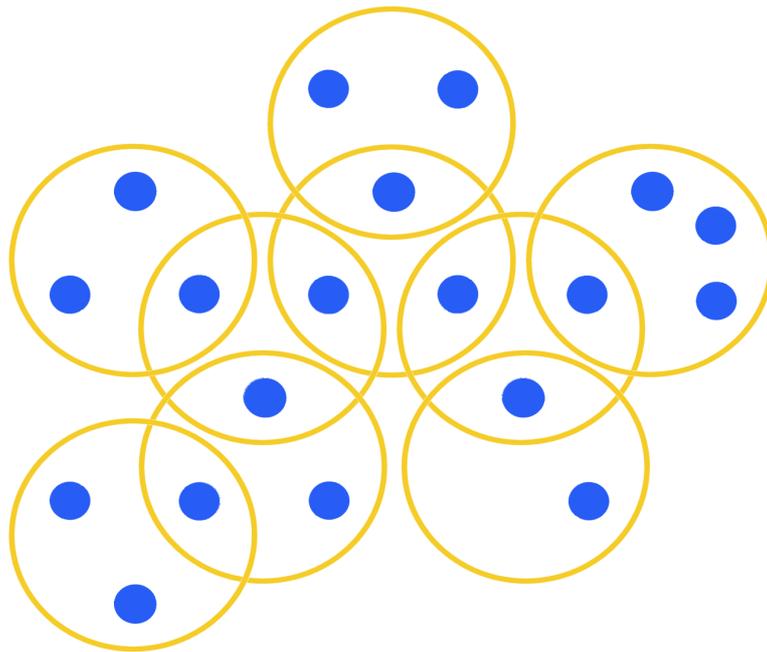


# Treems

and

## remote electronic working



## Research programme

At last we have a blueprint for remote electronic working, the organisational methods that will underpin the knowledge-based economy. Until now the whizzy possibilities of technology have been the focus of research which is of course an answer looking for a question. Now we can see that huge strides in communications infrastructure are not required - all we need is simple video conferencing. Now we can see that Social networking and ideas-sharing is not really leading anywhere fast and "web 2.0" is ingredients not a meal. So now we have to turn the research agenda round to focus on how to achieve some necessary goals through organisation and tailored tools. There's a major economic and social change in the making which at the very least we need to understand well enough to prepare for.

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## Mini glossary and important references

### About treems

The treems web page is at ..... <http://vulpeculox.net/treems>

There you will find

An introduction to Treems : ..... [TreemsIntroductionArticle.pdf](#)

The complete book designed for printing as a 96 page booklet: ..... [treemsA4A5.pdf](#)

An article about technical guilds: ..... [Hanses.pdf](#)

This document: ..... [TreemsResearch.pdf](#)

### Acronyms

**ftf** face to face (situation/environment)

**kbe** knowledge based economy

**rew** remote electronic working

### Terms

**Champion** Top-level role in treem tasked with managing human resources in one branch.

**Chief** 'Production' manager. ie Someone who answers for some aspect of results.

**Grumblee** Person who listens to grumbles in order to deal with dissatisfaction and keep moaning out of close team relationships.

**Hanse** Guild of skilled technicians.

**Moot** Policy meeting in a Treem context. Typically initiated from the bottom-up. Always with a definite agenda. Not an implementation meeting. Generally transient.

**Outsight** The ability to see things in the wider context. Leadership requires applied oversight.

**Pin** A person who is simultaneously a member of two small teams thus linking them together. Direction and information flow through this person. Typically they will be the senior member of the 'lower' team.

**Three-branches** Model of dividing an organisation into production(left), servicing the organisation(middle) and outward-facing(right).

**Treem** Tree structure of interlinked very small groups

# I Introduction

## Purpose

Prototype organisations based on treems are required

- To demonstrate the general concept
- To prove the fundamental assumptions
  - Small teams can focus, be close and work efficiently
  - Teams and individuals become self-motivating
  - Overall management is practical through many linkages
  - *Champions, Chiefs, Grumblees* and *Moots* are adequate
- To learn the practicalities of
  - *Champions, Chiefs, Grumblees* and *Moots*.
  - Growing the network and getting the right people in place
  - Governance methods
  - Application of standard management objectives
  - Reward and ownership
  - On-the-job training
- To drive the development of networking and administrative tools
- To determine what communications capacity is needed in practice

Important indirect issues need investigation of a different sort

- How will the skills market (as opposed to jobs) market develop
- How can specialist knowledge and experience be
  - Developed by individuals
  - Developed as a pool of practitioners keeping up with technical change
  - Meaningfully 'weighed' against 'standards'
  - Hired equitably and with minimum risk
- What are the implications of the three-branch model
  - For recruiting and suitability assessment
  - For non-remote organisations.

Of immediate importance is an assessment of the impact rew could make to revitalising economic activity.

The human aspects of treems are important academic areas

- Essential team interaction success and failure factors
- Efficient ways to build remote rapport

- Learning leadership in tiny groups
- Measuring motivation for groups and individuals
- Anthropological appreciation
- How sharply defined and malleable are the character traits used in the three-branch model?
- Do some people have 'more personality to express' or fewer alternative outlets? Does personality necessarily interfere with focussing on group activities?

*Research is not a substitute for getting some prototype demonstration treems up and running. Research and development go hand-in-hand with active enterprises. Without research we'll take ages to recognise potential improvements and understand failure.*

## Framework

- Some guinea-pig projects are required.
- Quantity and variety are needed in order to obtain results that can be relied upon and to explore different aspects of the nature of remote working organisation.
- Coordination is required to draw generally applicable results from many specific projects and also to assist later projects with lessons learned from early ones.

A set of potential projects is tabulated and described in chapter 14 of *Treems - Factories and offices for the 21<sup>st</sup> century* (<http://vulpeculox.net/treems/treemsA4A5.pdf>). These can be started with minimal preparation although thought and resources will need to go into recruiting methods (an important subject of research in its own right) to obtain a suitable mix of skills, experience and temperament in each case.

For the 'observer corps' of researchers (and developers) there needs to be two levels of interaction:

- Helping build and maintain the project along general Treem principles.
- Investigating and possibly providing specialist assistance in the researcher's area of special interest.

Information and experience will need to be shared.

Most projects have limited lifetimes (although it may easily happen that fiercely motivated groups extend their remit to capitalise on their highly effective organisation) so general results shouldn't be very long in appearing and getting confirmed or confounded. Comparative studies (for example examining forms of governance or organisation growth methods or amount of pre-project indoctrination) will take longer to reach undisputable conclusions, but even here we'd expect some significant results after a year.

There will be some expenses involved with setting up and running these projects. For economy and instrumentation reasons it is suggested that the internet resources should be provided by a limited number of organisations intimately involved with the research and development of electronic-technical aspects. The main expenses of each project will be (a) recruiting (b) set-up advice. Here, as these are human aspects with which we expect some researchers to be closely involved with, we would expect these to be rolled-into research budgets. Some minor running costs can be anticipated and there

may be the need for physical meetings, travel expenses and odd fees. Various reward methods need to be experimented with. There will be a mix of member's donated time, member's credited time (against any subsequent sale of work) and member's paid time. Details depend on the constitution of each project.

## **Proof of concept and value of rew work**

Remote Electronic Working will bring major changes to our economy, society and especially working environment for many people. This is how the 'knowledge-based economy' will get off the ground. This is all very well but so far, although it all makes good sense on paper, nobody has implemented a treem or anything like it. We need to find out quickly as a fact whether rew will work and what infrastructure is required.

A case in point at the moment (March 2009) is what capacity broadband do we expect to be available to most households? Treems can provide a minimum requirement (VC6) Videoconferencing with 5 incoming and one outgoing channels which needs to be translated into Mbit/s.

We also need to do a bit more than hand-waving to establish the validity and value of making economically viable or socially valuable collaborative enterprises easily accessible to people by lowering the barriers to joining and providing supportive learning environments. (Consider the opportunities people already get from joining local drama groups - There are all sorts of activities where willing hands can be introduced and enthused and learn to work as part of a productive community.)

Finally we need to start bringing rew to the attention of people who might say "Hey we could do that!" in order that they may be part of the first wave of the new knowledge-based economy.

Important note: In the age of the Internet things move an order of magnitude faster than previously. It is roughly five years since social networking became available and in that time has gone through at least one re-generation. The drive for rew comes from the advantage it gives to the economy and boost to a more highly skilled workforce. If products are to be made and exported and if skills are to be sought locally then that means making a start now - and it needs governmental leadership for national benefit.

## **Conclusion**

A lot needs to be done to understand and develop treems and rew. Enough of the basics are there to get started with some prototype projects which is probably the best way forward - we have to obtain practical real-world results as soon as possible in order to open the way to more general exploitation of the kbe on a sound footing. While at this stage it is difficult to assess the economic impact it seems very probable that the increased productivity of treems, flexibility of remote electronic working and fertilization of the skills-base will be a major boost.

## II Topics for investigation

Research, development, methods and tasks are intermingled.

### Overall success and failure factors

Putting a random bunch of people together and giving them a guide book is not guaranteed to result in an effective, efficient and empowered organisation. We need to assemble the right bits in the right order and apply to the right job. How difficult (or possibly natural for some people) is this? What are the basic rules? Are there development stages that should be compartmentalised? What are the success (and failure) factors and how can they be detected? Who should be monitoring them and what should they do about it?

#### OSF.1 Identification of factors

A theoretical exercise to itemise and isolate success and failure factors in

- (a) remote working in general
- (b) initial recruiting in general
- (c) shakedown<sup>1</sup>
- (d) treem-specific organisation development
- (e) treem-specific communications
- (f) treem-specific causes of structural weakness, stability and flexibility

#### OSF.2 Prototype guide development

Write a guide to success and failure extrapolated from non-treem experience as a starting point for new treem organisation building. This will be used in the first instance by treem-builders and leaders on demonstration projects.

#### OSF.3 Reassess OSF.1 after practical experience

One purpose of the demonstration projects is to provide practical experience where none existed previously. This can then be used to update OSF.1

#### OSF.4 Update OSF.2 management guide

Practical experienced gained from the demonstration projects will be used to rewrite the guide.

#### OSF.5 Use OSF.1 to inform a monitoring and evaluation process

Insightful assessment of risk and experienced understanding of how to elicit relevant information is required in order to monitor the situations within treems and their consequences. Results will feed back into OSF.3 and OSF.4. Also external monitoring of treems may be useful in repairing or strengthening projects in the field. Once the method used to monitor treems has been shown to work in practice it will be a very useful result in itself and form the basis for future auditing.

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<sup>1</sup> Part of any successful project is to have a practice run before the main event.

## Organisation and method tools

Treems is a new organisational structure with never-before tried communication and control mechanisms designed specifically to deal with the human issues that are more difficult to manage without face-to-face contact. Obviously these need to be observed, and tools provided to reduce the man-management overhead and increase its effectiveness. This is very experimental territory where there are two key priorities:

- Understanding how the system works
- Giving tools to people in the prototype groups and watching what happens.

### OMT.1 Catalogue of management methods

Create a definitive guide to the communication and control methods used in treems. Elaborate with design notes explaining why these methods have been chosen for use in the new environment.

### OMT.2 Create a tool development programme

A 'shopping-list' based on OMT.1 with proposed methods of implementation. These might be simple checklists or complex applications.

### OMT.3 Management tools development

Implementation of proposals in OMT.2

### OMT.4 Encyclopaedia of management techniques

Building on OMT.1 to become a reference source of management methods.

### OMT.5 Sizing

The flexibility of a new is all very well - provided it is kept fit. It is easy for empires to grow without checks on efficiency. When there is no longer the need for a role it should be deleted from the organisation. Especially in a close-knit team this can be hard.<sup>2</sup>

The purpose of this investigation is to devise methods to audit resources and results in a Treem-based organisation.

### OMT.6 Purposeful and systematic knowledge

'Clouds', Wikis, Tweets and Blogs may be cool ways to capture information but an enterprise depends on much more structured and purposeful documentation. Time-sheets, inter-group contracts, policy decisions, budgets, record of correspondence, bug list, and so on and so on. Furthermore access is generally restricted and authorship needs to be verified.

The object of this project is to identify the key knowledge/communication objects for new and treems; and to suggest or develop suitable tools. (It is not a 'what can we do with this tool' exercise but a 'having defined what we want to do - what can we use' exercise.)

### OMT.7 Rules for group interaction

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<sup>2</sup> In many cases the people are the most valuable part of the organisation it will often be a better business strategy to find productive work rather than lay-off staff.

There are two ways in which groups can interact: Up and down the tree and across the organisation. These need very different rules for interaction. The up and down interaction occurs via Pins in a straightforward delegation/escalation process. Communications 'across' may be (a) routine, in which case they need to be established on some footing (for example time sheets by the end of each month) or (b) 'contractual' where groups agree a common plan between them. For example when can the testers get their hands on something and when can marketing have some samples to show off.

The purpose of this investigation is to develop workable group interaction methods.

## Group interaction, psychology and tools

A key element of treems (and any remote working) is welding members of small groups into cohesive members with shared goals and collective responsibilities; mutual appreciation of each other's strengths, weaknesses, preferences and temperaments; availability and reliability. Harmony is required, but good team loyalty is to be aimed for. For this to happen requires the right seeds in the right seed-bed with the right encouragement in a suitable environment.

A major difficulty, **probably the single most important issue** as regards remote working, is providing members with the means to establish and maintain a close rapport with their colleagues. Humans have developed face-to-face team-building and character assessment to a fine art involving many subtle behaviours. We need a very good understanding of what channels are used here so that we can provide an effective substitute or alternative that isn't blunt and cumbersome.

### GIP.1 Review of group interactions

Establish a collection of group interaction and team-building activities considered important. In this case we're interested in very small groups of strangers forming a common cause. Multiple disciplines are probably going to be involved.

### GIP.2 Group laboratory

When researching the effect of different methods of communication and approaches to remote team building we will need to measure the effects of alternatives. For this we'll need standard group tasks and standard conditions. The first stage is to develop face-to-face (one extreme) and 'narrow-channel' (the other extreme) measurements of building, achieving and coping under stress. This gives two datums between which we can attempt to measure experiments with varied communication channels and preparation.

### GIP.3 Second group laboratory

The object of this is to replicate GIP.2 in a completely different cultural environment in order to (a) see where cultural differences are an issue (b) validate results by replication and (c) create competitive rivalry and so stimulate further and better investigations.

### GIP.4 Video conference tool and technique development

The most promising substitute for face to face interaction is video conferencing between a handful of colleagues. There are issues of quality versus bandwidth which need to be gone into carefully as for example lag and un-synched sound can

be very distracting. As well as providing robust technical video capable of simulating multiple presences we may need live secondary channels. Is it possible to use my screen for chatting to you while working with other documents? But as well as these technical issues we need to develop social protocols (or find out a bit more about how they develop of their own accord) so that the unarticulated gestures that make up things like "yes go on I'm listening" we use all the time when face-to-face are substituted or simulated. (Perhaps it's something we'll get used to?) Face-to-face meetings are always in some context - the office with an agenda, the corridor with a "did you have a nice holiday" and so on, but with video there are not the same boundaries and escape routes. For example it is easier 'to be busy' without causing offence when face-to-face than when sat typing at your computer with somebody going on and on. No doubt social conventions will develop but they may well be assisted by inventive researchers and virtual social or physical contexts.

### **GIP.5 Group development success factors**

The purpose of this investigation is to focus on what makes a team bond. Size, preparation, experience, leadership, technical relationships, personalities, confidence, track record together, group responsibility and stress are just some of the variables that might govern the effectiveness and robustness of teams. All of these can be examined from a psychological point of view. The ultimate goal is to produce a small and simple user guide for the benefit of recruits who will otherwise have no guidance.

### **GIP.6 Individual group-suitability assessment and behaviour**

(See also Recruiting and skills market below.)

The very important issue of having harmonious teams where members are comfortable with each other depends on personalities. It is probably fair to say that most people can find a way of getting-along but we really need to trap and eject those that cannot. Also we should be looking at what behaviours make for good cohesion and try to reward their expression, possibly by setting up suitable contexts that people can use. (Suppose I've spent a lot of time helping you with some task. In the face-to-face world you can buy me a pint, but that doesn't work electronically.) We probably need to look at the way people balance private and group agendas, how aware they are of the way other people work and their comparative experience.

The result of this potentially complex investigation should be reduced to a working guide for human resource managers and learning materials for everyday collaborators.

### **GIP.7 Belonging**

Belonging breeds loyalty.

When an enterprise is intangible, ie. it doesn't have an office or factory, and the people are merely small images on a screen it may be difficult for us to build a realistic picture in our minds of the enterprise to which we can attach our instinctive familial and tribal loyalties. In a team-based organisation the 'family' is the group of three or four and the 'tribe' is the whole organisation. Groups may need to actively build their identity and confidence by badging themselves or other means. The whole organisation needs to find ways to make itself 'real' to all its members - This might involve activities completely unrelated to work and more

about 'people-like-me'. The sorts of things attempted in various newsletters but applied with a budget, purpose and skill.

The purpose of this investigation is to develop a guide for enterprises on the essentials of getting developing member's loyalty through 'belonging'.

#### **GIP.8 Self-expression**

In a new environment there are no public areas where we can display ourselves beyond our close colleagues. This denial of self-expression can only lead to trouble as inappropriate alternatives are found through frustration. Some sort of social networking seems to be required where you can see photos of my cats and you can rant about whatever it is that's bugging you today.

The purpose of this investigation is to explore methods of self expression within the context of an organisation. This could be as simple as personal web pages or blogs, but there are many more possibilities including real-world activities. As well as clarifying the value of this activity to the enterprise there needs to be some discussion of boundaries of acceptability.

#### **GIP.9 Routine and good work discipline**

Getting on with work is a constant problem for people who work on their own. The nature of supervision in new is completely different from ftf. Work is often mingled with other activities. Normally there is no reason why people should work '9 to 5' even where at least one person in the team needs to be on-call we'd expect team members to arrange spells between themselves so they all benefit from the flexibility of new to go shopping or collect the kids from school.

The purpose of this investigation is to understand (a) the psychological basis for working at tasks and (b) the social motivation. This can then be used to support workers with collective tools for task management.

#### **GIP.10 Moderation**

Behaviour may be positive, harmless or disruptive. In the ftf world we smile, grit our teeth, 'have a word' or call the police as appropriate but in the remote situation social pressures are difficult to apply and discipline. In new it is very easy for somebody to be bullied 'out of sight' of the others which generally wouldn't happen in an open office. Given the asymmetric nature of this disruption (a small amount can cause an awful lot of damage) we need to attend carefully to its prevention and containment.

This investigation will focus on

- (a) identification of potentially disruptive personalities (see also GIP.6),
- (b) creating a 'moderate' culture by organisational policy and social encouragement
- (c) soft and hard disciplinary frameworks applicable to new in all its forms.

## Treem-specific roles under the microscope

While not being the only way to run a new enterprise, Treems are a unified break from traditional methods. The ethos that nothing matters more than happy workers is central to the attention paid to the human resources infrastructure. For example a *Champion* is not just a personnel manager but a branch leader; discontent is their problem not some supervisor's or middle manager's.

The roles of *Champion*, *Chief* and *Grumblee* need to be proven in practice. Techniques need to be learned and shared. A good social-psychological understanding of how these roles work is required to inform wider formal training. *Pins* need to function reliably or else the network of groups falls apart! Their everyday competencies need to be examined to see what makes them resilient in times of stress.

It should be noted that although the **roles** of *Champion(s)* and *Grumblee* will always exist in a treem-based organisation, they may be carried out as side-jobs by people who have production-oriented roles as well.

### TSR.1 Collaboration between Champions, Chiefs and Grumblee

These roles need to work effectively together even though they may well be competing for resources and struggling to satisfy each others demands. The Treem model doesn't specify a top-level of management, so there are many possible environments in which this challenging interaction can take place.

The purpose of this investigation is to monitor the interactions. In particular looking for situations that cause conflict or are difficult to handle, analyse the nature of the problem and develop methods of prevention or amelioration. For example are 'meetings' ad-hoc, or weekly, or what? The objective is not to arrive at a prescriptive formula for good management but to build a knowledge base.

### TSR.2 Roles on their own

Certain personalities will be suited to Champions and Grumblee. Chiefs and Pins will normally be chosen for their skills, knowledge and experience in particular technical fields.

The objectives of this investigation are to

- (a) Create and prove a recruiting guide for Champions and Grumblee.
- (b) Create and prove a training guide for Champions and Grumblee.
- (c) Identify *disqualifying* personality traits in Chiefs and Pins
- (d) Create and prove a training guide for Pins. (NB Chiefs will always be Pins.)

### TSR.3 Reward and patronage

We're always looking for ways to encourage people to do jobs better or make more effort. Somebody, somewhere, ought to be keeping an eye on how bonuses, suggestion-of-the-month award and budget trickle-down for example are used (and mis-used) by these key roles.

## Enabling technologies (IT and psychological)

There are two incredibly important things that we lose as soon as we go on-line

- Real contact with people
- Sense of place

These are the things that make it so difficult for us having been brought up, and possibly genetically programmed, to interact with people and 'live' in places. For example take the same people from an office and move them a few yards down to road to a restaurant and watch them behave differently. As individuals we create our own working environments - even if we don't control the physical aspects our mental image and so use of the space will be adapted in our own way. This applies to mundane things like what to wear, when to gossip, and the ubiquitous 'culture of interruption'.<sup>3</sup> This is as well as losing the many subtleties of frequent low-level interaction with other people.

How can we use 'a screen, keyboard and camera' to substitute for personal contact and working environment? For workers at home, or perhaps doing 30 minutes every day on the train, are there physical things that can be done in the arrangement of the local environment and other channels we can use to enhance being part of a community and an environment for working.<sup>4</sup>

### ET.1 The science of people, place and workplace culture

Describing the cues and their uses which are available ftf but not rew. This research will have to consider cultural differences due to geography and generations. Having a 'these are the problems' reference should help in the development of technical solutions following.

### ET.2 Technology for connecting people

Enabling communication between people 'via broadband' with emphasis on building inter-personal and social relationships. This will be informed in part by ET.1 - for example how we identify ourselves and others will be an issue that begs technological solutions.<sup>5</sup>

### ET.3 Software technology for creating new working environment

Lots of potential here from virtual worlds to shared desktops, however 'because it can be done' isn't a reason for doing it. Just as we don't all drive Formula-one cars so we'll probably be looking for something more prosaic - informed by ET.1 and the basic elements of work-study. One important issue is how to differentiate 'Workplace No.1' from 'Workplace No.2' from home. ie Establishing a sense of place.

### ET.4 Non-software new working environment technology

To start with we can look at the psychology of the individual and groups in order to provide ways to make work easier and more efficient. Routine and synchronisation are examples. (See also ET.5.) Shared understanding takes time to develop - there

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<sup>3</sup> ie what level of communication-confetti is acceptable in an office.

<sup>4</sup> Hey! Lets give everybody a branded mouse mat. (Only joking.)

<sup>5</sup> As opposed to "Hey we've had this sparkly idea for using bandwidth! It's really sparkly so it must rock."

may be ways to put aside time to nurture it. What sort of rules are appropriate and how are they enforced? Is it possible or sensible to mirror the routine and distractions found in ftf working environments? Some aspects of this project will trigger ET.3 work. For example it might be determined that a group log is a good way of knitting daily activities together. As a result a software project to support it could be spawned, even though essentially the matter is one of psychology.

#### **ET.5 Induction, probation and acceptance**

Social groups take 'belonging' and status seriously. Becoming an efficient member of an organisation requires being able to approach the right people in the right way. A new enterprise is not a 'social network of equals' but a machine with cogs of different sizes that have to mesh in a certain way. Every new organisation will need some process which will probably combine formalities, time spent getting to know people and reviews.

The purpose of this investigation is to combine elements of ET.1, ET.2 and ET.4 in order to develop a general analysis of induction, probation and acceptance and from that a specific model and guide for new with specific methods described where appropriate.

#### **ET.6 Bootstrapping**

The nature of small teams makes it easy for them to share knowledge and have-a-go together to see what happens and so learn. Also it is easy for somebody to become a Pin by recruiting one or two new members and thus bud a new group. Clearly these new members will be 'junior', at least to begin with. If they are not experts then they should soon learn how to apply their expertise in this specific context and the Pin should learn how to get the best out of them. If they are enthusiastic but have a lot to learn then they will be given support to learn and become more useful as quickly as possible. A small confident team with clear objectives is an ideal environment for rapid improvement in performance.

The purpose of this investigation is to identify the factors that affect the ability of a group to get better at what it does and how individuals get better. If possible to derive some rules-of-thumb to relate ambitions to realistic times to achieve them and perhaps to find heuristics to 'measure the health' of a group by measuring increases in productivity.

#### **ET.7 Group stability and resilience**

Just as the design and maintenance of physical structures is based on physical science so 'relationship science' is required to put even the smallest team of people together if it is to last and do its intended job. In a crude way we can see that a stool or chair with one leg longer than the others will at the very least be on a tilt and possibly rock; and in the same way a group of three or four with a member from a very different temperament or background to the others is probably going to spend a lot of its energies dealing with internal stresses. One example of destabilising behaviour is hijacking group activities for personal agendas. Resilience (how the group deals with stress) is a separate issue which may involve external as well as internal factors. We're interested in building lots of small teams from initially mediocre material that don't need a lot of looking after and don't crumble under a bit of pressure.

This investigation will to observe the operation of groups of three or four people to identify the success and failure factors in relation to stability and resilience. From this observation to build a model of group stability and how stresses are absorbed internally and how stresses can be 'taken outside'. This is applicable to all small groups.

Following on from the above; what special considerations apply to the rew environment? This will lead to an analysis of the role of the Grumblee, Moots and possibly everyday group activities. For example, informed by 'relationship science' we might suggest preferred methods of decision making, auditing and reporting.

#### ET.8     **Outsight**

"Outsight" is my term for being able to see the wider picture and "applied oversight" is leadership. In a treem-based organisation there should be a natural flow of oversight 'down the tree' via the Pins. However it is easy for a small team to lose sight of the wider picture and fail to recognise storms-in-teacups for what they are. So we need mechanisms for refocusing members from time to time and being able to spot halting progress at an early stage in order to intervene.

This investigation will attempt to identify what oversight is and how people acquire it. The control mechanisms of Treems will be examined in this context and monitoring methods developed so that places needing some oversight can be identified in the course of normal events. Also some practical guidance for Pins, Champions, Chiefs and Grumblees should be produced.

#### ET.9     **Ritual**

Collective ritual has been used for thousands of years to glue communities together and make sure everyone joined in to get important things done. This is just what we want for rew. Perhaps we'll be mainly be focussing on small groups rather than complete organisations or private habits. A daily look through the log together for five minutes might be an efficient way to exchange and check information but also a handy deadline, getter-out-of-bed and gentle way to begin to focus on tasks for today. Perhaps the last Friday of the month is 'personal achievement day' where personal goals are reviewed and time taken out to learn something new.

This project will examine the use of rew tools in a ritualistic manner in order to determine what benefits might be obtained. Tools may need to be developed to do this although the focus should be the functions being performed rather than the specific tools.

## **Recruiting and skills market**

One of the milestones of the development of rew will be recruiting without ftf contact. This is something that many people will feel uncomfortable with. On the other hand it may be a more objective process than all that 'do they have a firm handshake' business.

When recruiting for the key Treem roles we will be looking for qualifications and experience that don't exist in conveniently packaged form yet. As a start we'll have to guess what makes a good *Champion* and *Grumblee*. (See ET.9) For other recruitment

we need to filter by temperament to fit round pegs into round holes according to the three-branch model.

Rew enables organisations of all sizes to be more particular about the specific skills they require. (Because they are not limited to people living locally, and they don't have to employ full-time.) Where is the marketplace for these skills? In a knowledge-based economy the commodity of knowledge needs recognised grades. For example a microcontroller programmer cannot show any qualifications; the only hard data being time spent doing it which may not be a very good heuristic. Peer-reviewed standards (see next section) may be one way of reducing risk.

### **RSM.1 Difficulties and options**

A short analysis of why

- (a) recruiting without meeting ftf is difficult,
- (b) finding the right people is difficult
- (c) risk increases with specialisation.

Followed by discussion of approaches to these problems.

### **RSM.2 Recruiting procedures**

A rew organisation needs to work harder than a traditional enterprise to create an image that potential employees or volunteers can quickly size up and get a feel for the culture. The stimulus for recruitment will often come 'organically' from within groups - unchecked this could lead to a staff explosion - so we'd expect Champions to keep tight control - but the group has the vision of what sort of skills they need and the necessary decision-making expertise. When adding people to the organisation the Champion will need to ensure that their Pin is suitably skilled to lead a group.

This investigation will produce a practical guide to recruiting in the rew/treem context. It will cover the organisational, advertising, discovery, and 'interviewing' up to joining. (See ET.5 for induction.)

### **RSM.3 Selection without ftf interviewing**

Understanding the difficulties for employer and employee is the first step towards managing the risks involved. This investigation will probably consider

- (a) How to specify required skills and knowledge
- (b) How to assess candidate's skills and knowledge
- (c) How to assess temperament
- (d) How candidates can get a good technical understanding of their role, and what their position in the organisational structure would be.
- (e) How to assess bona-fides

### **RSM.4 Development of a skills market**

There are various ways people with skills could find organisations that need them and vice versa. One model is *Hanses*, associations of say for example graphic designers that provide 'a place to go if you want a graphic designer' and 'our members are peer-reviewed for confidence'. There are plenty of additional models such as recruiting fairs and forums.

The purpose of this investigation is to describe possible market models, how they might be encouraged, their strengths and weaknesses, and what regulation or oversight would improve the quality of the commodity on offer.

## Learning and skills development

A 'knowledge-based economy' depends on knowledge and skills being applied at the right level. In a competitive environment these skills have to be suited to the best current technology of the day. Schools and universities are unlikely to directly teach specific skills unless they are 'mainstream' and probably with a very broad (ie shallow) scope. This means that as well as the everyday learning about how to fit in and understand the particular environment in a new post people will inevitably be learning technicalities. This on-the-job training is accepted as part of all technical work but in a new environment, or where the organisation is small and inexperienced there may be difficulty matching level of inexperience with level of responsibility.

By their nature small groups are supportive environments as everyone realises that each person's contribution is essential to the quality of the combined result. But that's not enough as learning normally needs direction and supervision to be effective. If a *Pin* is an experienced leader with the appropriate oversight and commitment to training others (as they are being trained themselves) then we have intimate encouragement, supervision and direction in a practical situation.<sup>6</sup>

This is fine so long as there is motivation at all levels to spend time on self-improvement, developing other's talents and making the organisation more productive. Where is the element of self-interest in this? Typically a matter of culture combined with rewards - immediate and anticipated. For example a *Pin* in sales might be expected as part of the culture to spend one hour a week with their junior colleagues for which they get a definite reward, while the newly joined are learning how to make more sales and thence more commission.<sup>7</sup> Some organisations may be dedicated to learning and make a concerted and highly structured effort whilst others with limited ambition may limit themselves to bare minimum 'this is how to do the job' and leave any initiative to individuals.<sup>8</sup>

### LSD.1 Metrics

There are a number of dimensions we can use to measure a person's abilities in the context of performing a given role. Experience and technical competency are two basic ones but we might consider energy, enthusiasm, adaptability, breadth of experience or skill, previous small-group experience, understanding the goals of the enterprise and others.

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<sup>6</sup> There is a different situation where an extremely competent person finds themselves as a 'junior' in a backward group. This needs careful handling by the Champion.

<sup>7</sup> As can be seen from this example there are other ways of rewarding Pins - In this example some part of the whole group's commission.

<sup>8</sup> Who of course will soon move on to more challenging organisations leaving behind an impoverished and inevitably failing one.

The purpose of this research is to develop a practical method of at least itemising and describing qualities that we are looking for as a checklist of suitability. However a better goal is to develop a personal status table with selected qualities tabulated against past, present and hoped-for levels.

### **LSD.2 Technical competence/experience assessment**

'It takes one to know one' is probably the best approach to assessing specific competencies - but it's often difficult to implement. Alternatively qualifications or time spent studying, or sample tests might be substitutes. References from previous employers or a track record in some field can be used to give confidence of being able to deliver what is claimed.

This research will primarily look at peer-assessment (qv. Hansas) to see what infrastructure is required and what means can be used to minimise the cost. Peer-assessment will be compared with other methods in order for practical choices to be made and assessment tools developed at a later stage.

### **LSD.3 Motivation**

There has to be 'something in it' for everyone. An enterprise will thrive if the members are always improving, making fewer mistakes and being more efficient. Individuals and groups need to be motivated to spend 'non-productive' time pulling themselves up by their bootstraps and nurturing others.

The purpose of this investigation is to identify all the many improvement motivators involved and develop systems or a practical guide that can be adapted by all the different types of enterprise that will use rew to their specific needs. It may be possible to measure the social and productivity effects of different improvement regimes.

### **LSD.4 External training input**

In many small organisations groups will find their own feet then make their own way. However this could be described as the blind leading the blind which may or may not develop into an efficient and effective enterprise. There may be circumstances where specific training, resources or direction will pay dividends both from immediate results and showing how it is done for future reference.

This investigation will look at the productivity of different groups with varying degrees of external training input. It will look at creating the teaching relationship, styles of intervention and direction, and how to avoid training for training's sake. Part of the assessment will be to look at the longer term effects of professional training technique on pupil's attitudes to learning and getting more training.

### **LSD.5 Shakedown**

Particularly with rew where we want to knit new groups together quickly we would normally have a shakedown project or period intended to be a get-to-know-you and let's-try-things and run-that-past-me-again environment where people find their feet in a new environment. The emphasis is very much on developing efficiency through personal efforts rather than production. All competitors spend time training and enterprises are no different.

The purpose of this investigation is to compare the long term productivity and stability of groups with different amounts of shakedown. A longer-term project could look at the effects of occasional 'training projects' or competitive challenges.

## Governance and reward

Strangely, although historically there are a multitude of governance systems there don't seem to be many implemented in electronic collaborative networks and those that are have been shown through centuries of experience not to be stable. The origin of this paradox probably lies in the inability to exercise authority remotely or to direct loyalty 'up' the organisation and responsibility 'down'. A functioning cooperative is still organised by a management committee for daily activities even if it is 'one man one vote' when it comes to policy making. Small, well run and clearly purposed committees can be effective but large groups where everyone wants to have their say are counter-productive.

Top-down decision making should be driven by bottom-up proposals. Treems have *Moots* which are policy discussion forums always with a specific agenda normally instigated in this bottom-up way.<sup>9</sup> *Moots* are generally transient, whereas continuity of governance, oversight and authority has been found to be fundamental to the 'constitutionality' of enterprise management. It may be that new enterprises so far have so few actual assets and participation tends to be by consent than obligation so people have ducked the issue of constitutions. Another reason might be that people only belong by inclination rather than to get very much useful out of it.

### GR.1 Why the constitutionality gap?

A comparative analysis of constitutional arrangements of real world clubs, businesses and other collaborative organisations; and current examples of electronic collectives.

### GR.2 Experiments with Moots

"Moot" is a very old term for a decision making forum to which issues should be referred to when it isn't appropriate to deal with them 'locally'. Essentially a policy meeting, normally instigated 'from below'.

The purpose of this investigation is to develop a good practice guide covering how moots are called and publicised and how they are run. This will involve controlled observations under varying conditions (size, amount of notice etc.) and moots 'in the wild' (to see what evolves or common misconceptions arise) in order to determine what works well in which situation.

### GR.3 'Executive council' and constitutional governance

Some sort of central direction is required in any purposeful organisation. This is often, but not necessarily, in the form of a top-level policy board and a top-level management team. In clubs and societies these tend to get merged. In a treem-

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<sup>9</sup> If you can make the decision yourself you don't need external input, but if others are involved then a meeting needs to be called. Policy meetings ie. Moots are not the same as cross-branch 'contracting' agreements where one or both sides agree to do something.

structured organisation of any size there will be three Champions and a Grumblee looking after the *means* of production<sup>10</sup> and various Chiefs with the responsibility for production itself. How are these to be connected to the policy board?

The purpose of this investigation is

- (a) to analyse the structure, functions, and relationships between, the two top groups in a treem-based organisation.
- (b) To sketch out the characteristics of a specimen constitution that suitably separates policy from production.
- (c) To suggest ways to keep the numbers of people in any one group small while still allowing proper flow of information, opinion and discussion.

#### GR.4 Authority and discipline

For an enterprise to achieve its aims individuals have to be encouraged to do what the organisation wants and discouraged from pursuing their private agendas.

Because rework involves greatly reduced supervision we rely on goodwill, loyalty and clear specification of what's to be done a lot more than in a full-time workplace.

Displeasure, social pressure and sanctions are much more vague in rework which is a real cause for concern where we need to instill a code of behaviour, demand results and expect full cooperation.

This project will look at the 'carrots and sticks' and exercise of authority in a treem-based organisation. Different types of reward systems will need to be examined. In particular the social unit of the treem as a moderating and focussing influence will be analysed. The aim is to learn how to do it well and what conditions make it easier or more difficult. Tools for self-monitoring may also be part of this research. (See also ET.3, ET.4 and ET.7)

#### GR.5 Reward systems and ownership

Looking at purposeful electronic groups today it is easy to assume that all collaborative organisations are run on altruism by volunteers financed by gifts. This is probably the case because we don't yet have the necessary methods and structures to make it work as a strictly commercial enterprise. This needs addressing because without payment people can't and won't participate except for private reasons, just a little bit, and won't volunteer their efforts and good-will so that others can profit.

This is a big issue which probably requires multiple experiments into amongst other things:

- (a) The value systems people use...
- (b) ... and how this translates into motivation (and de-motivation) ...
- (c) What rewards are acceptable for what level of responsibility (including cash-in-hand, share in future business value, self improvement, gaining valuable experience, awards and recognition, etc.)
- (d) How to measure and value contributions.
- (e) How reward systems could be usefully adjusted for each branch. For example sales (right) may be motivated by commission, administration (middle) by shares and developers (left) by cut of royalties.

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<sup>10</sup> Not necessarily full-time roles.

## GR.6 Legal and ethical

There are plenty of business, employment and property issues that affect all enterprises. A new collaborative enterprise has specific issues, risks and challenges. If an Egyptian living illegally in France does some work for a charity with a postal address in Argentina, a bank account in Ukraine and a web site hosted in Sweden then are they entitled to be paid maternity leave? Nightmare scenarios don't need to be complex to be lurking where lack of jurisdiction or multiple jurisdictions and complex employment laws with potential for fraud are a magnet for shady deals and red tape. It is inevitable that as with ships that are 'flagged' in states with laissez-faire maritime regulations so new enterprises will be 'located' away from heavily regulated states.

This investigation will identify the legal issues specific to new organisations. It may suggest some basic principles to assist nascent enterprises. It will also be the starting point for a wider long-term discussion of sensible regulation of new.

## Social and economic implications of new

We have already seen massive adoption of social networking and other internet channels and forums. Twitter may be no more than the hula-hoop of its time but it shows the speed with which a technology can become fashionable and used by millions in just two years. Purposeful collaborative networking will take longer to become part of our lives but when it does the impact will be much greater. We will have to rethink acquiring and selling skills, community funding of worthwhile projects, the ethos of participation, working at home for multiple employers with limited employment rights. It is easy to see how lonely workers will need a different real social environment to make up for the lack of workmates, work culture and work routine.

There are quantitative economic implications: If 'knowledge-based economy' means anything then it means highly skilled people working together to produce designs and develop systems. Until we understand how to connect, train (See Learning and skills development above) and reward (See G.5) these highly skilled people nothing significant will happen. If we can build efficient enterprises then we have a lot of positive factors creating an economic powerhouse based on skills being developed and applied at the leading edge.

There are also structural economic implications:

- Treems are bureaucracy-killers. There will be stiff resistance from those in cosy niches and owners of empires, but the application of small focussed and motivated teams will inevitably be far more effective in doing the basic job and evolving better ways of delivering a service.
- *Provided good internet access is available* anyone and any small sub-contractor can be part of a global operation. People with skills or potentially skilled people who find it difficult to get appropriate work at the moment for reasons of family commitments, age, locality, disability or health will be able to participate fully.
- Having a well developed skills-base will result in bringing money into the country by reason of straightforward investment where there is a dynamic skills culture and by electronically exporting skills as part of global enterprises.
- The economics and culture of learning skills and acquiring experience will need to be examined. A new employee (or volunteer or trainee) needs to be proven as

capable of self-management, group-interaction and probity which can't be done with a piece of paper from a college. It has to be economically attractive, particularly in the early days before it is accepted as the norm) for people to spend time becoming effective new team players.

### SEI.1 Social implications for individuals

Being freed from geographical constraints increases opportunities for people to find specialised work. Not having to do '9-to-5' allows people to fit in work around other commitments or health problems. For many people a significant downside will be operating as an independent contractor with variable wages quite possibly for only a small amount of work each week, having to keep looking for new openings and without the employment rights enjoyed by full-time workers. Some people will leap at the opportunity to do something for sake of extra money or just satisfaction as well as their full time job or to fill-out retirement or familial duties. One particularly interesting case is enthusiastic youngsters being drawn into skilled activities and so learning the technical and social skills required for employment and building their 'experience and competence capital'.

Someone working alone or in a domestic environment tends to lack the social contact and essential discipline of a working environment. Isolation, as well as potentially initiating a vicious circle of low self-esteem, can also result in minor domestic matters growing out of all proportion causing worry and stress. Self-employment may imply lack of employment rights so increasing insecurity.

This investigation will examine the double-edged social and psychological implications for individuals involved in new.

### SEI.2 How society can benefit by supporting purposeful enterprises

There is a long tradition of the arts being subsidised for the 'public good'. Collaboration on say developing information systems for senior citizens has a 'public good' result *but could also* involve people from the community using their practical knowledge, having access to the skills of experienced specialists and encouraging long-term 'ownership' and participation. Similarly there are many locally significant projects that could give opportunities to young people to learn skills and how to collaborate.

The purpose of this investigation is to look at some example public-good projects and estimate the value of the primary and secondary benefits. It may be appropriate to compare the expected and actual results achieved by demonstrator projects and derive practical lessons from the organisation and management.

### SEI.3 Lessons for bureaucracies

Treems are about teams taking responsibility - Bureaucracies are about avoiding it. Treems embody a 'can-do' culture where challenges are what keeps people interested - Bureaucracies embody an avoiding work and keeping well in a comfort zone mentality. Treems are about the application of skills in a delegated, flexible manner - Bureaucracies are about managing with poorly educated and poorly motivated staff using rigid rules. Treems are about bottom-up policy initiatives leading to an evolving organisation. Bureaucracies are about top-down policy dictated and an institutionalised structure.

This is an important investigation because of the vast numbers of people in bureaucracies and their huge inefficiencies. Even if only minor improvements ensue there will be a large absolute monetary and productivity gain.

This long term project is in three parts

- (1) To conduct a theoretical comparative study between bureaucracies and treems.
- (2) Then to re-educate and re-organise a small bureaucracy using existing staff along treem lines.
- (3) While also setting up a treem replacement for a small bureaucracy from scratch using experienced treem Champions and others where possible.

#### **SEI.4 Local to global scope - The impact of geography**

Just because people work electronically doesn't mean they have to be on opposite sides of the globe. For example a British university might specialise in agricultural methods for emerging African nations with a community of technical specialists in and about the university while the practical implementers in the field also have equal participation even though separated by thousands of miles. Connecting continents and communities is only one aspect of the influence of geography. The import, export, relocation and ownership of skills and knowledge will all be affected when rew becomes a reality.

This research will consider the economic and social changes that may be expected due to the relaxed geographical constraints made possible by rew. One part of the investigation will be looking at the effect rew can have on the ability of local communities to access 'world-class knowledge and skills'.

#### **SEI.5 Possible development scenarios**

Together with SEI.6 we need to look at the rate of development of rew and its associated infrastructure. Will it simply be an extension of the community software development model? Will it extend to non-profit movements for engagement with policy development and change? Will it be used by start-ups? Will it be used by existing businesses to re-organise? Will it be used to replace bureaucracies? How long will it take for different countries to develop dynamic skill-bases and the ability to export skills?

#### **SEI.6 National economic effects**

Is the adoption of rew going to 'kick-start the knowledge based economy' and if so by how much? If there is a dynamic skills-base then what affects inward investment and exportability? If rew is adopted on a large scale then will it necessarily mean a large increase in self-employment?

These two investigations, SEI.5 and SEI.6, are an attempt to put some numbers on the effect of the significant change in the way skills are used in the economy. SEI.5 requires an understanding of the nature of new rew organisation, technology, how it might appeal as worth a try and why it might be adopted. SEI.6 will try to estimate the monetary effects.

#### **SEI.7 Micro economics**

What are the economic changes businesses and individuals can expect? Is it possible to save 20% of costs by closing physical premises and moving to rew or are the increased costs of looking after people prohibitive? Will rew mean self-

employment for most 'employees'? What could be the effect of different reward schemes?

The purpose of this investigation is to identify the micro-economic issues and attempt to gauge their significance, opportunities and dangers.

### **SEI.8 Building the skills base**

Rew is ideally suited to employing specialists as-and-when for specific tasks. This is in contrast to trying to find somebody local 'who will do' or an existing employee who is now expected to manage but who has no interest or incentive to invest a lot of time in becoming a rounded expert. Further, Treems should be good learning environments with the ethos on accepting challenges with group support. The combination of a supply method and a lively demand should result in a healthy, up-to-date, practical and expanding skills-base. Infrastructure such as Hansas and a skills marketplace will need to evolve in order to provide efficient low-risk access to skills and employment.

This research will endeavour to identify the scope and success factors involved in the creation of a dynamic, up-to-date skills base.

### **SEI.9 Employment**

There are many issues surrounding rew employment. Some rew workers will inevitably be self-employed or part-time and this might become the norm. This raises questions about employment rights. International collaborations will inevitably have different expectations and legislation. Where reward is not wholly 'wages' then what have the various taxmen or minimum-wage regulators got to say?

This project will investigate the issues surrounding employment in the rew context for straight-commercial through to volunteer non-profits who occasionally employ international experts.

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