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Service Design Against Organised Crime

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Abstract

This paper proposes benefits of using service design against organised crime. As a vehicle to this discussion, the focus is an anti-child-trafficking project at Northumbria University in the UK, involving its multidisciplinary Northumbria Crime Prevention Network.

The last 10 years have shown increasing evidence of people trafficking, internationally (DoS, 2010), generally for the purposes of illegal labour and/or sex. A significant fraction of those who are trafficked are children. The majority of these children are in their mid-teens, but some are as young as five years old.

The C4 persona-based critical design process, (Hilton, 2008), is proposed to strategically enable a service design approach to counter organised crime, by first developing the required criminal personas in order to use their competitive perspectives in critical review of the preventative initiatives. Opportunities from such a service design approach, to child trafficking for example would include new means of: interruption or redirection of child trafficking services so that these children end up in legitimate care; also the proposition of considering new opportunities and improvements in child trafficking service routes and processes as a means of second guessing how and where Recruiters, Transporters, and Exploiters, (Van Dijck, 2005), might next be found operating, and then through border and security agencies successfully countered.

KEYWORDS: Service Design, Organised Crime, Counter Actions, Child Trafficking, C4, Critical Design.

Introduction

Service Design has been defined (Mager, 2008) as addressing services from the perspective of clients. This might generally be understood to refer to systems of social and economic interaction where the client is provided a service. However, there are a range of interaction possibilities from the selfless services of charity, to the selfish services of crime.

In the world of organised crime the service system commonly seeks to profit through the deception, exploitation, and destruction of others. If we take a typical client-centred service design approach to this issue of reducing organised crime we might investigate how to immediately improve the security services, however, this research proposes there is added value in first investigating how the organised crime services might improve. From this vantage point it is argued that a stronger approach to improving the security services can be developed. As a further means of strengthening security service solutions, the organised crime services intelligence can be used to critically test the proposed improvements in the security services, using the C4 process (Hilton, 2008), described later.

One example of an organised crime is Child Trafficking. This crime continues to develop organically from socio-economic influences, with separate parties dealing with particular stages in the supply and exploitation. Trafficking may not always be centrally organised, but should always be considered and understood as a form of service network (CEOP, 2009). Therefore the application of service design methods would be a logical means of understanding and countering these activities, so that where trafficking services would look to minimise risk and maximise profit, the counter would look to maximise risk and minimise their profit.

While the media may be used as a means of context mapping, the criminological data required to inform and engage in the service design against crime process needs to come from those crime prevention agencies which are gathering it directly, (Felson, 1998). There are then a number of methods and tools for service design research and practice, which may be considered for countering organised crimes. For example: 'Blueprinting' (Bitner et al., 2008) can be used to map available intelligence concerning these criminal services; these services and their design processes may be reviewed and developed by checking for missing links (Goldstein et al., 2002) in order to propose sounder solutions. However, there are methods and tools from product design and engineering that may also be appropriated, including ICDM (Hari and Weiss, 1996) which can be applied to conceptualise counters; C4, a persona based critical design process, (Hilton, 2008), can be used to develop personas to critically test solution proposals; and predictive research methods can be used (Miettinen and Koivisto, 2009:63) to consider 'future opportunities and ideas, speculative scenarios, estimating the scale and potential of an opportunity even when most variables are unknown'.

However, it is advised that secrecy be maintained for such service projects and their design details, in order to avoid the ‘competition’ adapting and developing its own processes and solutions; a problem referred to as ‘novelty decay’ (Cropley et al., 2008). Although these approaches may begin at different points in the early stages of the service design process, they will then run in parallel, providing a multiple perspective approach to the development and evaluation of solution directions.

Reference to security services is used loosely in this paper to include all potential stakeholders and contributors to the public ‘service’ of crime prevention and community safety, from government services like the Home Office, who have been using designers to improve crime prevention practices; to the general public like health visitors whose observations and reports can better inform the authorities of concerns.

Though the approach to crime reduction described in this paper is relatively novel, it is not the first time service design has been employed in a crime reduction context. In 2009 the Mypolice web-based communication facility was conceptualised and developed by Scottish based Snook. (Stickdorn and Schneider, 2011).

This paper provides some composite cases for context, developed using authority databases on trafficking e.g. (LCPC, 2006; Candappa, M., 2007; IAS, 2007; humantrafficking, 2009; DoS, 2010.) Though the content of the composite cases examples in this paper are disturbing, the intention is that they help contextualise the service design methods and tools. Though trafficking is an international problem in recruiting, transportation, and exploitation, the cases in this paper all focus on the problem of countering child trafficking into and within the United Kingdom.

A Service Design Method

The description of service design tools and processes for countering organised crime begins with Service ‘Blueprinting’ (Bitner et al., 2008) which involves a number of stages of definition. First the service processes must be articulated in detail, e.g. trafficking children for sex work, but here it is summarise as steps:

- 1) Acquire vulnerable attractive children.
- 2) Transport to the place of exploitation, breaking their will on the journey.
- 3) Deliver to client’s brothel to provide underage sex.

Second, the sub-processes are articulated, e.g. recruiter/groomer for stage 1:

1a) Rent accommodation, and take an active role in the target community to gain trust and social knowledge.

1b) Identify vulnerable children then select one who will be easy to access and to sell in terms of required looks and fitness.

- 1c) Begin grooming the child, and possibly their family, to develop and test trust.
- 1d) Use the organised crime service connections to identify an exploiter/client.
- 1e) Make arrangements for the abduction, and the handover of the child to the contracted transporter, including the creation of the false passport and other papers.
- 1f) Prepare to move away, selecting the next promising community, without letting your present community suspect.
- 1g) After the abduction and handover of the child, make no return to that community.

There are a large number of different scenarios possible, which would need articulation and mapping, in order to understand the nature of these services more fully. In terms of informing anti-trafficking service development, the service designers would need to investigate and brainstorm as many different sub process scenarios as possible, to identify common forms of approach, and also any novel approaches to be aware of. The brainstorming would be primed by the latest intelligence on socio-economic and even environmental developments, and would be further supported by using criminal personas. The C4 process can be used to assist the criminal service blueprinting. This mapping process can be quite extensive, but by the time that the scenarios are becoming exhausted, e.g. variations on a similar theme lacking further novelty, the service design project community will have developed a very deep understanding of the workings of this organised crime. It is this team knowledge that will help recognise gaps for counter opportunities, and novelty of approach to improve effectiveness of countering child-trafficking.

Sometimes by using a different mapping structure, or mode of communication, it can help to view the processes from different perspectives, and highlight issues that were not previously apparent. The planning model framework of Goldstein et al. (2002) has been adapted here in figure 1, to model one form of child trafficking service, for the underage sex work market.

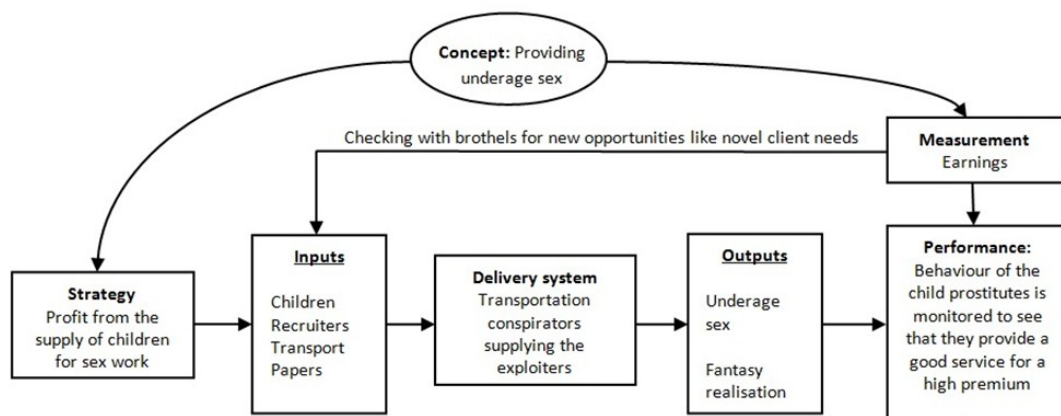


Figure 1 - Underage sex child trafficking service model. Adapted from Goldstein et al. (2002).

The ICDM inclusive method for customer driven conceptual design (Hari and Weiss 1996) involves what is referred to as an ‘agile systems’ approach. Although the 1996 paper refers to the

use of a number of concept generation and development tools including: Brainstorming (Osborn, 1957), Syntectics (Gordon, 1961), and TRIZ (Altshuller, 1984), the aim of ICDM is to select and use appropriate tools which will facilitate engagement with the service considerations of end users.

Motive → Capabilities → Target → Positive Renumeration → Absence of Discouragement
(Hari, et al. 2005)

For the child sex work scenario the ICDM approach would necessitate bringing into this mix both the customer persona, and their fantasy child persona. Although these personas would not be used in the same 'competitive' way as criminal personas, they would still aid in the testing of counter activity proposals by considering the motive and target response influences.

Discussion with UKHTC about gaps in available data highlighted that there is a particularly big gap in terms of understanding market access, and it was agreed that what was needed was an analysis of prosecution records to determine this root demand connection to trafficking. Presently however, the data suggests there is more of an exploiter push dynamic than a market pull. This involves a paradoxical need for 'publicity', constrained by the risk of getting caught by the security services.

The aim of the ICDM process is to generate and develop a number of potential solution directions to counter the organised crime, but then to test and evaluate these initial propositions. The C4 (Cyclic Countering of Competitive Creativity), persona based critical design process, involves developing and using personas of the criminals to generate creative prompts which are then used to critically test proposed counters to identified or predicted criminal activities. When the 'competition' is organised crime, in this case a chain of trafficking agents, the C4 process needs to develop and apply a range of personas to cover 'service personnel' types: Recruiter, Transporter, and Exploiter, (Van Dijck, 2006; 62). This approach enables the determination of what the typical criminal service improvement responses might be to new situations, including the countering of proposed counter measures.

The C4 process typically begins with the proposition of Assumed Personas. These are used purely as a starting point towards the investigation and development of Developed Personas. Approaches to this first step would likely be need and opportunity led. For example, the key 'client' exploitation needs for children, according to the anti-trafficking authorities (LCPC, 2006; Candappa, M., 2007; IAS, 2007; CEOP, 2009) are: labour in sweatshops; domestic servitude; under-aged sex provision in brothels; forced marriages; begging and pickpocketing; drug mules and decoys; benefit fraud; trade in human organs; and human sacrifice. The key opportunities for child acquisition, again according to these anti-trafficking authorities include conditions of: Poverty, where vulnerable individuals or families are conned with false working opportunities; Lack of education, where false opportunities of improvement through education are taken up; Cultural attitudes and discrimination, in cultures where females are valued less; Dysfunctional

families, where children are looking to leave home; War and political conflict, which has left children vulnerable.

Each of these needs might be met by one or more of these opportunities. The deciding factor would likely be which method of recruitment, transport, and exploitation is the most opportune lowest risk and highest return. While repeated use of a route and process increases chance of detection, creation of new routes and processes take time and bring risk with the unknowns. It is also expected that well organised trafficking services will have a multiple route infrastructure by which they can keep their trafficking fluid and irregular to evade detection, capture, and successful prosecution.

In addition to the C4 personas, predictive research methods can be used (Miettinen and Koivisto, 2009:63) to consider ‘future opportunities and ideas, speculative scenarios, estimating the scale and potential of an opportunity even when most variables are unknown’. These methods, as co-creation experiences, typically seek to inform and prototype the service developments for user evaluation of what largely involve person to person modalities, (Evenson, 2008). Whereas the criminal service development will be limited to informing opportunities through more covert observation and enquiry, those involved in the crime prevention community will be able to work more freely with a range of research methods, from traditional approaches of crime data access, to more innovative participatory enquiries, through workshops involving engagement with: mapping, modelling, visual diaries, camera studies, and document annotation. (Hanington, 2003).

Trafficking Service Routes and Processes

While it is generally agreed by the anti-trafficking authorities that there is still a great lack of data to inform counteraction, there are now a number of case studies available to inform initial approaches to understanding this socio-economic problem. Based upon available case study materials, the following two composite stories describe example routes and processes for the trafficking of children, providing contextual reference later in this paper.

- (1) A 12 year old girl is ‘recruited’ from a Moldovan family living in poverty. The parents want a better future for their child. The approach is made by a ‘friend’ of the family who describes an opportunity to study in a private British school. The trafficker is trusted, not just because he is known to them but because he has paperwork that describes the school and outlines the offer. Using the common ‘If written, then true’ belief. The child leaves somewhat freely and is taken to the UK where the trafficker passes the child across to the ‘carer’. The trafficker and carer have what appear to be valid credentials for the security service checks, but the carer does not take the girl to private school but instead to a life of household servitude and abuse with a couple living in Glasgow. The ‘friend’ does not return to the community he has recruited the girl from, but uses the money from selling the girl to move on.

- (2) A 15 year old girl is recruited from West Africa for sex work in the UK. The mother is aware of what this means for her child, and allows her to be raped a number of times by the traffickers to see whether she is suitable for purpose. If the child responds 'favourably', the mother is able to sell her child. The child is then brought to Eastern Europe in a container vehicle which helps with the disorientation and breaking process. In certain parts of Europe the border checking is looser and allows for lower risk trafficking, seeking entry to the UK by smaller ports. To ensure that the girl is delivered in a subservient frame of mind the journey involves repeated raping to break her spirit, developing learned helplessness with threats of being killed if she does not comply or makes attempts to escape. In Poole, and once through customs, she is met by someone claiming to be her Aunt who takes her passport to prevent escape from the country. She is then taken to a brothel in London where client contact is kept strictly indoors so that the child remains invisible to the security services. If the 'Aunt' is later approached by immigration or child support, she can show with paperwork that the child has gone into the foster care which was declared on entry to the UK, but if these details are followed up the trail goes dead, so the child is reported missing.

Countering Trafficking Service Routes and Processes

Approaches to countering trafficking have involved raising awareness of these crimes, including public service education about the signs of these crimes existence, in terms of the more visible components of Recruitment, Transportation, and Exploitation, (Van Dijck, 2006; 62). However, attempts to raise awareness are seen by some as tantamount to admitting to a problem and so are strongly discouraged in some countries and communities. As a result the most aware people are typically the immigration and health authorities, not the family communities under threat.

Counter trafficking also use technological approaches to its tracking, and border monitoring, with a variety of devices available for sensing hidden living cargo, by detecting traces of heat, motion, and CO₂. However, border controls have insufficient time and resources to check all crossings without stalling the import and export processes vital to these countries. It should be noted that detecting and returning individuals is not a form of prevention, but a temporary cure, as there is evidence of people being re-trafficked, and caught again.

More up to date case materials are being recorded to inform crime prevention project communities. These can come through social and health workers identifying a trafficked child and initiating an investigation; or border authorities interviewing children and traffickers. Interpreters are usually needed because it is beneficial to traffickers to deal in children with little or no English language ability.

Designer's involvement in countering organised crimes is in its infancy, but the value of divergent thinking should not be discounted, unconstrained by not knowing all the facts, enabling alternative perspectives and approaches to the creative proposition of solution directions. Also, it should be considered the value of the designer's capacities to work with experts in multi perspective project communities, to aid communication and open mindedness to 'opportunity identification', (Hilton, 2002).

The benefit of the C4 persona based process is in the way that it reinforces the need for critical review of solution directions using contextual perspectives and practices as counter arguments to test and evaluate proposition benefits and risks. C4 has been previously used in artefact designing (product/fashion) and is appropriate to supporting a service design approach, raising service design questions to determine the Threats, Opportunities, Weaknesses, and Strengths, in that order, (Schieffer, 2005:24-25), in both the child trafficking and the counter trafficking services.

The persona development process has to begin with a literature review and mapping of references and case material to establish and understand the operational context(s). This is then followed by market segmentation, to map the terms of engagement. A services approach would consider and develop the following key segments:

- Attitudinal Segmentation, looking at the values and beliefs of the users.
- Behavioural Segmentation, looking at practical reasons the users may have.
- Journey Segmentation, looking at routes to satisfying the requirements.

(Parker and Heapy, 2006: 22)

These service segmentations may be further reviewed, as if trafficker considerations:

- How are you segmenting your users? What combinations of data do you use to create insight?
- Who is responsible for 'user intelligence'? How are they connected to the management of your organisation?
- Are you genuinely looking at your services from the vantage point of the interface?
- Can you map all the touchpoints of your service? Do you know how people feel about these touchpoints?
- How do the different channels of online, phone, and face to face interact for different kinds of service users?
- How are you designing in deliberation, dialogue and opportunities for co-creation to the touchpoints and channels of delivery?

(Parker and Heapy, 2006: 37)

It is crucial that the interface touchpoints are taken seriously, for traffickers to reduce risk of: being caught by the authorities; the child escaping; or the trafficker being redirected or double

crossed. However, there is little evidence of traffickers being in aggressive competition with others, probably because these services are presently relatively easy to recruit for and transport via. Consideration around touchpoints will be based upon making the activity appear normal and acceptable, to keep transactions calm, and reduce risks of failure.

The trafficking service would benefit from these touchpoints being mapped so that the area of recruitment and transportation checkpoints and transfers might be organised effectively from a distance. Such an approach to logistics could, as an example of situational response, save a shipment when plans go awry, by offering immediate support of alternative routes and processes. The journey can be a tense one especially around the touchpoints if a child is not properly subdued by the process of deception or threats of punishment or death. In extreme circumstances traffickers have been witnessed ditching their shipment as a distraction to security services in order to evade capture.

The security of the traffickers is maintained where possible by minimising frequency of face to face contact, using instead coded telecommunications to reduce the likelihood of accidental identification and connection, and to avoid clear interpretation by the security services. Reduced contact also serves the purpose of no single trafficker 'in the field' knowing the full extent of the service. However, face to face is generally necessary for the recruiter in any attempts to gain the trust of the target child and even the child's family.

It is crucial to the success of these services that all requirements are understood and supported in a businesslike manner, and this is best achieved through an atmosphere of co-creation, listening and watching for opportunities for improvement of the shared venture. By this approach the Exploiter can help direct a Recruiter as to where a child may be located, possibly identified on the Internet; or support fraudulent claims by providing convincing paperwork and procedures; also the sharing of successful approaches to subdue individual children, or groups, to reduce risk of being caught out. Similarly, it is important to the service in the recruitment of new traffickers, that they have characteristics that would help mislead security services if required, for instance older female Transporters who are more easily perceived to be benign family members or carers responsible for the child.

Whether security services choose to employ service design methods or not, the fact is that organised crime also has access to general service design methods through a number of publications, and may be using these methods already to improve their criminal practices.

Conclusion

Our awareness and capacities to counter crime are limited to those forms of crime we have had experience of. It is argued that creative approaches from design and more specifically service design can be used to map present criminal services and forecast new criminal opportunities, and in so doing inform and improve the counter measures detection and intervention capability.

Design communication processes can aid the development of awareness through the creation of pre-experiences of these crimes and their counters, through storyboarding for example, to forewarn the communities and prepare the counter actions.

The C4 critical design process described in this paper is argued to be crucial in its cyclic development and critiquing of the service design solution proposals, and for developing a deeper understanding of the operational context of organised crimes, in this case child trafficking service routes and processes. Nevertheless, C4 works effectively in conjunction with other design and business development techniques, from mapping, through forecasting, to analysis. The initial findings of this process of investigation, including C4 critiquing and selection would indicate there may be opportunities for improvements to countering child trafficking by:

- Using poster campaigns specifically to describe signs of trafficking without mentioning these crimes, e.g. explaining that schools and businesses ‘do not recruit in this way’.
- The creation of ‘false opportunities’ e.g. to slip through border crossings, intended to lure traffickers into revealing themselves through their ‘recorded’ responses.
- ‘Turning’ forgers, to supply papers that enable tracking and interception, if service infiltration is successful at this touchpoint.
- The penetration of local immigrant communities by support workers, who in positions of trust can begin to educate people about signs of child trafficking, in such a way that this knowledge is passed back to their home communities in warning.
- Training ‘agents’ to effectively impersonate brothel clients in order to pass the phone vetting processes, and infiltrate these services to gather case evidence.

As they develop, new service design methods and tools should be considered for improving the quality and effectiveness of our security and crime prevention services. What this paper has sought to do is raise awareness of service design benefits in investigating and supporting the countering of organised crime.

References

- Altshuller, G. S. (1984) *Creativity as an Exact Science. The Theory of the Solution of Inventive problems.* (A. Williams, Trans.) Amsterdam: Gordon and Breach publishers.
- Bitner, Mary Jo, Amy L. Ostrom and Felicia N. Morgan, “Service Blueprinting: A Practical Technique for Service Innovation,” *California Management Review*, Spring 2008, 66-94.
- CEOP (2009). *Strategic Threat Assessment Child Trafficking in the UK.* Child Exploitation and Online Protection centre: London.
- Cropley, D. H., Kaufmann, J., and Cropley, A. J. (2008). Malevolent Creativity: A functional model of creativity in crime and terrorism. *Creativity Research Journal*, 20, 105-115.
- DoS (2010). *Trafficking in Persons Report. 10th Edition.* Department of State, United States of America, <http://www.state.gov/g/tip/rls/tiprpt/2010/>

- Candappa, M. (2007) *Child Trafficking in Newcastle. A report on the evidence and agency responses to child trafficking.* ECPAT UK.
- Evenson, S. (2008) *A Designer's View of SSME.* In B. Hefley and W. Murphy (Eds.) *Service Science, Management and Engineering, Education for the 21st Century. Service Science: Research and innovations in the Service Economy.* Vienna: Springer. pp. 25-30.
- Felson, M. (1998) *Crime and Everyday Life.* 2nd Ed. Thousand Oaks; Pine Forge Press.
- Goldstein, S. M., Johnston, R., Duffy, J., and Rao, J. (2002) *The Service Concept: The missing link in service design research?* *Journal of Operations Management*, 20, 121-134.
- Gordon, W. J. J. (1961) *Synectics, the Development of Creative Capacity.* New York: Harper.
- Hanington, B. (2003) *Methods in the Making: A Perspective on the State of Human Research in Design.* *Design Issues.* Vol.19, No.4. Boston, MA: MIT Press.
- Hari, A., and Weiss, M. P. (1996) *ICDM – An Inclusive Method for Customer Driven Conceptual Design.* *Proceeding of the 2nd ASI Annual Total Product Development Symposium, Pomona, CA,* pp 721-747.
- Hari, A., Cropley, D.H., Zonnenshain, A. (2005), 'Agile System Engineering for Creative Anti-Terror Solutions', in *Proceedings of the Systems Engineering , Test & Evaluation Conference, SETE 2005 – A Decade of Growth and Beyond, Brisbane, Queensland, 7 to 9 November 2005, CD, Digital Paper.*
- Hilton, K. H. (2002). *Stimulating the Practice of Opportunity Identification.* Shared Visions conference, Brighton.
- Hilton, K. H. and Henderson, K. (2008) *Developing Criminal Personas for Designers.* *British Society of Criminology Journal*, Vol.8 At <http://www.britisocrim.org/v8.htm>
- Hilton, K. H. (2010) *Boundless Creativity.* In D. Cropley, J. Kaufman, A. Cropley, and M. Runco. *The Dark Side of Creativity.* New York: Cambridge University Press.
- Humantrafficking (2009) *Human Trafficking & Modern-day Slavery.*
<http://gvnet.com/humantrafficking/UK.htm>
- IAS (2007) *Anti-Trafficking Toolkit.* Research and Information Unit, Immigration Advisory Service. www.iasuk.org
- LCPC (2006) *London Procedure for Safeguarding Trafficked and Exploited Children.* London Child Protection Committee.
- Mager, B. (2008) *Service Design definition in the design dictionary.* In M. Erlhoff, and T. Marshall. (Eds) *Design Dictionary.* Birkhauser Basel: Board of International Research in Design.
- Miettinen, S., and Koivisto, M. (Eds) (2009) *Designing Services With Innovative Methods.* Taitemia: Savonia.
- Osborn, A. F. (1957) *Applied Imagination – Principles and procedures of Creative Thinking.* New York: Charles Scribner's Sons.
- Parker, S. And Heapy, J. (2006) *The Journey to the Interface. How public service design can connect users to reform.* London: Demos.
- Schieffer, R. (2005) *Ten Key Customer Insights. Unlocking the mind of the market.* Mason, OH: South-Western Cengage Learning.

Stickdorn, M., and Schneider, J. (2011) *This is Service Design Thinking*. New Jersey: John Wiley and Sons. Pp 234-249.

Van Dijck, M. (2006) *Trafficking Human Beings: A Literature Survey*. 3rd Rev. Project No. CIS8-CT-2004-501767. Assessing organised crime, 6th Framework Programme.