

21st century guilds - Hanses

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Problem

As information technologies proliferate so we need the skilled technicians to apply them. But:

- Many of these technologies are niches which are not on any traditional career path.
- A lot of the time there are few opportunities to continue developing skills...
- ... or getting started in the first place.
- Often there are few full-time, long-term jobs.

The economic result is poor application of technology due to a fragmented, poorly trained workforce that lacks experience where high levels of skill are essential. This results in inefficient implementation, poor quality products and missed opportunities. ie. Bad for business, bad for skill development. *It may be very British to muddle-through but that's what everyone else calls amateurish.*

Many projects and organisations need specialist skills on-demand a bit at a time. Employing, say, a system administrator as a permanent position doesn't make economic sense until the organisation is quite large. Yet every organisation needs some. The traditional fudge is to lump responsibilities on people with other things to do who don't want them and aren't experts in problem solving or prevention. Furthermore training and understanding is ad-hoc, the minimum necessary and quickly lost.

Remote working¹ makes it much easier to employ specialist skills piecemeal. An arbitrator or graphic artist or translator (for example) can be *given a task* (in craft terms this would be called a "commission") which :

- The technician understands better than the employer. ie The client tends to express the problem rather than specify the solution.
- Doesn't start off as being 'a two week contract' etc. but a 'solve-this'!
- Doesn't involve travelling.
- Means a higher level of mutual trust and responsibility.

For this to work there needs to be a pool of technicians available for hire. These technicians need to be:

- Well trained - or with established level of competency.
- Experienced - or with established experience
- Trustworthy - with no 'buts'

Why *Hanse* needs to be a protected term

"Hanse" is an old word for guild. It needs to be protected in law against being used by anybody for any trade association because the knowledge-based economy *will depend* on technical guilds which amongst other things will need to adhere to certain standards of probity. *The term "Guild" has been devalued - "Hanse" must not be allowed to go the same way.*

¹ See <http://vulpeculox.net/ob> for how this is now practical for a complete organisation.

Solution

The modern guild ("Hanse") would be similar in many ways to the medieval craftsmen's trade association:

- Organised by the experts themselves.
- Membership based on merit and ethical behaviour.
- Training and mentoring with defined levels of experience and skill.
- An established source of specialist skills.
- Enforcement of 'professional' standards.

Whenever guilds are mentioned, historically-aware people get worried about monopolistic tendencies and exclusive membership requirements. In a modern environment these potential faults should be controllable. On the other hand there are many trade associations that use the word 'guild' in their title but require nothing more than an annual membership fee being merely fronts for consumer deception. *This lack of probity is a serious matter as it is always easier and cheaper to cut corners and deny responsibility.*

Each hanse would have a specific realm. Some examples might be: 'Javascript programmers', 'software librarians and change controllers', 'Arbitrators', 'management technologists', 'graphic artists', 'domestic computing security advisors', 'abstract asset managers'² or 'privacy and security managers'.

The benefits for the members are:

- Better employment prospects.
- Mutual improvement.
- Mutually defining levels of experience and recognising expertise.
- Pooling marketing and other commercial costs.
- A framework of trust and ethics.

The benefits to the economy in general are a workforce that is :

- Well-trained. Especially in new and niche skills.
- Available.
- Flexible.
- Trustworthy, or in the worst case can be held to account.

The benefits to enterprises are

- Access to specific skills...
- ... at an understood level...
- ... for specific tasks.

A country which has established Hanses will benefit economically by becoming:

- An exporter of skills. (More so with the increase in remote electronic working.)
- Known as a place with good access to leading-edge and niche skills

² Somebody who keeps track of the ownership and value of contributions and intellectual property in a distributed organisation.

Training

Information technologies change far faster than traditional professional organisations can deal with. For example today there could be a well populated band of 'Firefox add-on writers' which simply wouldn't have existed a couple of years ago, while application techniques are being learned and the technology is changing. *If we want state-of-the-art practitioners then we need a forum and motivation for them to keep abreast of developments.*

- 'School' is general - specialist subjects don't get covered in depth.
- 'Books' are specific but tend not to be cutting-edge.
- Neither may cover important niche technologies, although if a subject becomes fashionable or widely used it can be covered extensively subject to the limitations inherent in the media. . .
- Neither provide hands-on experience in a real-world environment.
- Neither provides access to this year's advances.
- 'The Internet' can sometimes assist with learning by problem solving but it is often patchy, out of date and incorrect.
- On-the-job training for specialist technical subjects is very much about finding things out as you go along. This results in a narrow problem-oriented view which means a lack of fundamental understanding, magic spells of the "this is what I typed in last time and it seemed to go away" variety and lack of awareness of alternative approaches.
- On the job 'training' is often a hurried response to a specific need where getting the job done takes priority over 'let's understand how this works and what our options are so we can decide how best to fix it'.
- Where knowledgeable people do exist they are quite naturally not inclined to spend ages dealing with other people's problems - certainly not prepared to take responsibility.
- Technical communities and forums do exist on the Internet. In my view these show the importance of sharing information rather than how to do it - because the quality of the advice is often poor, not relevant, simply wrong, repeating another's 'magic spell' or out of date. A world where everyone feels entitled to contribute their 'wisdom' is one based on folklore. It becomes more and more difficult to find nuggets of quality when there is no garbage collection.

A community of niche technologists or experts could address training. In fact it really has to if membership is to be based on competence and experience. There are two important aspects:

- 1 The experts set *and maintain* the 'syllabus'.
- 2 The established practitioners assist apprentices.

These work in a closed community where membership brings commercial advantages. It is in their interest to 'keep up to date' and encourage everyone to accept the need to employ well trained experts as opposed to jacks of all trades.

Quality

IT people tend to thrive on solving problems in stages. This helps them build a varied toolbox with which to deal with the next one. But this is a very random process and to be honest there are some people who can only function in a 'problem' environment. If my machine breaks down I want a *technician* to mend it - but if I want a better machine then I need an *engineer* to build it. Engineers are expected to have a complete understanding of the realm, technicians simply the right tool for the job and be able to follow the instructions with diligence. So here is the problem: For a lot of people the route to becoming an engineer is via a technician. In itself this isn't necessarily a problem but how does a potential employer know how far into engineering the technician has progressed?

There is another issue which is how does a potential employer assure themselves of somebody's capabilities when being asked to work on something 'similar' to what they're used to. How 'similar' is "similar"? What is the risk if it's not quite as similar as expected.

When people are being commissioned to produce work there is the risk, *practically a certainty actually*, that what the client ends up with isn't exactly what they had imagined. Of course in an ideal world the craftsman delights by producing a wonderfully inventive, beautiful and practical piece of work based on a rough sketch from the client. Sadly this isn't always the case. Possibly the client is not very communicative, expects something for nothing, changes their mind or doesn't grasp the magnitude of the task. Alternatively the craftsman is not very good at reaching a compromise of all the good things within a reasonable price, or isn't very good at technique or understanding crucial background technical issues. Sometimes the craftsman 'knows better' than the client what is wanted and presses-on with their vision regardless.

These two issues: (1) Hiring someone who is suitable (or if not perfect then with a manageable degree of uncertainty) and (2) managing the commissioning process will arise far more frequently when skills are brought-in as required as opposed to the more traditional full-time employment. Therefore we need to make it easy to get these things right and minimise the risks.³

This is why standards for technical competency and confidence in a well managed commissioning process endorsed by a hanse are required.

Competency and discipline

A potential commissioner needs to be assured that a given hanse member is

- able to do the job
- will do it diligently
- will follow accepted practice

A guild member needs to be assured that in the event of a dispute that the hanse will fight legitimate claims. (Commercial power is important where craftsmen are working remotely for large companies often on poorly specified or dynamic projects.)

³ Actually hiring the wrong person full-time can be more troublesome than a commissioned work, but everyone has come to live with the risks and how to deal with them.

This means that any hanse must:

- Provide competence assessment.
- Define accepted commercial practice.
- Play a role in the framing and auditing of a member's commercial relations.
- Have disciplinary powers.

All of the above is in order to make it easier to hire the right person with confidence.

How this is implemented is beyond the scope of this article as it will vary between hanses. For example the competence of say a Python programmer would be assessed very differently to the competence of say an arbitrator or a circuit designer. Who better to sort out these things than the experts themselves? On the commercial side there might be 'standard contracts', commissioning guidelines and an ethical code. On the mutual assistance side there would presumably be obligations on members to assist others if called upon.

Charter

A hanse needs to be a corporate body. Traditionally guilds were set up by charter which established the basis for their rights in law. Although there are professions today where it is illegal for outsiders to practice, most information technology isn't a matter of life and death so monopoly isn't likely to be a right sought for by charter. *However the right for a body to call itself a "Hanse" should be controlled by law to prevent unchartered bodies presenting themselves as such.*

A charter would primarily ensure that the hanse fulfilled its obligations to its members and their customers beyond simply being say a Limited Liability Partnership. The public acknowledgement of the authority and responsibility of the hanse is important to maintain confidence in quality. Without it a hanse would be just another trade association with no public obligation.⁴

Conclusion

There is a place for a 21st century version of the old guilds performing important modern functions. By concentrating knowledge and skills it will make specialist skills that are fundamental to the knowledge-based-economy easier to access and of a more reliable quality. By working collectively, individuals have better economic prospects and technical support from colleagues.

"Hanse" is used instead of the devalued "guild" in hope that the temptation to hide behind a trade association in order to supply inferior services can be avoided by appropriate regulation.

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⁴ It is of course in the hanse member's interest to be committed to delivering high quality work; but on top of this an organisation that undertakes training which results in overall public good may be in a better position to ask for public subsidy to encourage new entrants.