

Twitter as Information Navigation Tool for Science and Technology Parks

“Roadmaps for future navigation” was the title of the recent World Conference of the International Association of Science and Technology Parks (IASP) in Copenhagen, which was attended by more than 550 delegates from 53 countries.ⁱ

One of the information navigation tools for science and technology parks (STPs) is the micro-blogging tool Twitter, which allows STP professionals to tap into the stream of conversations on any topic imaginable, engaging existing and potential stakeholders in the science and business community and beyond.

How are STPs using Twitter to navigate the online information space?

This analysis of Twitter as information and communication tool looks at selected examples of STPs, how they use Twitter, who they reach and what they are tweeting about.

Informal conversations with delegates during the conference indicated that many in the STP community are not familiar with Twitter; quite a few said that they “don’t see the point of using Twitter”; others doubted that something useful could be said in 140 characters, a common statement by non-Twitter users. The perception that Twitter is for gossip and casual chit-chat, rather than a useful business research and intelligence tool, was dominant.ⁱⁱ

The two tweets below from the IASP conference may illustrate that there are indeed potentially quite complex stories behind short statements:

[hightechcampus](#) high tech campus

[#iasp2011](#) "STP's must not rely only on public money". We agree. Development
[#Hightechcampus](#) fully privately financed. +ROI >90comp >8000empl

[jchaffer](#) James Chaffer

RT [@nesta_uk](#): Interesting piece on diff between business incubators & accelerators ...

<http://bit.ly/mmV6LE> [#IASP2011](#)

Twitter, founded in 2006, today has around 200 million users and there are 140 million tweets per day, the current rate of tweeting is 1200 tweets per second.ⁱⁱⁱ There are many different answers about what Twitter is: simply put, it is a social networking and micro-blogging service that allows users to post their latest updates. An update is limited by 140 characters and can be posted through three methods: web form, text message, or instant message.

The attractiveness of Twitter is its instantaneous nature: it’s a real-time global stream of thoughts, data and information of all kinds, which users can turn into insights, business intelligence and actionable information.

“The tiny, feature-light blog service has few bells and whistles, but its reach is extraordinary. Its simplistic approach to sharing thoughts and news to other people on the Internet has caught on to the point where every respectable company has an official account, government agencies are using it to connect with constituents, and celebrities log on to share their latest gossip.”^{iv}

What are STPs tweeting?

One of the oldest and largest Science Parks in the US, the Research Triangle Park in North Carolina (www.rtp.org) is actively tweeting @TheRTP.^v With more than 2300 tweets, the park has more than 3000 “followers” (individuals/organizations) who want to receive updates from the park on a regular basis.^{vi} RTP is following nearly 1400 individuals/organizations; these are other science parks, business and science organizations, science and tech news, citizens in Raleigh, government officials, journalists, local and international companies, which are users RTP finds interesting and relevant to keep in touch with. The RTP is tweeting about events at the science park, news about tenants, and regional information. It’s a communication channel not only for the 40,000 people working on campus but also for stakeholders who are interested in the RTP.

Tweets are shorter and faster than information spread through websites or through more formal media, such as newsletters or targeted emails. A tweet can be picked up by anyone and catch the attention of people/organizations which the sender is not necessarily aware of.

Many science parks have been tweeting for a short time only and are still experimenting, e.g. the UK Science Park Association (www.ukspa.org.uk), which describes itself as “authoritative body on the planning, development and creation of STPs in the UK”. With only 33 tweets @UKSPA since June 2010, it has 116 followers and is following 158, among them many of the tweeting UK science parks, such as @KentSciencePark, @BhamScienceCity, @yorksciencepark, @Netparknet, @SurrayRP; as well as universities, tech and science news. The association’s homepage does not link to Twitter, perhaps indicating that it is not yet part of the overall communication strategy.

One of UKSPA’s more active Twitter users is the Manchester Science Park (www.mspl.co.uk) @McrSciParks. With more than 650 tweets, it has created 585 followers, is following more than 600 others and is listed on 19 sites. The tweets are mostly about happenings at the park, “connections café” announcements, and tenant news. It also follows science and tech news, other science parks, and local organizations in Manchester. The tone of the tweets is casual, and tweets are both about business information as well as little stories about the everyday life in the park.

Twitter users can choose whose updates they want to receive; the followers come and go and are largely outside the control of the user. Followers are attracted by interesting tweets; they won’t follow simple marketing push messages.

How do STPs know they are getting it right? One way is to monitor who the followers are by studying their profiles. Manchester Science Park seems to attract mostly “relevant” followers^{vii} such as regional innovation and knowledge transfer agencies, tech transfer centres of universities, individual entrepreneurs and consultants, new economy researchers, recruitment companies, other science parks and - most importantly - own tenants.

Berlin’s technology park Adlershof (www.adlershof.de) is tweeting, mostly in German, @Technologiepark on events on campus, as well as about new business collaborations, general science and business news. Among its more than 140 followers are journalists, other science and business organizations, researchers and universities. Adlershof follows 81 others, and is listed by 15 other Twitter users.^{viii}

Lists organize tweets from followers, so a user could create a list of tech news from various sources and read them not as single tweets in their tweet stream, but compiled in a list, e.g.

Adlershof appears in a list of German R&D institutions and on lists of regional business news providers. The Park follows other R&D organizations, local and international science news, e.g. BBC Science, Technology Review, Fraunhofer Institute and Max Planck Society. The content of the tweets as well as the choice of users it follows indicates that Adlershof is using Twitter strictly for business - it's not mixing science with football news or following rock music groups. It looks like the range of "appropriate" content has been defined by their social media policy, although Twitter, like any good conversation, thrives on eclectic thoughts.

In other science parks Twitter users have a broader scope of tweets and interests: Sweden's ICT park, Kista Science City (www.kista.com) says in its profile that all people working at the Kista Science City organization can tweet @kistascience, so the tweets are a mixture of business news and updates on events such as "Green ICT" and "LTE developments at Ericsson, but also include casual tweets such as "No beach weather? Watch bowling match instead" or "Enjoying coffee outside in the sun". The tweets are mostly in Swedish, some in English, and Kista follows a broad range of users: venture capitalists, CEO and CIOs of tech companies, IP law firms, tech entrepreneurs and students. It's a good example of the conversational nature of Twitter; Kista is plugged into the conversation in tech circles and beyond and followers get a feel about the working culture at Kista Science City. This kind of information exchange is very different from official communication channels.

How a STP defines its profile, what it tweets, who it tweets for, who is tweeting, who it chooses to follow - all these are issues that need to be discussed as part of the communication and knowledge management strategy.

The current use of Twitter among STPs shows that many of them are still experimenting with the tool, trying to figure out how it can help to increase the reach in the business and science community, but also get the local community where the STP is based, involved; perhaps even reaching users who would normally never visit an STP but might do so because they come across an interesting event at the STP through a tweet. Twitter, as most other social media, is not outreach, but "inreach" and relationship generation.

A well defined Twitter profile of a STP can increase the image among its stakeholders and beyond, and reaching "beyond" touches upon serendipitous exchanges typical for the new generation of science parks, the user-led and living labs, and urban innovation spaces.

What language should a STP use for its tweets?

Most STPs are using the language of the country they are based in; e.g. Tartu Science Park in Estonia (www.teaduspark.ee) tweets updates from @teaduspark to its more than 300 followers in Estonian, which limits the reach and attractiveness for non-Estonian speaking users, whereas Tallinn-based "technopole" (www.tehnopol.ee), which calls itself "Best technology park in whole wide world" in its Twitter profile, tweets both in Estonian and English @tehnopol. While around 400 users are currently following the Park, it only follows 44 others, mostly local tech entrepreneurs, start-ups and designers.

The balance between "follower" and "following", which is public information in the Twitter profile, indicates whether a user is largely sending information or also interested in what others say. This is one of the main characteristics of Twitter as a conversational tool, which is often not well understood by beginners and organizations with largely top-down information

flows. Users contribute to the world-wide conversation, but also listen. This also includes the option of directly getting in touch with a follower and engage in a private conversation.^{ix} All innovation starts with a conversation - another reason why STPs should not underrate the usefulness of Twitter.^x

Just by browsing through the tweets of these two Baltic science parks, a researcher can get a glimpse of the country's innovation landscape, and a potential investor can probably get more interesting insights through studying the content of the tweets than by reading official publications of Baltic investment agencies or science park marketing brochures. Digging into the mixture of formal and informal nuggets of information makes Twitter a very powerful intelligence tool, and a "treasure trove" of business information.^{xi}

French science parks rarely tweet in English, and they even have their own version of science parks: technopoles. The technopole Atlantique in Nantes, tweets @atlanpole (www.atlanpole.fr), and is one of most active STP Twitter user in France with more than 400 tweets and nearly 300 followers. It follows some 200 organizations such as CERN, French Ministries, entrepreneurs in Nantes, biotech companies, but also L'Equipe, the largest French Sports newspaper.^{xii} It also follows @ctravier, the CEO of the Laval Mayenne Technopole (www.laval-technopole.fr) While Christian Travier^{xiii} is an active Twitter user with nearly 700 tweets and more than 265 followers, the official STP Twitter account managed by the communication manager @LMTinnovation Laval is still in a test phase and the user just tweeted twice since June 2011.^{xiv}

This example leads to the question who is actually in charge of tweeting - the CEO of a STP, a senior staff member in communication, marketing or knowledge management, or a student internet geek from a university nearby? The better the management of a STP understands the value of social media, the less likely is the latter option.

Twitter beginners often find it too time-consuming to find relevant information, however, information search skills will improve by simply using it often. Some STPs delegate the information and market research to professionals in their communication and marketing departments. There tends to be lot of "noise" in twitter streams, messages not at all relevant for a user, which is one the reasons the analysis is delegated. Filtering useful information from the vast flow of tweets, however, often does require experience and contextual knowledge.

Not having a clearly defined Twitter strategy is perhaps more risky than not tweeting at all, as two examples may illustrate: Pomeranian Science and Technology Park in Gdynia, Poland (www.ppnt.gdynia.pl) set up a Twitter profile in July 2009 @PPNT_Gdynia, but so far, has only sent 14 sporadic tweets within two years, the last one in March 2011. It is only following two users and doesn't have a complete description of its profile which usually includes a link to its website. Coming across this Twitter profile one may wonder whether it is a genuine profile set up by the management of the Park. The Twitter profile uses the logo of the STP, but the homepage doesn't show a Twitter logo, so it is not clear whether the Twitter account belongs to the STP. It may also have been created once, but then been abandoned.

One of the oldest European technopoles, Sophia Antipolis (www.sophia-antipolis.org) has a Twitter logo on their website, but doesn't tweet and doesn't have a Twitter profile either, whereas @sophiantipolis is a Twitter account by an undefined entity using a very similar domain name (www.sophiaantipolis.com), not related to the technopole at all. The tweets are mostly about job postings, non-science related tweets about vacation rentals, travel agencies and second hand car sales. It only has around 80 followers and is following 8 users, indicating that the user may not be genuine. The risk for the STP is that potential visitors are misled, as may be the case with Tunisian Elgazala Technopark @Elgazala Tech which is following @sophiantipolis probably mistaking it for the real Sophia Antipolis.

These examples illustrate that the management of STPs should organize their internet presence and activity carefully, not leave it to a web designer or IT team, but integrate it into their long-term business strategy. Twitter is one of the many interactive communication tools that helps STPs to create and sustain an active stakeholder community, reach out to existing and potential tenants, partners, supporters, and in particular, navigate information spaces for potential new connections and exchanges which increases the general innovation climate and capacity of a STP.

Twitter also creates a community among science parks professionals; during the conference, active delegates used the hash tag #IASP2011 to share insights and comments about the event.^{xv}The hash tag summarizes tweets relating to a particular category, such as conference or a topic. At the conference website www.iasp2011cph.com, the official hash tag is published so that active Twitter users can find each other. It also helps users who are not physically present at the conference to follow the event and join the conversation.

Some examples of #IASP2011 tweets to show how Twitter users refer to each other in a conversation:

[Lkhal](#) Linda Hall

Excellent talk on [#accelerator](#) business model for [#startup](#) SMEs by David Rowe @ Warwick Enterprise from UK. Promises gr8 ROI. [#iasp2011](#)

[Cumuli](#) cumuli

RT [@birlangst](#): [#IASP2011](#) David Fuller on the power of narrative: know and tell your story! Couldn't agree more... –MB

[TheRTP](#) RTP

[@TheRTP](#) [#iasp2011](#) presentation: RT [@MCV92](#) [@prezi](#) link: <http://ow.ly/1tYiEA> MT [@Lkhal](#): [#iasp2011](#) panel on evolution et al of smart facilities

The conference tweets can be saved and archived thus adding value to the conference proceedings. The proceedings contain papers and presentations, but the tweets reflect the actual discussion at the conference and give a much more lively insight into what caught the attention of the audience, which were the “hot” topics and interesting speakers.^{xvi}

A hash tag can also be used to summarize tweets of a particular science community, e.g. users interested in Clean Technology can find others through #cleantech, and venture capitalists or those interested in the VC community find information by following #VC. Advanced Twitter search tools can help to get very specific information about industries, companies, locations, and people.

The International Association of Science and Technology Parks (www.iasp.ws), one of the largest communities of professionals in this field, is not yet using Twitter to engage in conversations with its members and the larger innovation community, but is planning to do so once the revamp of its website into a more interactive communication platform is completed.

To summarize this analysis of the current state of Twitter in STPs, only a few pioneers among the IASP members are using the tool and other social media creatively as part of their communication strategy. The low adoption in organizations that see themselves at the core of regional, national and global innovation systems is striking at first glance.

Looking at the history and organizational structure of STPs, however, many of them are semi-governmental bureaucratic structures or organizations focusing on the physical infrastructure and facilities, whereas communication and the creation of exchanges and networks within the local and wider science and business community are not at the core of the business, but rather seen as a marketing add-on.

STPs are just beginning to discover the power of digital information and communication spaces in knowledge-based economies where a single tweet can lead to a new breakthrough idea and tangible business deals.

References

ⁱ IASP conference 19-22 June 2011, conference website <http://www.iasp2011cph.com>

ⁱⁱ Charlene Burke (2011). Twitter for business intelligence <http://web.fumsi.com/go/article/find/64010>

ⁱⁱⁱ New Twitter Stats (June 2011) 140M Tweet Sent per Day, 460K Accounts created per Day <http://techcrunch.com/2011/03/14/new-twitter-stats-140m-tweets-sent-per-day-460k-accounts-created-per-day/>

^{iv} Mark Raby (2011) Twitter on pace to reach 200 million users <http://www.tgdaily.com/software-brief/52284-twitter-on-pace-to-reach200-million-users-by-2011>

^v The format a Twitter ID is the @ sign followed by the user name

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- ^{vi} All tweet figures which are mentioned in the profiles are from August 2011
- ^{vii} An interest aspect of Twitter is that a user rarely knows exactly which followers are potentially relevant
- ^{viii} Lists in Twitter <http://support.twitter.com/entries/76460-how-to-use-twitter-lists>
- ^{ix} Users can only get in touch with a follower, if the follower follows the user; a form of reciprocal agreement to enable a conversation.
- ^x Stephanie Evans. Conversation and Innovation <http://blog.artsusa.org/2011/07/25/conversation-and-innovation/>
- ^{xi} Twitter for Business Intelligence <http://scienceintelligence.wordpress.com/2011/04/06/twitter-for-business-intelligence/>
- ^{xii} Due to this fact most likely the person behind the Twitter account is male
- ^{xiii} Mr Travier also follows l'Equipe
- ^{xiv} A Twitter account for English speaking followers is being developed @LMTnetworks
- ^{xv} There were only few Twitter users during the conference (around 30) creating a kind of insider circle of people "in the know"
- ^{xv} The #IASP2011 continues to be used after the conference for follow-up discussion in the community.

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