

Web based communication and online social media networking in the NSW planning system



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Reasons for research

- Limited (published) research on electronic Planning adoption in Australia.
- A perceived slow take up of electronic Planning in the NSW planning system.
- Observed implementation has been *ad-hoc* and closely linked to planning reform agendas.
- New planning system for NSW calls for stronger communication with the public and the use of Information and Communication Technology to deliver planning services.



Aims of the Presentation

- Presents the results of a desktop review of electronic services being provided to the NSW public through local government web sites from 2009 to 2012.
- Detailed look at the rise of social media and its use by NSW local government using sentiment analysis.



Progression of data collection

- The project started in 2009 as a comparative analysis of NSW local government with 2 studies conducted in the United States.
- Has transformed into a longitudinal study of NSW local government over a 3 year period.



Data Collection

- Using an Internet communications methodology development by McMillan (2002), data collection involved a desktop review of planning documents and planning services functionality that is available on each of NSW's 152 local government web sites in December 2009 and December 2012.
- *Monologue* is one way communication with the receiver, the public, having no control over the format or type of information provided.
- *Feedback*, the receiver has some control of the interaction. However, the extent of the communication is not guaranteed.



Data Collection

- *Response Dialogue* is two-way communication, and is typically initiated by the public. When a planner responds to the communication it becomes responsive dialogue, however, the planner retains control of the communication.
- *Mutual Discourse* is pure two-way communication where both parties have control of communication, and both parties have the opportunity to send and receive messages.

Results

<i>Monologue (%)</i>	2009	2012	Change
Planning Instruments	91	97	6
Zoning Maps	53	79	26
Meeting Agenda	90	99	9
Meeting Minutes	97	99	2
Audio/Visual of Public Meetings	3	2	-1
Electronic Newsletter	73	81	8
Geographic Information System	20	26	6
Planning Instruments Query Tool	8	10	2
Development Application Tracking Tool	38	47	9

Results

<i>Feedback (%)</i>	2009	2012	Change
Customer Service E-mail	100	100	0
Submit comments to Development application online	39	47	8
Development Application Forms	95	99	4
Submit application for property certificate online	11	19	8
Property certificate form	91	97	6
Submit comment to Plans on Exhibition online	39	51	12



Results

<i>Responsive Dialogue (%)</i>	2009	2012	Change
E-Commerce	68	71	3
Lodge Development Application form online	7	13	6



Results

<i>Mutual Discourse (%)</i>	2009	2012	Change
Discussion Forum	6	11	5
Blogs	2	2	0
Social Media	9	54	45

Results

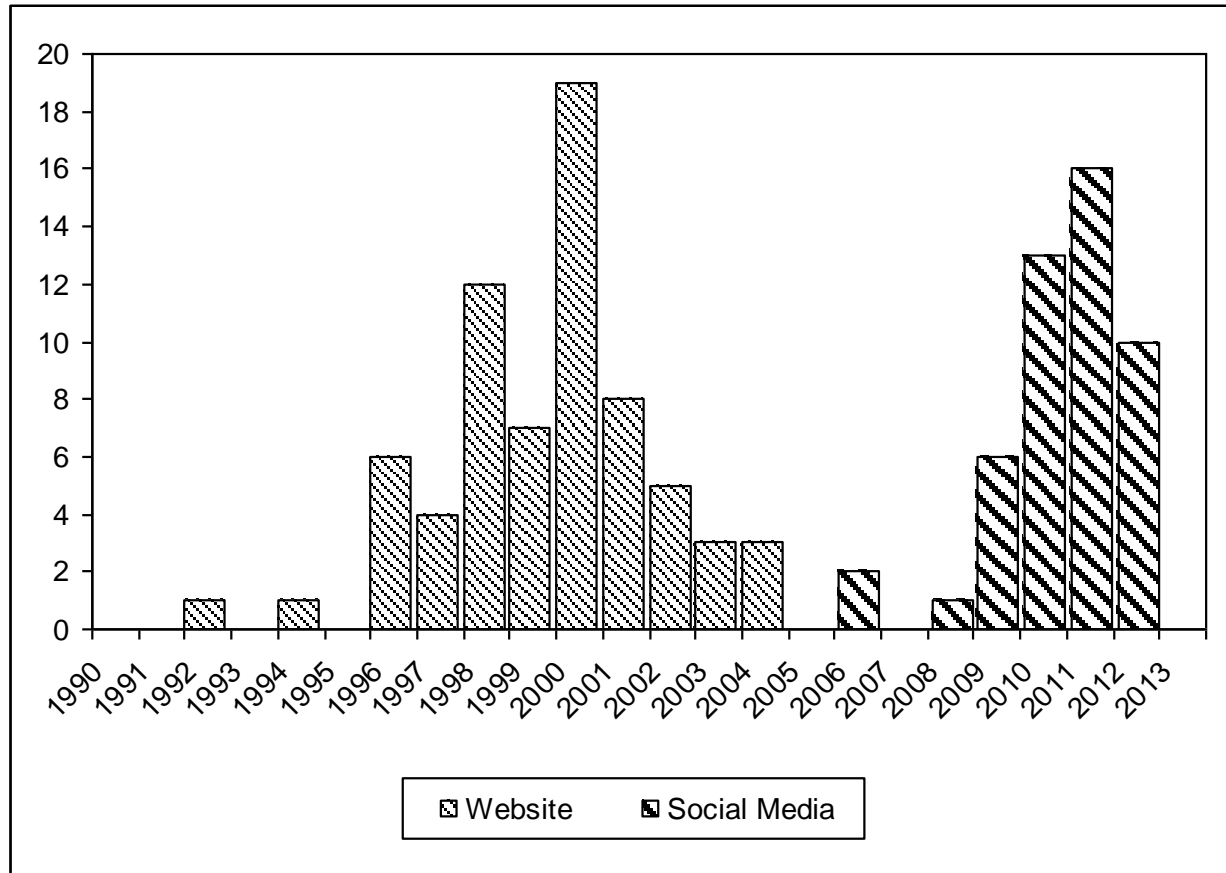
Metropolitan

<i>Mutual Discourse (%)</i>	2009	2012	Change
Discussion Forum	12	33	21
Blogs	5	5	0
Social Media	21	67	46

Non-metropolitan

<i>Mutual Discourse (%)</i>	2009	2012	Change
Discussion Forum	4	2	-2
Blogs	0	0	0
Social Media	4	49	45

Results





Results

Social Media usage (%)	2012
Facebook	51
Twitter	38
Youtube	9
Google+	4
Flickr	4
LinkedIn	3
Pinterest	2



Sentiment Analysis

- Used to gain a profiles of a randomly selected sample of Council twitter accounts.
- Essentially, sentiment analysis is looking for positive and negative feelings within the text and social media related activity.
- For this research, the online sentiment analysis tools of Sentiment140 (<http://www.sentiment140.com>) and Twitalyzer (<http://www.twitalyzer.com>) were used.

Results

Council	Followers#	Following#	No. of Tweets#	Positive/ Negative ratio	Impact	Klout
Albury	1,386	870	896	10/3	0.4	46
Sydney	17,277	355	1,748	31/4	4.3	61
Dubbo	509	176	720	1/0	0.1	44
Manly	1,591	435	2,882	No result	0.3	42
Moree Plains	19	2	487	No result	0	0
Mosman	2,256	898	2,602	2/0	0.5	46
Narromine	354	58	512	4/1	0.2	37
Penrith	2,430	2,397	1,304	35/16	0.5	46
Pittwater	2,321	2,078	9,345	5/1	0.6	49
Shoalhaven	557	648	405	3/0	0.1	43
The Hills	1,701	572	1,748	4/1	0.4	45
Wagga Wagga	663	66	992	5/1	0.2	45

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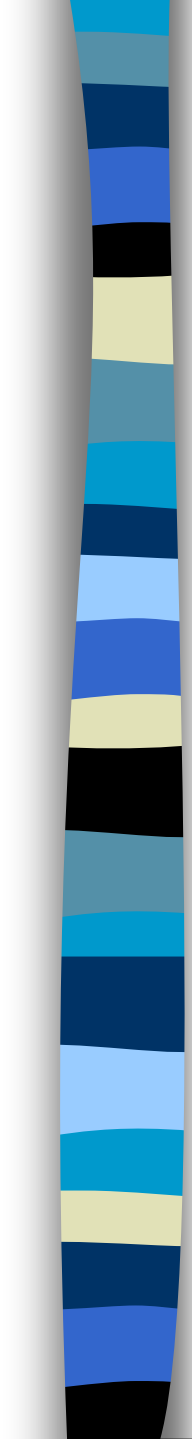
Conclusions

- Desktop review demonstrate that local government are extensive users of *monologue* communication; however, the implementation of more interactive tools that act in *feedback*, *responsive dialogue* and *mutual discourse* communication modes was significantly lower in 2009.
- The 2012 data shows minor increases across *monologue*, *feedback*, *responsive dialogue* communication types, but a significant increase in *mutual discourse* for social media.



Conclusions

- While social media promises to expand the communication choices of both local government and the community by creating a channel for authentic dialogue;
- There is little evidence of social media being used to create *mutual discourse* communication, rather the mode continues to be *monologue*.



Thank you, questions?

Williamson, W., & Parolin, B. (2012) Review of web-based communications for town planning in local government, *Journal of Urban Technology*, 19(1), pp. 43–63.

Williamson, W., & Parolin, B. (2013) Web 2.0 and Social Media Growth in Planning Practice: A Longitudinal Study, *Planning Practice & Research*, 28(5), pp. 544–562.