# IFLA TREND REPORT 2018 UPDATE

"We cannot tell what will come in the next ten years, but we do know that by joining our intelligence, our forces, and our voices, we will be best placed to respond."

INSIGHTS FROM THE

**IFLA** TREND REPORT

# Foreword – Gerald Leitner, Secretary General, IFLA

At a time of rapid change, it can often feel like the only certainty is uncertainty.

Ten years ago, the world stood – for the most part unaware – on the brink of a major and lasting financial and economic crisis. Since then, we have seen spectacular technological advances, social upheaval, and growing unpredictability in our climate.

Not so much an earthquake, but a growing fluidity that has put long-standing truths into question. Not least, of course, 'truth' itself, as Glyn Moody underlines in his contribution to this year's Trend Report update.

This has underlined the need for new approaches, as suggested by Professor Rafael Ramirez in his essay. A holistic, realistic, look at the trends shaping our world, and an awareness of the different ways in which they might play out. We cannot be certain, but we can be better prepared.

Libraries have not been spared. As institutions embedded in their communities, their role has necessarily evolved. Collections, services, and missions have adapted in line with the needs and expectations of users, often in ways that could not have been imagined a few years ago.

But, crucially, a lack of certainty should not mean a lack of confidence.

We will need this, as we have much to be proud of, and much to defend. Changing times do not need to mean changing values, especially when the values are of public service, individual and community empowerment, promotion of innovation, and preservation of heritage.

Cassie Robinson sees libraries as key to ensuring continued public acceptance of a digital revolution that was once considered likely to put them out of business. Roger Baig's contribution sets out how libraries can find new roles in a digital age, and indeed form part of an alternative to the major telecommunications companies that seem so powerful today.

The message is a clear one. Libraries have what it takes to survive, and thrive.

IFLA's Global Vision is not about predicting the future, but about preparing for it. We cannot tell what will come in the next ten years, but we do know that by joining our intelligence, our forces, and our voices, we will be best placed to respond.

We owe it to ourselves, and to our communities, now and in future, to succeed.

# IFLA is the Global Voice of the Library and Information Profession

IFLA puts libraries on the global stage and helps them develop.

We are the global voice and the largest brains trust of the library and information profession, with an active network of more than 1,400 Members – leading institutions and players in the library field – in over 140 countries, and well-established relations with the UN and other international organisations.

Together with our Members we work to set the professional agenda and develop standards in library service provision, to improve access to information and cultural heritage resources, and to place this work at the heart of local, national and global policies.

# Contributors to the Original Trend Report:

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Trend Report updates are available for 2016 and 2017

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Cover page quote: Gerald Leitner

## WHAT IS THE IFLA TREND REPORT?

The IFLA Trend Report is the result of the dialogue between the library field and outside experts from a range of disciplines.

By crossing experience and perspectives, it provides an opportunity to explore and discuss the emerging trends that are shaping the world in which libraries work. It is not a static report, but a dynamic and evolving set of online resources for library and information professionals. The Trend Report website – trends.ifla.org – offers a range of data and information for libraries to use, share and build on, including a bibliography and literature review of existing trend reports, expert papers and discussion summaries.

The original IFLA Trend Report identified five high level trends in the global information environment, spanning access to information, education, privacy, civic engagement and technological transformation. It does not seek to predict the future, but rather to explore the forces that will influence it. Subsequent updates have continued in this line by opening up new paths and questions for reflection.

It is intended as a starting point – a catalyst – for discussion both within the library field, and when talking with external partners. It is a support for thinking on how best to prepare for what is to come, so that libraries do not only survive, but thrive.

That is where you come in. How libraries respond to – or take advantage of – these trends will have a decisive influence on how big a role our institutions will play in the new information landscape. This is perhaps the most urgent question facing the profession today.

## GET INVOLVED IN THE REPORT

From the launch of the Trend Report in 2013, IFLA has been engaging its members and the wider library field to promote and build on the Trend Report. It has helped them to deliver their own workshops, discussion groups, seminars and other activities identifying and discussing information trends most relevant in their region.

In April 2017, IFLA took things to a new level by launching its Global Vision initiative. The most inclusive discussion of the issues and opportunities facing the library field ever held, it has seen over 31 000 people around the world contribute their ideas and reflections. Now in its second phase, library associations, IFLA professional units and others are being encouraged to meet and identify ideas for actions to build a stronger library field.

We encourage you to continue the Global Vision discussion and use both the IFLA Trend Report update and the IFLA Global Vision Workshop Toolkit to organise and facilitate creative workshops with your community, network, colleagues or staff. The toolkit is available at www.ifla.org/globalvision. Stay tuned to news from IFLA at www.ifla.org and follow us on Facebook and Twitter!

# 1 EXECUTIVE SUMMARY

Five years on from the original IFLA Trend Report, there is no sign that the pace of change is slowing.

The original report picked out five areas where developments were shaping the global information environment – levels of access to information, online education, privacy, opportunities for new voices to emerge, and the impact of new technologies.

Alongside technology itself, we have seen laws, practices and attitudes change, and the global library field with it. Significantly, we have seen the interplay of these trends, sometimes reinforcing, sometimes contradicting each other. And of course, new questions have emerged.

The Updates to the IFLA Trend Report offer a chance not only to identify new trends, but also to look at how they interact, and explore the implications for libraries. They step outside of the library world, in order better to refresh and refocus our own thinking. Drawing on the insights and knowledge of external experts, they are the raw material for reflection on how our institutions can act to maintain and strengthen their relevance and impact in today's world.

This Update is no different. It continues the pattern established in 2017 of collecting papers based on presentations at the IFLA President's Meeting (this year held in Barcelona on 19 March). In line with the overall objective of the President's Meeting – to kick-start a process of generating ideas for action to build a stronger global library field – we hope that it will lead to discussion and debate, proving the power of the world's biggest library brains trust.

A summary of key themes covered in the Trend Report 2018 Update can be found below:

## Rafael Ramirez
## Scenario Planning and Libraries

- In many places, not least the United Kingdom, libraries have been faced with a struggle to maintain branches and services

- Expectations – and hopes – that the future of libraries was assured proved unfounded, due to erroneous assumptions about the context in which they operated
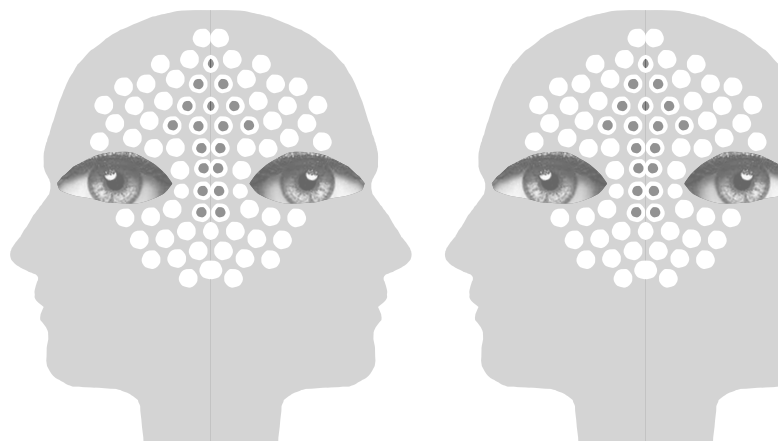
- Scenario planning offers a powerful tool for testing assumptions, exploring the interrelation between trends, and developing strategies that put institutions and sectors in a better position to face the future. Libraries could gain from adopting such an approach.

Rafael Ramirez is one of the world's leading experts on scenario planning, having developed the Oxford Scenarios Planning Approach with colleagues Angela Wilkinson and Kees van der Heijden. He has also been one of the first scholars to develop theories on the aesthetics of business and organisation; theories that help to clarify how scenario planning can be rendered more effective. He is currently director of the Oxford Scenarios Programme and the first Professor of Practice at the Saïd Business School and Green Templeton College, Oxford University, United Kingdom.

He was previously Chairman of the World Economic Forum's Global Agenda Council on Strategic Foresight, and Visiting Professor of Scenarios and Corporate Strategy at Shell International. He received his PhD from the Wharton School, University of Pennsylvania, and masters from the University of Oxford and the Environmental Studies Faculty at York University, Toronto.

## Glyn Moody
## Libraries are Under Attack: Here's How They Can Fight Back

- The shift to digital has put many core library principles and activities into question

- Privacy is threatened from different quarters, new rights and technology reduce possibilities to access and re-use works, and the notion of truth itself seems threatened

- Libraries can adapt and respond through sharing skills, tools and ideas that empower their users

Glyn Moody writes about the Internet, and related areas such as free software/open source, copyright, patents, open access, open data, trade deals, and digital rights. He has been a journalist for 35 years, and is best known for his book "Rebel Code: Linux and the Open Source Revolution" (2001), which describes the evolution and significance of the free software and open source movements, with many interviews of all the notable hackers.

He is based in London; his writings have appeared in Wired, Computer Weekly, Linux Journal, Ars Technica, Techdirt, The Guardian, Daily Telegraph, New Scientist, The Economist and Financial Times, among others. He can be followed as @glynmoody on Twitter, where he has posted over 300,000 tweets.

## Cassie Robinson
## Libraries Matter

- Around the world, the Internet is facing a crisis of confidence, due to a lack of understanding, a lack of trust, and, general unease about the power held by internet giants.

- Rather than falling victim to the web, libraries have the potential to make the Internet more useful, fair, accountable and more inclusive.

- Libraries should use this opportunity to redefine their offer, underline their values, their public interest mission, and take a central role in building the accountability of the Internet.

Cassie Robinson has worked for fifteen years in the field of social innovation, social finance and public value, in particular in the digital age. She is currently the Strategic Design Director at Doteveryone, where she leads work on how the Internet is changing society and strengthening and protecting what matters most.

She is the co-founder of Tech For Good Global, as well as founder of the Civic Shop. She is the UK Ambassador for SIX (Social Innovation Exchange), a global network for social and civic innovation, and is on the Advisory Board for Participatory City, the Good Lab, Atlas of the Future and Collectively (soon to become Vice Impact). She is also a visiting fellow at the Institute of Innovation and Public Purpose at UCL, and has worked with UK Government and the British Council.
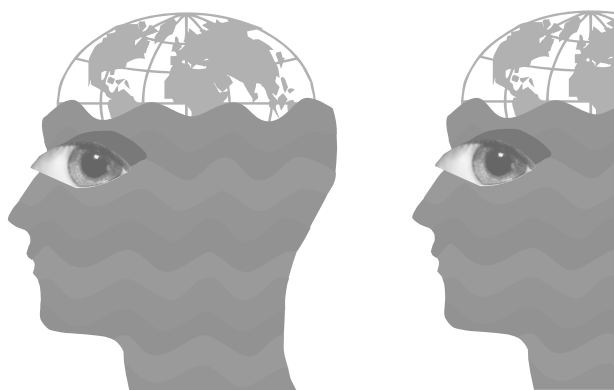
## Roger Baig
## Libraries and Community Networks: A Collection of Win-Win Opportunities

- Community networks bring together local actors to develop the infrastructure people need to realise the potential of the Internet, on a not-just-for-profit basis.

- With examples emerging around the world, their emphasis on collaboration has led to new, bottom-up approaches to establishing and promoting better connectivity.

- Libraries can play a key role, through their existing Internet connections, as gateways between the local crowdsourced infrastructure and the global Internet, as a source of locally-relevant material, and as a physical place to carry out discussions and training.

Roger Baig is an active member of the guifi.net community network since. He initially joined the project as a volunteer and since 2011 is employed by the guifi.net Foundation, the organisation responsible for promoting and developing the guifi.net network and keeping its principles. His activities include the international representation of the guifi.net Foundation, the organisation of community events and talks, etc.

As a researcher, he is doing his PhD at Universitat Politècnica de Catalunya. His current research interests are on business models, sustainability and governance of community networks.

# 2 Scenario Planning and Libraries

by **Rafael Ramirez**
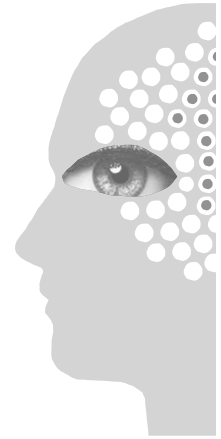
## KEY POINTS:

- In many places, not least the United Kingdom, libraries have been faced with a struggle to maintain branches and services

- Expectations – and hopes – that the future of libraries was assured proved unfounded, due to erroneous assumptions about the context in which they operated

- Scenario planning offers a powerful tool for testing assumptions, exploring the interrelation between trends, and developing strategies that put institutions and sectors in a better position to face the future. Libraries could gain from adopting such an approach

## Unpleasant Surprises

Libraries often are met with a different future than the one those supporting them for hoped for.

On May the 14th 2018, Anoosh Chakelian published an article titled "Crumbling Britain: One Town's Revolt Against a Bankrupt Council to Save its Local Library" in the New Statesman Network[1] .

I use her original writing extensively in the first half of this piece to convey how scenario planning might be of relevance and useful in the library setting.

Ms Chakeliean met residents on a rainy weekday morning in a café in Desborough, a north-west Northamptonshire town in the United Kingdom, and she quickly determined that they were exiles. They had been exiled from the library, which had reduced its opening hours massively as a precursor of its definitive closing.

The future the residents had hoped for had not met them, nor -alas- had it met their library.

> *THE FUTURE THE RESIDENTS HAD HOPED FOR HAD NOT MET THEM, NOR -ALAS- HAD IT MET THEIR LIBRARY*

## Futures Colliding

Instead, Northamptonshire County Council in effect declared bankruptcy, and announced it would shut down 21 of the county's 36 libraries (Ms. Chakelian tells us that since 2010, 478 have been closed throughout the UK). The reason, as I understand it, is that public monies previously dedicated to care and public services were diverted by the British State to bail out banks following the 2008-9 Financial Crisis. Massive cutbacks in government budgets followed, and local government budgets were particularly hard hit.

The futures of the library collided with that of finance, sparked by the sub-prime mortgage crisis in the USA.

That library matters a lot to many people. "Parents get to know each other, you build friendships, your children go to school with some of the same children; you build a community," said Carolyn Oakes, a 33-year-old cook volunteering at the library interviewed by Ms. Chakelian.... "Without that community, people will only care about themselves. They'll become their own units rather than empathising ... The elderly would become more reclusive. Teenagers would be on the streets."

She told Ms Chakelian that she "could not have coped without the children's services at the library". The nearest alternative library involves spending £6.70 on a bus, which she cannot afford. "I look at the cost of books – what if my daughter wanted to do something further in education? I couldn't afford to get a book a week each for my children. That's going to affect their learning? Why deny them that chance to better themselves? Without books, they'd be denied that chance – to find a cure something, for example. It'd be denying the world that chance. People aren't thinking of the future."

As Ms. Chakelian puts it," this is not merely a matter of books: the library is where pensioners renew their bus passes, students do homework, job seekers use the computers, young parents take their children and older people find companionship".

Residents launched a legal challenge against the council's decision. After the' Save Desborough Library' campaign sought legal help, a little girl who is a regular library user took the case to the High Court with her mother's assistance, to save all 21 libraries from closure.

Parents thought that the library was one of the places that helped them to prepare that girl, and many others, for the future.

*PARENTS THOUGHT THAT THE LIBRARY WAS ONE OF THE PLACES THAT HELPED THEM TO PREPARE THAT GIRL, AND MANY OTHERS, FOR THE FUTURE*

But instead, a different and unexpected and unwelcome future took hold, with dire consequences for the links between books, childhood, adulthood, old age, citizenship, and community.

# Beyond Trends

Could attending to trends, as IFLA has done[2], have helped those affected (and those looking after those affected) here?

My view as a scenario planning scholar[3] is that one needs to include but also go beyond trends in engaging with uncertain and turbulent conditions. Some trends obviously shaped the future that has come to pass for Desborough's library. Two obvious ones are:

- an ageing society (with more costs diverted from the young to the elderly) ,and
- an ever more unequal United Kingdom (London's contribution to the exchequer went from being the equivalent of the next 25 cities in 2005 to the next 37 by 2015)

*ONE NEEDS TO INCLUDE BUT ALSO GO BEYOND TRENDS IN ENGAGING WITH UNCERTAIN AND TURBULENT CONDITIONS.*

But the unfolding debacle had also a lot to do with several other, richly interlinked, trends and (non-trend) events such as

- the role of debt in society,
- fuelled by cheap computing and software,

- enabling financial innovation co-producing a financial crisis
- which started with the sub-prime mortgage bubble and derivatives in the US,
- facilitated by the dismantling of Glass Steagall Act by various US administrations;

and

- the changed structure of families and communities,
- driven by offshoring and automation of work;

and (two more)

- growing consumerism,
- fuelled by the invention of the container, which makes it cheap to ship goods around the world and enables consumption.

Scenario planning as my colleagues and I have developed the practice, method, and theory (c.f Ramirez and Wilkinson, 2016[4]) attends to changes not only in the context – in this case the more immediate context of the Desborough library – but also the context of the context (in this case, the Northamptonshire County Council and the National Government's finances and policies upon which it depends). Scenario planning helps those who practice it to examine how these factors, events, and trends might combine to change assumptions, expectations, and the plans which underpin them.

*SCENARIO PLANNING HELPS EXAMINE HOW FACTORS, EVENTS, AND TRENDS MIGHT COMBINE TO CHANGE ASSUMPTIONS, EXPECTATIONS, AND THE PLANS WHICH UNDERPIN THEM*

Research shows a high correlation between failed strategies and erroneous assumptions[5] , so using a methodology which is rigorous[6] to surface and question assumptions in time, to render these perspectives through stories[7] to consider alternative plans appears to be a good idea.

I hope my IFLA presentation in Barcelona on scenario planning[8] prompts more librarians to use scenario planning. I hope that this helps librarians to imagine and prepare for different futures, as has been done in other professional fields – such as the chemical sciences scenarios produced by the Royal Society of Chemistry[9]; those of gastrointestinal medicine by United European Gastroenterology[10], or the ones on the intellectual property published by the European Patent Office[11].

# 3 Libraries are Under Attack: Here's How They Can Fight Back

by **Glyn Moody**

## KEY POINTS:

- **The shift to digital has put many core library principles and activities into question**

- **Privacy is threatened from different quarters, new rights and technology reduce possibilities to access and re-use works, and the notion of truth itself seems threatened**

- **Libraries can adapt and respond through sharing skills, tools and ideas that empower their users**

Libraries are under attack - again. More than a thousand years ago, there were constant threats to medieval libraries across Europe. Migrations by Germanic peoples such as the Vikings saw monastic libraries destroyed or looted as collateral damage of raids on local settlements. Even if libraries were not the direct target, they were nonetheless important victims.

As a result, knowledge and thus Western civilisation itself were put at risk. For all the ancient texts that somehow managed to survive the depredations of that time, there are many more that have probably been lost forever in the conflagrations, looting and wrecking that took place over the centuries.

Today's attacks on libraries are far more subtle. Far more often than not, they do not involve obvious destruction of buildings or their precious holdings. As before, the root cause is a new wave of migration. This time, it is not a physical relocation, but a conceptual one, as billions of people move substantial parts of their lives online.

> *THIS TIME, IT IS NOT A PHYSICAL RELOCATION, BUT A CONCEPTUAL ONE, AS BILLIONS OF PEOPLE MOVE SUBSTANTIAL PARTS OF THEIR LIVES ONLINE*

And as before, the damage being wreaked on libraries is incidental to the main targets, but no less serious. If librarians do not start to fight back, there is a greater risk that the bleak times of the Middle Ages will have to be re-named Dark Ages 1.0, as the new Dark Ages 2.0 begin to unfold.

## Under Siege: Multiple Attacks on Privacy

The move online has not just led to major changes in the way people communicate, or conduct business. It is also driving profound and unexpected developments that threaten core aspects of the library world. For example, the essentially private nature of library use can no longer be taken for granted in a world of perpetual and pervasive online surveillance.

As Edward Snowden revealed in 2013[12], intelligence agencies like the NSA in the US, and GCHQ in the UK, routinely collect, monitor and analyse in bulk most of the data flowing around the Internet. That level of surveillance was simply not possible before people shifted their analogue lives into the digital sphere.

The constant governmental spying is matched by the equally intrusive spying carried out by Internet companies like Google and Facebook. They have successfully placed continuous surveillance at the heart of their business models, with little public outcry over the obvious damage to privacy. Online companies track and gather as much information as they can about your digital activities in order to sell advertising that is targeted to your particular interests.

The more companies know about you, the higher the price they can charge to advertisers for the tighter targeting. Just how dangerous this approach can be has become evident recently in the light of the Cambridge Analytica scandal[13], where detailed profiling of Facebook users may have been used to influence the results of votes in the US, UK[14] and around the world[15].

> *THE ESSENTIALLY PRIVATE NATURE OF LIBRARY USE CAN NO LONGER BE TAKEN FOR GRANTED IN A WORLD OF PERPETUAL AND PERVASIVE ONLINE SURVEILLANCE*

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The copyright industry evidently wants privacy to be undermined even more, as part of a new EU Copyright Directive[16] currently being discussed. The rise of the Internet has made the sharing of information and material that is covered by copyright extremely easy. The EU's own research shows that small-scale, non-commercial sharing of this kind causes little or no harm to the copyright holders[17], and may even be beneficial in terms of promoting sales.

Despite that, the publishing and music industries have lobbied hard for new legislation that would force major Internet services to filter uploads[18] made by members of the public, in order to prevent this kind of sharing, which most people engage in routinely. The algorithmic filtering mandated by Article 13 of the proposed EU Copyright Directive, inevitably imperfect, would not only harm privacy through its constant, unblinking surveillance.

It would also lead to over-blocking of files that can legally be shared - for example public domain material[19] – chill free speech, and discourage EU innovation[20]. Libraries would suffer the adverse effects of all of these.

# Pulling up the Drawbridge: Narrowing Access

The Copyright Directive contains additional attempts to hobble the Internet in ways that will empower the copyright industries but impoverish libraries. For example, Article 11 would create a new ancillary copyright[21] that will allow publishers to control and charge for the use of tiny snippets of news articles, including headlines – some have called for even individual words[22] to be covered by this new copyright.

Like the rest of the Directive, the details of this "snippet tax" are still being discussed. One proposal is for this to apply to scholarly publications[23] too, which would impose onerous additional burdens on academic communications.

> THE "SERIALS CRISIS" IS THE MOST OBVIOUS MANIFESTATION OF THE MOVE TO TURN SCHOLARLY KNOWLEDGE INTO A PRODUCT

The snippet tax is just the latest sign of a broader desire by the publishing world to become the main gatekeeper for academic work. The attack on the idea of scholarly knowledge as a commons available to all, owned by none, is being carried out by an industry that is keen to sustain profit margins of 30%-40%[24] – levels practically unheard of in other sectors. The "serials crisis" is the most obvious manifestation of the move to

turn scholarly knowledge into a product[25], and a costly one at that. These actions seriously undermine the role and autonomy of libraries in the academic world.

# Mining the Foundations: Fake News

More recently, things have taken an even more disturbing turn. Now, knowledge in general, along with expertise, is both increasingly seen as not just optional, but somehow a sign of elitism. That view naturally poses a challenge to libraries, which have rightly prided themselves on offering both their own expertise, and that of others.

> THAT VIEW NATURALLY POSES A CHALLENGE TO LIBRARIES, WHICH HAVE RIGHTLY PRIDED THEMSELVES ON OFFERING BOTH THEIR OWN EXPERTISE, AND THAT OF OTHERS

The rejection of expertise as a valid input has probably contributed to an even more corrosive development: attacks on the idea of truth. That is, arguments are no longer about the contours of what is true, but simply a shouting match based on opposing assertions. The recent rise and spread of so-called "fake news", more properly called disinformation, or lies, is based on the idea that for every fact there can be an opposing fact, just as valid – hardly an idea that will find much favour among rigour-loving librarians.

# To the Rescue: How Libraries Can Respond

The list of serious challenges to libraries and the values they embody is long. But the situation is not hopeless. Indeed, libraries are well-placed to play an important role in meeting those challenges. For example, although privacy is jeopardised as never before as a result of massively-intrusive digital technologies, there are also effective technical solutions that can protect personal information.

However, many members of the public are unaware of their existence, or believe them to be too complex to adopt, and therefore forgo their benefits. Libraries could start to use these privacy-enhancing technologies, and to evangelise their use by setting an example themselves.

> LIBRARIES ARE WELL-PLACED TO PLAY AN IMPORTANT ROLE IN MEETING THOSE CHALLENGES

A good start would be to install virtual private networks[26] (VPNs) to provide encrypted channels for all communications. Librarians could explain what exactly VPNs do, and why they are worth deploying. Similarly, the default for library computers could be free software/open source - things like the browser Firefox[27], the office suite LibreOffice[28], and the operating system GNU Linux[29].

Since their underlying programming code is open to inspection, it is harder to hide backdoors allowing companies or governments to spy on users, which makes them more likely to preserve privacy. In the familiar and low-pressure setting of a local library, users could experience first-hand that such programs are as good as expensive proprietary offerings, and no harder to use. Even better, libraries could hand out copies of the software for free.

In the same way, to counter current attempts to demonise the idea of sharing, libraries could actively promote the use of public domain materials[30]. This virtual library forms an important but often neglected resource that can be shared and re-used in any way, and without any doubts about the legality of doing so. Creative Commons[31] (CC) is another worthy project that deserves to be better known. Libraries are the natural place to promote the benefits of using CC licences[32] that encourage wider sharing of materials for mutual benefit.

Fighting back against the enclosure of the knowledge commons is perhaps more straightforward, because academic publishing is a familiar domain for librarians. Instead of acquiescing to demands for subscriptions to "big name" journals that are becoming ever-more costly, library departments could suggest open access[33] titles as alternatives, and explain why.

> ## THE LIBRARY IN ITSELF IS AN ENDURING DEMONSTRATION THAT EXPERTISE AND TRUTH EXIST, MATTER, AND ARE APPRECIATED

More radically, librarians could locate preprint versions of articles users are keen to read. A recent study suggests that publishers add very little other than costs[34] to preprints as they journey through the editorial process towards "official" publication in journals. In addition to the original and most famous preprint repository, arXiv.org[35], there are now a host of subject-specific sites[36] that offer huge numbers of preprints completely free.

The two other attacks on the foundations of libraries - assaults on expertise and truth - are harder to tackle with specific measures. Perhaps that is not necessary, because the library in itself is an enduring demonstration that expertise and truth exist, matter, and are appreciated. Every time someone visits a

library, they affirm its importance as a source of information. Every time they use its resources, they accept that expertise and truth are worth seeking out.

# Conclusion: Openness as Response

That still leaves a secondary problem: encouraging more people to visit and benefit from the wisdom of libraries. And this, in its turn, reveals how the threat of the Dark Ages 2.0 will not be countered in the same way that the Dark Ages 1.0 were vanquished. Where medieval libraries sought to avoid being noticed, and closed their gates in the hope that doing so would keep the marauders out if they did pass by, today's librarians must do the opposite. They need to trumpet that they exist, and then throw open their gates to draw in and welcome as many people as possible.

Although the challenges facing librarians today are probably greater than they have been for a very long time, so are the opportunities for tackling them. The Internet may have a frightening power to destroy, but it can also become a way of working with others to build. The core skills of librarians to gather, preserve and transmit knowledge remain as vital today as they were a thousand years ago.

> ## LIBARIES NEED TO TRUMPET THAT THEY EXIST, AND THEN THROW OPEN THEIR GATES TO DRAW IN AND WELCOME AS MANY PEOPLE AS POSSIBLE

That continuity enables librarians to join forces with activists who fight against common enemies, but who lack experience in saving civilisation from the barbarians. While its proud heritage endows the profession with a special place in the resistance movement against the new Dark Ages, it also imposes on librarians a corresponding responsibility to engage in the struggle as fully as possible.

# 4 Libraries Matter

by **Cassie Robinson**

This is a critical moment in the public's relationship with the internet. The web offers everyone access to information, but due to fake news, filter bubbles, polarised content and algorithmic timelines, there is no guarantee that the information is accurate or even true.

As distrust and unease grows, the ability of the Internet to deliver on its promise as a force for equality and justice weakens. We must therefore act now to shape a positive, responsible future for technology - and for all of us.

> *WE MUST THEREFORE ACT NOW TO SHAPE A POSITIVE, RESPONSIBLE FUTURE FOR TECHNOLOGY - AND FOR ALL OF US*

Getting this relationship back onto a sustainable course requires a shift in the institutional culture of government, new behaviours in the technology industry and greater awareness and voice from the public and civil society.

Based on research by my organisation – Doteveryone – into public attitudes to and understanding of technology[37] over the past year, the potential for libraries to contribute to this has become clear. This essay identifies a number of key areas of opportunity.

## Align with the Internet Backlash - Show the Technology Industry what a Moral Compass Looks Like.

Doteveryone's research revealed a sense of public resignation about the ability to hold technology companies to account. 70% agreed with the statement "I don't like it when I hear news about companies avoiding tax, but there's nothing I can do to change it".

When asked who, if anyone, should be responsible for enforcing rules that ensure service providers treat their customers, staff and society fairly, 66% of respondents believe government should play a role, 61% say industries should share this responsibility, and 60% would like to see the creation of an independent body.

> *THERE IS A NEED TO COME TOGETHER AND ADDRESS THIS GAP IN ACCOUNTABILITY. AS PUBLIC INSTITUTIONS, LIBRARIES CAN HELP BY SETTING A POSITIVE EXAMPLE*

There is a need therefore for government, industry and society to come together and address this gap in accountability. But whilst this is being organised, as public institutions, libraries can take a lead and help set the agenda.. They are one of the few places left where you are a resident—or a person—before you are a consumer. They can show the way in terms of how information should be used.

**Libraries can be an equaliser, curating and publishing information that equalises power**. With no corporate funders to please, they can focus on the interests of the public in deciding which information to protect and distribute through their newsletters, noticeboards, websites, etc.

**They also show how information should be looked after.** Librarians have a history of taking information security seriously. As we move into an increasingly digitised world, it seems logical that libraries could become the places where we hold our archives—the past versions of what politicians have promised or the media has reported, even if that information is inconvenient for some[38] .

Importantly, they also provide safe and secure access by default. In its simplest form, this could mean computers that don't track your personal details. We have mapped out lots of different ways[39] libraries could offer open and secure tech.

# Be a Centre for Public Engagement and Empowerment on Internet-related Issues.

Doteveryone's research found the public has limited understanding about how technology companies operate - both in terms of their use of personal information and their funding models.

For example only 17% realised that information which other people share about them is collected. And while two-thirds could identify advertising as a revenue stream for many technology companies, less than a third recognised that businesses make money from selling data.

We found people wanted to know more - particularly about how their data is used - but also more broadly about companies' values, governance and adherence to local laws - but can't currently find this out.

> **WE MUST EMPOWER THE PUBLIC TO UNDERSTAND THIS TECHNOLOGY**

This lack of understanding is helpful to companies who wish to evade accountability. They remain immune from consumer activism as long as those consumers remain in the dark. We must empower the public to understand this technology.

**Librarians can help build digital understanding**. Many libraries already offer basic digital skills classes, but as part of an expanded future role librarians could help people have greater digital understanding. The Library Freedom Project[40] has done some brilliant work in this space, training librarians so that they can help people understand their digital rights and become skilled in how to protect their digital footprints..

Doteveryone has developed a Digital Understanding model that libraries could use as a guide for developing people's digital understanding. Digital understanding is the ability both to use technology and to comprehend, in real terms, the impact that it has on our lives.

> **FOR EXAMPLE, PEOPLE WITH DIGITAL SKILLS CAN GO ON FACEBOOK; THOSE WITH DIGITAL UNDERSTANDING KNOW HOW FACEBOOK COLLECTS DATA ABOUT THEM**

It's not the same as digital skills. Digital skills mean we can perform a task. Digital understanding means we not only know the reason for a task and its potential consequences, but also appreciate the wider context of and around our actions.

For example, people with digital skills can go on Facebook; those with digital understanding know how Facebook collects data about them. People with digital skills can shop on Amazon; those with digital understanding know they can exercise their consumer rights on the internet. This is a great way in which libraries can engage and empower.

# Look at the New Things That Need Protecting because of New Technologies

Our survey shows that the internet has had a strongly positive impact on our lives as individuals, but people are less convinced it has been beneficial for society as a whole. In everyday life it's often hard to identify where trade-offs between individual benefit and potential societal harm take place. In the research we presented some clear choices.

We asked how people would feel if an online retailer offered free one-day delivery for lower income families, but this resulted in local shops closing down - 69% found this unacceptable. Or if their bank invested more in combating fraud and cyber crime, but closed their local branch - 61% said it was unacceptable. Or if their council made savings by putting services online and cut Council tax as a result, but some people found it hard to access these services - 56% found it unacceptable.

> **LIBRARIES FIGHT INEQUALITY BY GIVING US THE TOOLS WE NEED TO ACCESS THE INTERNET**

Technology is changing the world at a pace never seen before but the public does not want digital technologies to create disruption at the expense of communities and social structures. Significantly, poorer people feel the least benefit to themselves from the internet with 43% saying it's made life a lot better for them, compared to 57% for the wealthiest. And they are more likely to say that the internet has been negative for society overall (22%) than the wealthiest (17%).

On a basic level, libraries fight inequality by **giving us the tools we need to access the internet**. This goes back to basics — hardware, internet connections — and is arguably where libraries are furthest ahead on their tech journeys. Offering free wifi and phone chargers are simple ways libraries can do more to help people get online.

They also play a key role in developing key digital skills, as well as digital understanding mentioned above, as Doteveryone and Go ON UK's experience shows. And in an era of concern about fake news, they **can help separate fact from fiction**. Librarians care about facts[41], and the ability to separate what's real from what's not is an invaluable skill. Resources, reference points, and even real-life training could help us make better sense of the world we live in.

**Importantly in a world where people seem ever more individualistic, libraries can strengthen communities by creating virtual hubs**. Building on the work we did last summer, we experimented with "Library Live". Tools like these can help libraries to be at the centre of distributing community information[42]. In our work on a single digital library presence, the importance of helping people set up new groups, find people to run those groups with, share the activity of existing groups more, find space and be able to book it more easily became clear.

> *IN A WORLD WHERE PEOPLE SEEM EVER MORE INDIVIDUALISTIC, LIBRARIES CAN STRENGTHEN COMMUNITIES BY CREATING VIRTUAL HUBS*

We should not underestimate the importance of community. There are many types of information that communities want to share more, and that the library would be well placed to do. Not just what's on, but also about highlighting needs in the community, sharing vital information, as well as facts about the mundane everyday that ultimately show what people have in common (what the community is reading, what sandwiches people eating etc.). We looked at how libraries could be curators and distributors of this data.

And we came up with (or were inspired by) different ways that library spaces could be used: a space for digital skills and understanding, journalists-in-residence, telehealth, Maker Nurse[43], repair clinics[44], publishing live community data, safe-guarding local data, and community convening.

# The Opportunity for Libraries Now

Without getting too nostalgic about libraries, it feels libraries are a vital public institution, providing a vital social infrastructure that is worth saving. They are at the heart of our social infrastructure and now, more than ever, they need to show how they are connecting up and strengthening communities.

It is important to highlight that when things are closed down and taken away, it is a lot harder to bring them back. At Doteveryone we truly believe that libraries do have a unique role to play in building a better, fairer internet for us all.

But libraries need to talk more about themselves[45]. They need to talk about their perfect position as a public or community institution to provide services and space that reflect the changing needs of the public. And as vital social infrastructure that connects people to one another.

> *LIBRARIES DO HAVE A UNIQUE ROLE TO PLAY IN BUILDING A BETTER, FAIRER INTERNET FOR US ALL*

When libraries do talk about themselves, they should emphasise the activity they are doing or could do that reflects the public mood, how people are feeling, thinking and talking about the internet. And when they start talking more about those things, the things that libraries stand for, they can also newly design or more clearly state the ways they're doing that.
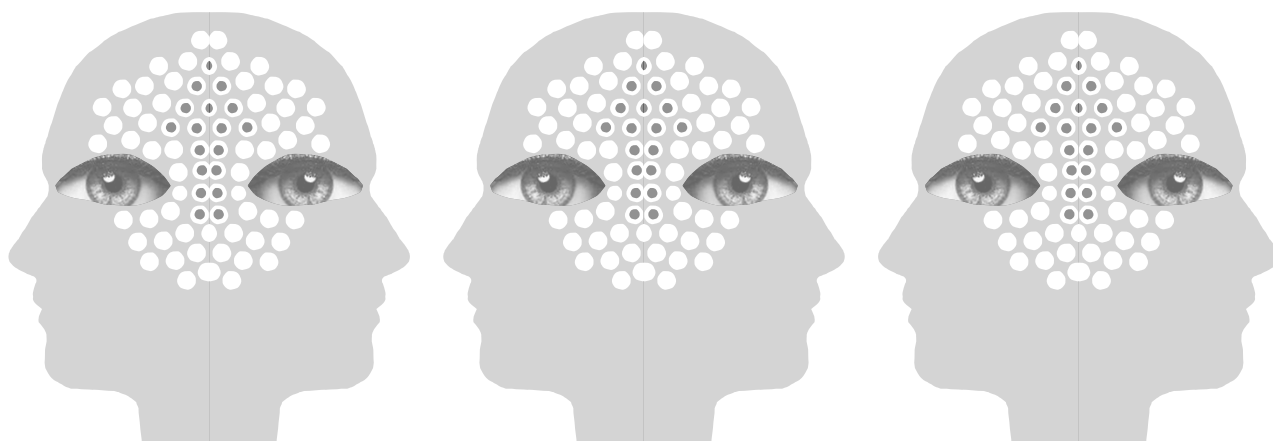
# 5 Libraries and Community Networks – A Collection of Win-win Opportunities

by **Roger Baig**
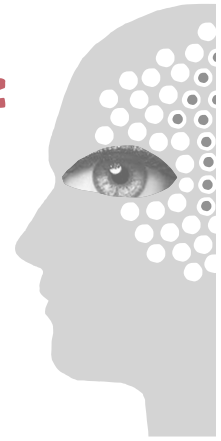
## KEY POINTS:

- Community networks bring together local actors to develop the infrastructure people need to realise the potential of the Internet, on a not-just-for-profit basis.

- With examples emerging around the world, their emphasis on collaboration has led to new, bottom-up approaches to establishing and promoting better connectivity

- Libraries can play a key role, through their existing Internet connections, as gateways between the local crowdsourced infrastructure and the global Internet, as a source of locally-relevant material, and as a physical place to carry out discussions and training

Having the appropriate network infrastructure is essential for the realisation of the potential of any aspect of the information society, including many of the proposals contained in the IFLA Trend Reports. Nevertheless, all too often this is not the case, either because there is no infrastructure at all or because the existing one is not available to everybody under the same fair conditions.

As a response to the lack of an adequate infrastructure to meet social needs, many communities over the globe have taken action to build and operate this themselves.

The approaches are diverse. Some are just informal groups of people, others are formally established as cooperatives, associations, etc. Some refuse commercial activity, while others encourage it, etc. The environment in which they operate also varies – some are located in rural areas and others in cities, some operate in totally underserved places while others are based in well-served areas, etc.

> *AS A RESPONSE TO THE LACK OF ADEQUATE INFRASTRUCTURE, COMMUNITIES AROUND THE GLOBE HAVE TAKEN ACTION TO BUILD AND OPERATE THIS THEMSELVES*

Finally, the technologies used are not always the same – fibre, WiFi, 2G. Nonetheless, all these bottom-up initiatives, known as community networks (CNs), have in common that they are not-just-for-profit initiatives that contribute to the social good by sharing knowledge and resources.

For example, in Mexico tens of indigenous communities enjoy mobile phone communications thanks to Rhizomatica, an NGO that helps these communities set up the equipment required, and empowers them to manage the infrastructure collectively. In South Africa, Zenzeleni Networks is undertaking action research on complementary means to make CNs in remote rural areas sustainable (sustainability is one of the key challenges of CNs), and in Slovenia, Wlan0 members freely share their surplus of Internet access with their neighbours and passers-by[46].

## Interaction with the Environment – Collaboration Opportunities

CNs cannot work in isolation. They must interact with their environment to acquire users (otherwise their infrastructure is useless), and carry out tasks that depend on third parties. For instance, they need to collaborate with public authorities to obtain licences, for example to build masts or lay cables, or to make use of the radio spectrum. They also need external network providers to get Internet access, etc.

The experience shows that these needs can be transformed into collaboration opportunities. For example, Rhizomatica and Zenzeleni Networks have collaborated with their respective national regulators to develop suitable radio frequency licenses. In Catalonia, guifi.net, a CN with over one hundred thousand users, has developed a model regulation that public administrations may adopt to facilitate the public,

private and community use of network assets such as fibre cables, towers, or routers.

Moreover, the cooperative attitude can be extended beyond the strict necessities. XAFOGAR[47] , a project aimed at extending the guifi.net CN through fibre to all households, industries and farms of the county of Garrotxa in Catalonia who want it, represents a success story for collaboration between the community (represented by the guifi.net Foundation) and a county-level public administration (Sigma, the environmental and public health agency of Garrotxa).

The case of XAFOGAR proves that the possibilities for public administrations to promote bottom-up networks go far beyond making funds available. In XAFOGAR the total public investment is 90.000€ - less than 5% of the 2M€ already implemented of a total estimated budget of 10M€. The real impact of the involvement of the development agency and the councils of the villages has been to create a climate of confidence allowing the project to raise the remaining funds. As a result, tens of new fibre connections are added to the CN every week by four local ISPs.

# The Success Story of Perafita's Public Library

CNs must gain experience, reputation and critical mass before being able to meet the challenges of projects of the size and complexity of XAFOGAR. Smaller projects such as the collaboration between guifi.net and the public library of Perafita clearly contribute in this respect. Perafita is a village of 400 inhabitants of the county of Lluçanès, a hilly rural area with less than 8.000 inhabitants spread across 13 villages; that is, a

very low priority area in terms of investment for big telecoms companies.

In late 2006 some people in the region started to get involved in the guifi.net project, born two years earlier in the neighbouring village of Gurb. They hoped to overcome the general lack of Internet access. Step-by-step, the citizens, in collaboration with some of the municipalities, started building a WiFi network to extend the coverage of the few and poor existing Internet gateways (commercial DSL connections).

In Perafita the public library offered excellent conditions to host the central node[48]  of the village's network. The building is centrally located and its roof can be seen from many places (in WiFi deployments direct line of sight between locations to be connected is indispensable, thus, the antennas are frequently installed on roofs). The library itself already had a telecentre with a half a dozen PCs, a decent Internet connection (3Mbps download, 300Kbps upload). For the librarian, hosting the network infrastructure was an opportunity to promote these resources.

In early 2007 the required hardware was acquired (later paid for by the municipality) and installed by two colleagues and myself. We took the opportunity to install a Linux server with a file sharing service, a repository of Linux distributions and a copy of Wikipedia. We also installed some services for the management of the network such as a domain name system (DNS) for caching and local domains resolution, a proxy to optimise Internet connectivity and a network monitoring server.

The overall experience has been very positive for both parties[49] . The library has increased usage of its resources as well as its visibility. Over the past decade, it has hosted several workshops and other activities on

guifi.net and IT related topics (for instance, in 2010 it hosted the celebration of the 10.000 nodes of the network [50]). The Internet connection, a service that previously was only available during opening hours (less than ten a week), has had peaks of over 500 users per day and has become the preferred option to get Internet access for some neighbouring villages, including their councils and libraries.

> *THE PARTICIPATION OF THE LIBRARY HAS HAD AN UNQUESTIONABLE IMPACT ON THE CONSOLIDATION OF THE INITIATIVE IN THE AREA*

As far as guifi.net is concerned, the participation of the library has had an unquestionable impact on the consolidation of the initiative in the area, because a decent Internet connection and a physical meeting place are paramount for the project's uptake.

# Getting Involved

As the success story of Perafita shows, libraries can play a unique role in the establishment and growth of community networks.

- **Leadership** Libraries have a privileged social position and capacity that they can use to 1) endorse and promote these bottom-up initiatives among public authorities, business circles, etc. and 2) lead the initial the initial phases of projects, including the funding and installation of the first nodes.

- **Capacity building** Training on building and operating CNs can be part of libraries' syllabus on IT and business.

- **Local support point** A physical place for assistance and guidance is essential to ensure a proper uptake. It can be offered as a library service without jeopardizing any potential private sector offer as the nature of their respective services are totally distinct and complementary.

- **Internet access (and power supply)** Making available the library's Internet gateway is a way to extend the socialisation of an existing connection – frequently the only one available in a community. Access to a stable power supply is also a must, at least for the central nodes of the network.

- **Local content** Putting libraries' content on-line in the CN, together with other cultural resources (Wikipedia, training courses, local caches, etc.) makes existing resources more readily available, and does not count towards consumption of data from the broader Internet.

By getting involved with the local CN, libraries contribute to the development of an indispensable infrastructure both for the population they serve and also for themselves. They can only meet the requirements of the communications age if a proper network infrastructure is available to all in their communities.

> *LIBRARIES CONTRIBUTE TO THE DEVELOPMENT OF AN INDISPENSABLE INFRASTRUCTURE BOTH FOR THE POPULATION THEY SERVE AND ALSO FOR THEMSELVES*

Libraries, represented by IFLA, are part of the discussion on how external organisations can join and support CNs in two international fora: the Connectivity Coalition of the Institute of Electrical and Electronics Engineers (IEEE), and the Dynamic Coalition on Community Connectivity organised as part of the Internet Governance Forum (IGF). Libraries may apply to the Internet Society's Beyond the Net Funding Programme to cover the costs of joining or establishing CNs.

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## TREND REPORT