being added to this team by another one?

This solution clearly helps with the removal of blockages and **coordination** between groups but does not offer a substantial increase in the **ESD** between the parties because there is **no rotation of people** to promote the sharing of knowledge.

For the inter-team **ESD** to increase, it will be necessary to modify the format in which the meeting is held as well as its **frequency**, making it a daily affair. In the new

“version”, the **Scrum Master** must always come with a team member, who will have to present information and **rotate** over the various days. This will mean that all parties (node networks) can interact at the different meetings, which will allow information to circulate and increase the inter-team **ESD**. When there is a bottleneck or knowledge silo, you should **accentuate** the **rotation** among people from one circle to another. It is necessary to find a rotation commitment without breaking up **inter-personal relationships**. If there is a high number of silos, rotation must even be 80% per annum to promote information interchange between people from different circles.

It is also recommendable for teams to create an **extended social contract** (or extended working agreements) on how they should communicate with the other groups and how they will rotate their

members to distribute knowledge. It is normal here for **knowledge workers** to be reluctant to take part in such practices, especially with groups with less mature members.

*“Collaboration within a team is usually continuous but between teams is always discontinuous”*

It is important for every company to have a conversation with the people who do the work in order to make the **first rotation experiment**, which should be improved after 2-3 months.



## HELP PATTERN AND QUANTIFICATION

There is a pattern of success in local or remote teams seen in **“unstoppable”** or **hyper-productive** teams. They are thus named for their productivity, which is normally associated with the fact that they seek **help** on a regular basis within or outside the group as soon as they encounter an obstacle or problem.

This pattern, according to my observations, has shown an increase in **collaboration** and **ESD** between groups, which promotes the creation of shared knowledge and adaptability to change.

It is a good idea to **quantify knowledge gaps** within the company at all times. This can be done by calculating the **cost of delay** or **CD3**, indicating that so much customer value has been lost due to not having specific knowledge to build a certain characteristic.

*CD3 is a cost of delay technique that allows a common measurement for comparing opportunities of different value, urgency and duration.*

This will make it possible to quantify the loss of business/economic opportunities, helping to align the company and make the problem visible. Check more about Cost of Delay at [www.blackswanfarming.com](http://www.blackswanfarming.com).



# ADAPTABILITY AND COMPLICATION/COMPLEXITY

Aggressively adapting the structure of the organisation so that it can increase its size without massively increasing its **complexity** and **blockages** requires rethinking the current growth model and challenging the beliefs of the company to put the focus on **Enterprise Social Density, simplicity, considering the customer as**

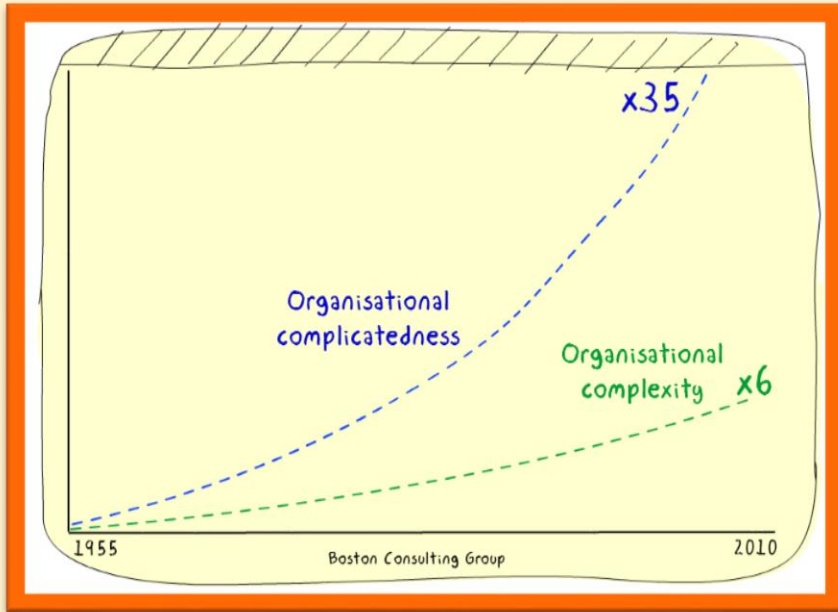
**the centre of the universe and delighting him** and software development as a sustainable **social activity**.

Companies commonly take the problem of increasing need for product requirements (better quality, cheaper, more flexibility, etc.) by creating departments that specifically deal with the new request. We call the increase in requirements **increased complexity**.

While it may be a good idea, it is a well-known **anti-pattern** that results in the addition of a new department which creates new roles, relationships between them, personal careers, approval and power chains, etc. etc.,

which will result in an **increase in the complication**.

According to **Boston Consulting Group**, from 1955 to 2010 complexity has increased **6** times and complication **35** (\*r10). The only viable option to reduce both factors is for groups to be multifunctional and self-organizing so that they can "**absorb**" the various requirements as part of their internal quality criteria (**Definition of Done** or similar). Having dealt with this, the characteristics will be managed by the team, which will make them "disappear", thus reducing both factors.





## OBJECT ORIENTED ORGANISATION STRUCTURES

There are structures that support social models, such as the **Object Oriented Organisation Structure**. Here groups are seen as networks of **nodes** or self-contained and self-organized objects where information flows internally continuously and in small blocks due to high **Enterprise Social Density**. One of the features of **OOOS's** is that the structure and positioning of the nodes

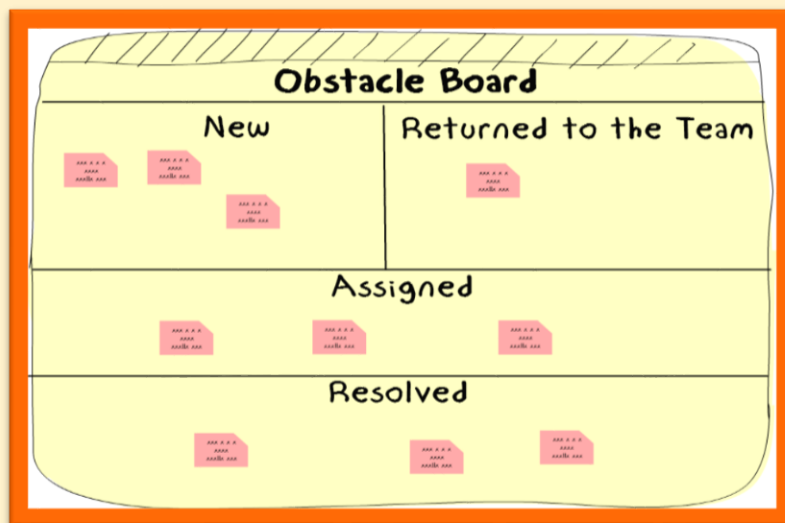
(departments of the company) can be "**refactored**", i.e. moved according to new market needs, thus offering **flexibility** and **speed of adaptation** and allowing easy replication of the "objects" because they are self-contained entities.

A main task of "refactoring" in **OOOS's** is **removing obstacles** iteratively through all company networks. **Blockages** of a self-organized node could affect the whole structure of the organisation in different ways, thus creating a chain reaction difficult to determine. That is why **visibility** and **removal** is **crucial** in this type of organisation. In my experience, it can be successfully supported by **Kanban obstacle boards**.

Here every department of the company sticks their obstacles to their local boards, which will be automatically scaled (copied in other, generally higher, boards) in the event that they cannot be removed. Once this has happened, this process will be repeated on a **fractal** basis, thus crossing different nodes until it reaches a person or team that can effectively solve the problem.

*Fractal: flat or spatial figure, composed of infinite elements.*

For **OOOS's** to be successful, the company's various facilitators (Scrum Master, Agile Champion, etc.) should take a leading role, constantly watching and helping so that blockages can be removed by a **deadline agreed** at the institutional level (e.g. 3 days).





## CULTURAL MULTIPLICATION

When OOOS's are used and there is visibility and effective removal of blockages, it will then be time to take the next step: ***creating the seed for the future organisation.***

This should be managed by creating an initial self-contained "ideal" node (team/area/etc.) where connections between members are high and the "right" mindset values and principles and key patterns (e.g. not carrying out multitask work and seeking help as soon as a problem arises) are in place. Once this group has been identified/created, it may be feasible to use it as a role model to be replicated throughout the organisation, adjusting and "refactoring" the structure of the company at **regular intervals.**

**Facilitators** (Scrum Masters, Agile Champions, etc.) must support the process

again so that teams have the initial space for effective growth.



## SUSTAINABLE SOCIAL MODELS

It is imperative for any resulting corporate model of the company to be subjected to **continuous improvement**. For this purpose it is necessary to use **retrospective** sessions where people can:

- Improve forms of communication among members
- Explore new ideas to simplify processes
- Discover new paths for those who do the work
- Learn new ways to effectively remove obstacles
- Learn an iterative and incremental way in which knowledge can be acquired in a sustainable manner

For the corporate model to be **sustainable** and the company to establish itself as a **learning company**, it is imperative for the process of **continuous improvement** to be **recurrent** and retrospectives be done at

**non-cancellable regular intervals**. This actively helps with the continuous adaptation of the organisation, which will not only make it possible to connect people with the business, but also to link individuals and the company with the things that promote efficiency and economic gains.



## ENTERPRISE SOCIAL VISIBILITY IN THE DIGITAL AGE

There is one more factor to consider. It has been shown that the **interactions** of people in the office with the **social and spatial environment** are essential components of the daily routine and a requirement of new organisations (\*r11). Around the end of 1980 people began to observe that certain corporate changes could not be adequately explained if the physical space where the activities took place were not considered to a greater extent. If we consider **software development** as a **Social activity**, special importance will have to be given to the impact of this on teams, their dynamics and overall organisation in order to ensure the success thereof.

It is common for companies to imagine that people only receive information through the standard means of communication (face-to-face conversation, telephone, etc.) or electronic means (email, Internet,

etc.). As a result, when a team travels to a remote geographical location or a new physical space is designed for the enterprise, the tendency is only to cover or replace these 2 channels of communication, ignoring the rest.

There are dozens of "**rich**" **social cues** that are given constantly but passively to employees through data and confirmations. They are called passive because they occur without them ascertaining what is happening. There are 4 key channels that feed what I call **Enterprise Social Visibility or ESV**:

**1** **Public information radiators** - physical panels (paper, boards, etc.) displayed publicly and visibly with relevant information. They are normally updated by the people around them, which alerts the

recipient to the fact that there are changes (these may be electronic as long as they are updated using a **visible social interaction**, e.g. Standing up and visibly updating a public touch screen).

2

**Social interactions** – Recognized “standard” social forms in which people around interact (e.g. a handshake between two people, etc.), allowing knowledge to be gained about a situation, even if they are not part of it.

3

**Recognition of facial expressions** – Watching other individuals to judge their emotional state (e.g. a conversation that occurs in the distance but within the physical space of the receiver).



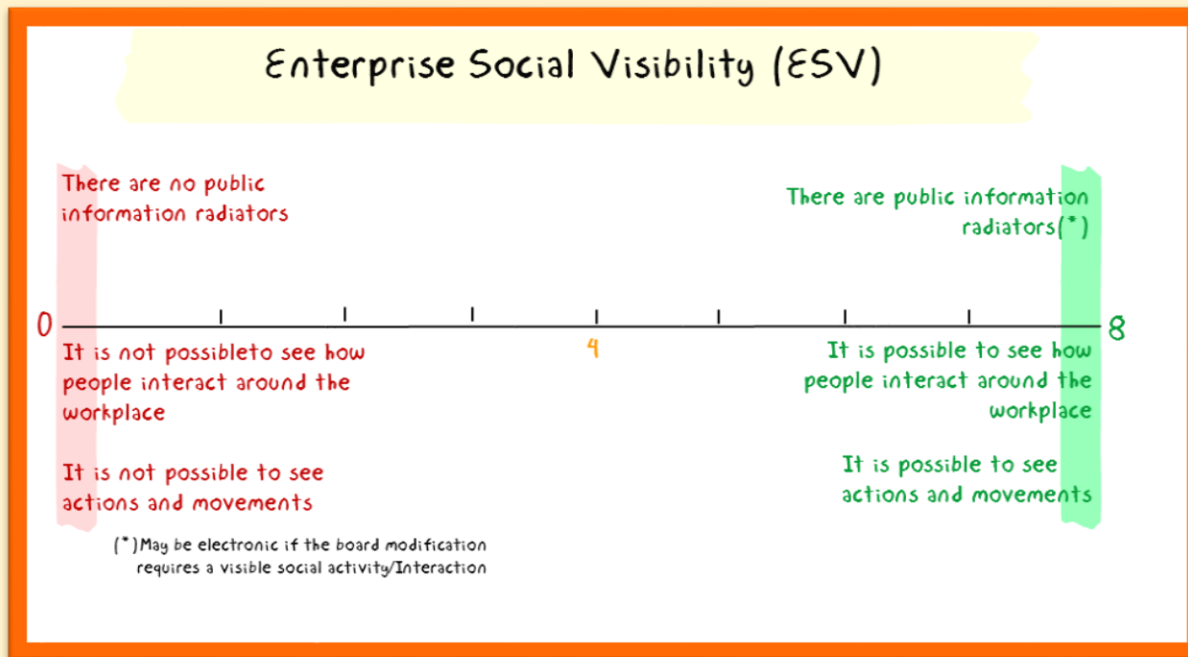
## ENTERPRISE SOCIAL VISIBILITY IN THE SOCIAL AGE

4

### Viewing actions and movements for recognition and prediction –

Watching a group of people about to perform a specific task will form a link between the group and the knowledge expected as a result of the action.

That is how interactions with the social environment offer are large set of **data** that is constantly **radiated** for **free**, making it possible for individuals to **draw conclusions** and make decisions with on a more solid basis.



It has recently been found that spatial information is stored in our brain and maintains a close relationship with verbal representations and their connections (\*r12), which shows the interconnection between the different senses.

Watching a group of people meeting for a specific matter with an expert could create a **key association** in the receiver's **memory**, where the skills of the expert are associated with the rest of the participants. In the event that such skills are required in the near future, one could recognize the existence of more people available to be asked about the "expertise".

This last point means that **Enterprise Social Visibility (ESV)** has a cognitive component, i.e. that individuals learn and constantly refine the signals they receive, indicating that the space is developed **iteratively**. This can be particularly productive in environments where the **Scrum** framework is used because here there is a **cadence** of ceremonies (meetings). The fact that they are held repeatedly under **similar**



## ENTERPRISE SOCIAL VISIBILITY IN THE SOCIAL AGE

**conditions** allows the receiver to **improve** the interpretation of the signals received, helping to predict/know the possible outcomes of perceived actions.

By contrast, the use of computer tools without public radiators for managing information or without a visible impact leads to a replacement of social activities and impairment of **Enterprise Social Visibility**, as it will not be possible to produce data or links on any of the 4 social channels. An example might be replacing a paper board for an electronic one or a physical meeting for a virtual one without adding a public radiator. As a result, **Enterprise Social Density** may be affected by a lower flow of activities in the environment and an increase in bureaucracy.

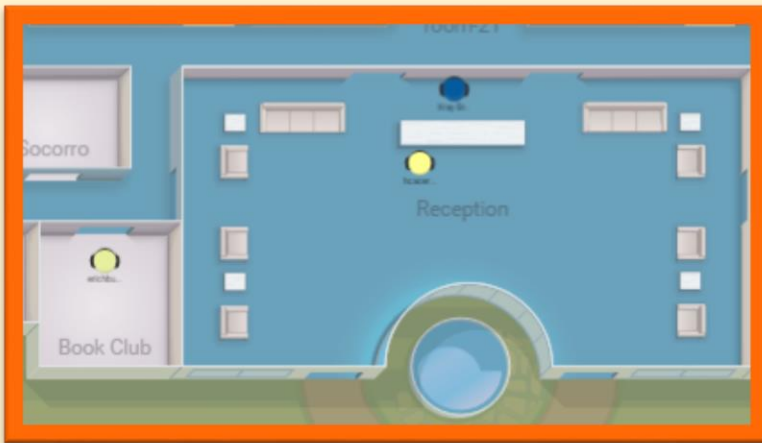
People create a **mental "virtual" map** of the different social activities based on any

of the 4 channels, constantly comparing it with the lessons learned in the past, which means they can **browse** their experiences and complement them with information acquired in the present through **ESD** or electronic boards.

Because of this, **knowledge workers** acquire a symbiosis with the environment that produces data, where information is collected and is compared with that obtained through the **ESD** and **ESV**, resulting in a greater transformation of the information and shared knowledge.

## AMPLIFICATION OF CHANNELS IN REMOTE TEAMS

Most of the tools on the market for helping remote teams focus on emulating face-to-face communication. Except for some “house-made” integrated software that helps with the publishing of visual radiators, most do not allow the dissemination of any of the channels required for sustainable increase of **ESV**. This exacerbates complexity and complication due to lack of spread of information in real time, which leads to increased silos and bureaucracy.



In order to provide a **sustainable social model**, the 4 social channels must be actively supported. A pioneer of social and spatial exploration is **Sococo** ([www.sococo.com](http://www.sococo.com)), a tool that makes it possible to replicate some of the communication channels virtually.

Here people, no matter where they are, can see the peers who are meeting, **their social movements/dynamics** within the office, the daily patterns and their **cadence** and establish face-to-face communication between colleagues, thus replicating the real space within a virtual one. This makes it possible for individuals to continue to use some of the information provided by the **social ecosystem** but in a distributed manner. As a general rule, it is important that face-to-face meetings can be

virtual at the same time (e.g. using Sococo, cameras and active speakers, e.g. Jabra). This allows the radiation of **information** that can be **captured** by individuals regardless of their physical location.

In the near future it would be desirable that when you move around your office your location is automatically updated, without having to do it manually. This could be done by an extension on the mobile phone to detect employees, their location and who are together, which would provide greater consistency between the real and virtual world.



## ENTERPRISE BLOCKING COLLABORATION AND IMPACT ON THE COMPANY

There is a final point to learn about the **social model**, which has resulted from observing myself organisations containing good:

- Strategic business vision and alignment of people with it
- Level activities that create waste (e.g. red tape)
- Collaboration between people within or between teams or departments
- Use of timeboxes
- Technical excellence and continuous improvement
- Relevant decisions and number of local optimizations

The concept of **local optimization** indicates the implementation of an improvement which will be good or desirable for a particular department or area, but bring negative profits in its overall spread to the

rest of the company. These can be positive if they are carried out in a controlled manner and take into account a complete vision and a plan for their prompt removal. In most cases, local optimizations are performed by people who are **unaware** of the impact on the "chain" or pursue **incompatible interests/goals**, ultimately resulting in devastating effects on the corporate network.

*Business value: Ability to provide the customer with something they consider offers them a tangible or intangible benefit.*

Another of the areas evaluated is waste: the opposite of value creation. Any characteristic, functionality or process that

**does not add value** or is not directly or indirectly used by the customer will be considered **waste**.

There are companies where **collaboration** levels are very high and constant and one can see people working with high **ESD** and **ESV**. The catch is that the efforts **create constant blockages** in the organisation, add waste, actively support its dysfunctions and do not help add value for the customer and improve the organisation or its structure. Unlike local optimization, here collaboration is not seen as specific measures taken by someone inside the company but as the effect of a high level of cooperation that supports mental models that appear to be **correct** or **necessary** but are in fact questionable and generate friction, blockages and waste and do not provide real value.





## ENTERPRISE BLOCKING COLLABORATION AND IMPACT ON THE COMPANY

These are some examples of **Enterprise Blocking Collaboration, EBC**:

- Collaborating with another person using a high level of multitasking
- Cooperating intensely to create reports that provide no value to the customer (vanity reports)
- Performing collaborative tasks when you are at over 90% of your personal capacity
- Cooperating with the development of a product between parties that do not communicate with each other or do so by exchanging documents
- Actively collaborating to increase Bureaucracy or local optimizations
- Supporting a way of thinking that, compared to another, is shown to produce no value or generate less value than the first.

The biggest challenge here is to distinguish between one type of collaboration and the other due to the high complexity of some companies.

There are some steps that can help to **eliminate blocking collaboration**:

- 1 Early detection of the "levers" that drive customer business value and discussion with the people who do the work
- 2 Elimination of tasks that produce local optimizations or are done indirectly (handouts of information or Bureaucracy)

3

Detection of workers who employ others that are at more than 90% of their working capacity on a daily basis

4

Work to remove silos rather than using them as a first option

5

Creation of a **continuous learning** company where failure is an opportunity for improvement

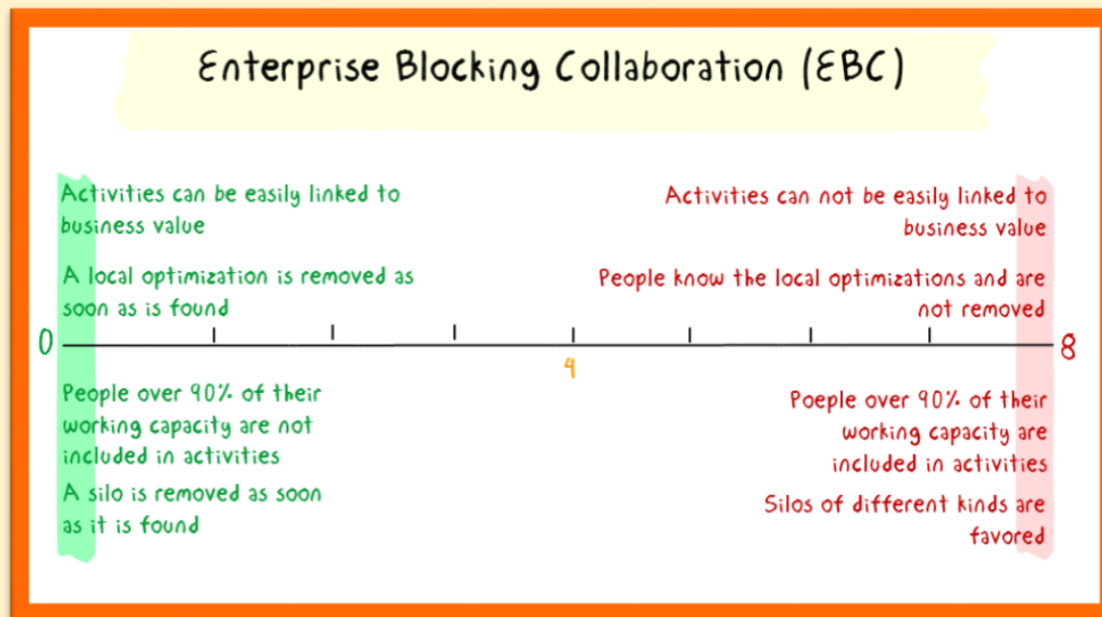
Real collaboration combines social elements and business processes which evolve towards new ways of doing work, seeking efficiency, supporting waste reduction and using a high level of participation.



## ENTERPRISE BLOCKING COLLABORATION AND IMPACT ON THE COMPANY

Organisations with a high level of **blocking collaboration**, however, tend to spend much of their money on dysfunctions rather than creating value for the customer.

*(\*) It should be noted that unlike with ESD, in this case the higher the value, the more blockages there will be.*





# SOCIAL METRICS

The **three corporate variables** learned above are intrinsically linked and as a result can be grouped to obtain a measurable impact on the improvement of the

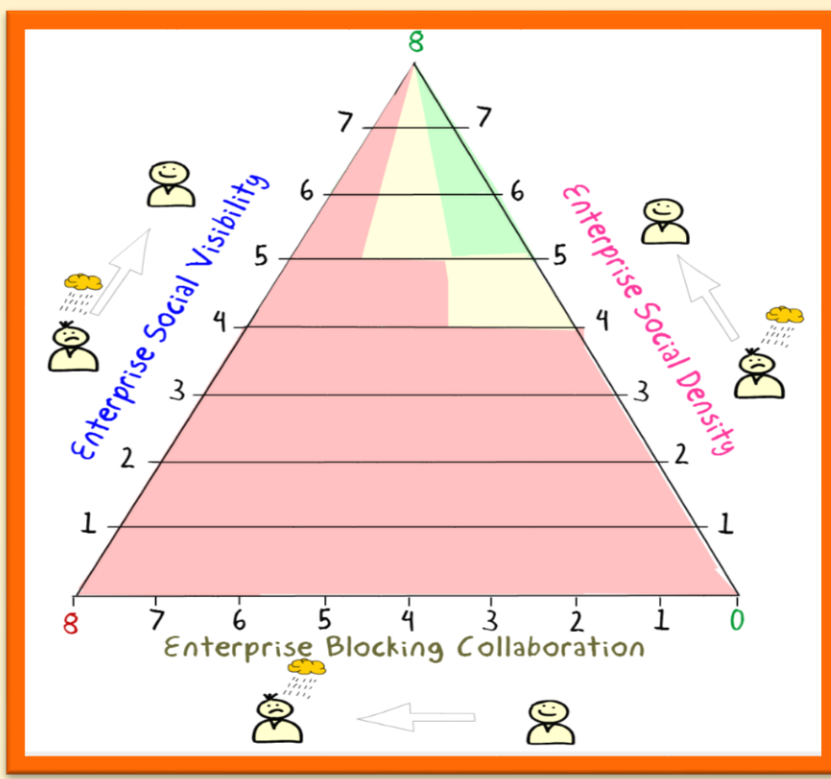
organisation. Once calculated, their

Visibility) and **EBC** (Enterprise Blocking Collaboration).

$$M_s = \frac{[(ES_d \times 2) + (ES_v) + (8 - EB_c)] \times 100}{32}$$

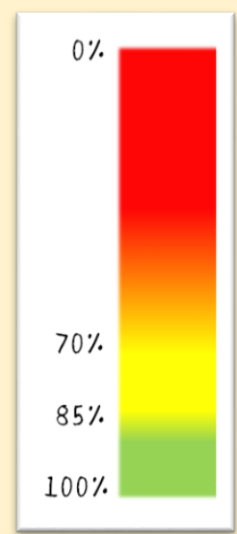
visibility will make it possible to convey the reality of the different factors in order to begin a process of continuous improvement.

Due to the nature and importance of connections between people, the **weight** of **Social Density** is **twice** that of Social Visibility and Blocking Collaboration.



It is possible to compare the results with specific milestones, for example, the implementation of a framework (Scrum, DSDM, Kanban, etc.), as well as the impact of various decisions taken at business level.

The following formula can be used to bind the flexibility of the **Social Model (SM)** in a single index rate; being **ESD** (Enterprise Social Density), **ESV** (Enterprise Social



Finally, it should be noted that the differences in access to information between teams will produce different times and learning skills and adoption of social characteristics, so even if you have a ternary diagram for the organisation, this could have nuances between different areas of the company.



It is clear that the way that companies have worked in recent decades has changed fundamentally. The processes and structures of the organisation have been affected, which has resulted in a split between traditional management practices, customer relations, the way in which markets should be managed and how feedback should be processed, as well as the way in which people should be empowered to carry out these tasks. If you do not take into account that the **social model** has a drastic impact on the roots of the company, its adaptation and survival will be compromised.


Please send me your feedback and experiences, I will be glad to hear from you.



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(\*) The terms **Enterprise Social Density (ESD)**, **Enterprise Social Visibility (ESV)**, **Enterprise Blocking Collaboration (EBC)** and their respective forms of measurement have been designed by Erich Bühler. Any part of this article may be used or copied freely provided that the source is mentioned. All material presented is the result of empirical work with teams and businesses. © 2015 Erich Bühler



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