

**„The Interplay of Mass Media and Online Campaigning.  
Evidence from a German State Election”**

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## **„The Interplay of Mass Media and Online Campaigning. Evidence from a German State Election”**

Following the global trend, online campaigning by political candidates and parties has recently increased in Germany. In contrast to the United States, where online campaigning has become indispensable for a successful election campaign, empirical studies on German elections only find relatively small effects regarding the impact of online campaigning on election outcome.

Furthermore, the usage of political online activities is quite low by the German public. Therefore, it stays unclear, why political candidates and parties would attach importance to online campaigning. This study offers an explanation of how online campaigning can indeed affect electoral success for the special case of Germany with its strong role of traditional media.

Drawing on content analysis data investigating online campaigning during the state elections of North Rhine-Westphalia, we provide new evidence to support the assumption that online campaigning in Germany is mainly used to raise media visibility, with the aim of exerting an effect on individual election behaviour.

Keywords: Internet; German election campaigns; online campaigning; politicians; journalism

## **Introduction**

Since the national election campaign of 2009, the strategic importance of the internet has been widely recognized by both politicians and the general public in Germany. The internet enables political candidates to address voters directly and quickly, potentially mobilize them and bypass the selection criteria of traditional mass media.[1] This applies beyond the United States to all western democracies, including Germany. Accordingly, academic research in the field of social media and its relevance for political communication has increased over the last few years [2-5], is 'currently surrounded by hype' [6, p.1) which makes it difficult for scholars to keep pace.

Especially Obama's presidential campaigns of 2008 and 2012 had a crucial impact on the strategic planning of election campaigns in Germany. It raised public expectations of party and candidate websites, Web 2.0 tools like Twitter and Facebook, as well as platforms for connecting campaign workers.[7] The general assumption is that the internet is still not the only means of winning an election. But without a wide range of online activities and being recognizably present on the most important social media platforms, some decisive votes may be lost. Before the German general election in September 2013, 37 percent of the population was convinced that the Internet would play a decisive role for the electoral outcome. Clearly, electoral success is directly attributed to the internet, not only by political actors, but more and more by the German public.[8]

However, research remains ambiguous as to whether the use of online campaigning results in election outcomes more favourable for the candidate. Prior studies find positive but only small effects of online campaigning on the election outcome.[9-12] Gallup polls indicate that the use of the internet by voters for information about election campaigns, at least outside the USA, is still quite low. This resource is mainly used by politically very interested people and voters with strong party identification, who tend to vote anyway and do not need additional mobilization efforts. The traditional news media, especially TV news, are still the most used source of campaign information in western democracies, in comparison to the websites of political parties and candidates.[13,p.408]

The presented study provides new insights into the mechanisms and significance of online campaigning in German elections and has two objectives. Firstly, the status quo of online media use in election campaigns in Germany and its effect on the electoral outcome is described. In contrast to the United States and (to a lesser extent) the United Kingdom, online campaigning in Germany is characterized by the strong role of traditional news media for

election coverage. Accordingly, as the second objective, we provide new evidence to support the assumption that online campaigning in Germany is mainly used to address the traditional news media, with the aim of exerting an effect on individual election behaviour. The analysis is based on an online web audit of the use of different online tools during the campaign for the state elections in North Rhine-Westphalia, Germany, in May 2012.

### **Online Election Campaigns and their Effects on the Election Outcome**

American elections have always been trend-setters regarding instruments and strategies for online campaigning. Since the presidential campaign of 1996 between Bill Clinton and Bob Dale, the use of the internet during election campaigns has been studied by researchers in the USA.[14-16] Towner and Dulio [17] provide an overview of current developments since the Obama online campaign in 2008. Meanwhile, various case studies in countries around the world and comparative analysis have been added to this research field.[18-21] These studies demonstrate a functional change caused by the internet in election campaigns. Primarily, the internet is employed to facilitate useful information about the election program and to organize the campaign by providing material for party members or interested voters. Nowadays the internet is being used increasingly to directly communicate with voters and to mobilize party members and supporters, as well as to bypass the selection criteria of traditional mass media.

Interactivity in political online communication surprisingly often plays a subordinate role, although studies find that websites with interactive features make citizens 'feel more politically involved'[22,p.59], so that they develop an increasing political interest and tend to revisit the websites. However, political actors predominantly communicate unidirectionally. Websites often lack interactive features.[23,p.25,24] In the run-up to the general UK election in 2010, the majority of candidates' tweets only consisted of information and few candidates used twitter to interact with citizens.[19, p.709] Gibson and McAllister [9] conclude from similar results that the receivers of political online activities are primarily journalists and not voters. Karlsen [25] finds that candidates who concentrate on their own individual candidacy rather than on the broader party campaign 'have been offered a new platform for self-promotion' (p.22) and are mostly not interested in interaction with the public.

Research on the effects of online campaigning on election outcomes at the national level is rather less prominent in communication studies. Once again, investigations in this context started in the USA. D'Alessio [26] examined whether the election results of specific candidates can be explained through the use of a website during the election campaign. Controlling for party affiliation and the advantage of being an incumbent, the website had a significantly

positive effect on election outcome, despite the low usage of the internet at that time. However, the key result of his study was not confirmed by Bimber and Davis [14], who showed that websites were not responsible for higher voter turnout and did not in fact influence opinion making. Wagner and Gainous [27] report a small, but positive and significant effect of candidates' websites on election outcomes for the congressional election in 2006. The authors regard the importance of online tools during election campaigns as limited, because the positive effect only applies to candidates of the Democratic Party. A closer look at the republican candidates reveals that financial investment during the campaign and the candidates' political experience are essentially responsible for the election outcome.

Gibson and McAllister [9] demonstrate a positive effect of candidates' websites on the outcome of the Australian national election in 2001. Because of compulsory voting in Australia, the authors conclude that the results cannot be interpreted as an online mobilization effect, but rather candidate ability to persuade people to vote for them. However, Gibson and McAllister remain sceptical, as hidden confounding variables might explain the direct effect. The research design was repeated for the national election in 2007.[10] Again, it yielded a positive correlation between online campaigning and election outcome, but only for candidates of the Green Party. The effect is limited to Web 2.0 applications, which exclude personal websites. Sudulich and Wall [11] identified a positive correlation between website use and election results in the Irish national election of 2007 controlling for numerous variables, such as the campaign budget and marginality. The authors assume that online-campaigning may become a 'mainstream, vote-winning technique in future elections'. [11,p.473] Hansen & Kosiara-Pedersen [28] investigated online campaigning for the Danish general election in 2011. The candidates' Web 1.0 and Web 2.0 activities, summed to form an index, did not influence the election result. Rather, television appearances, incumbency and the number of campaign staff are much better predictors of electoral success. This result supports the assumption that the traditional media 'remain dominant for campaigns, even within the US'. [13,p.408] Pablo Porten-Cheé [29] investigates the use of party websites and its effect on voting for the European parliamentary elections in Germany in 2009. Using individual-level data, Porten-Cheé finds positive, but only minimal effects of using the website of the Social Democrats and the Green Party on voting behaviour for these parties. Instead party identification and issue competence are the decisive predictors for voting behaviour (p. 321). Some surveys confirm the positive effects of particular social media tools on electoral performance. DiGrazia and colleagues [30] show a positive correlation of Republican-candidate name mentions on Twitter on the Republican vote margin for the U.S. congressional elections in 2010. The

methodological design stands out, as numerous variables including incumbency, district partisanship and media coverage, were controlled. However, the exact causal nexus between name mentions on Twitter and electoral outcome remains unclear.

In the last few years, several projects also focused on state elections. Rackaway [31] tests the influence of online campaigning on voting during the elections for the House of Representatives in Kansas and North Carolina in 2006. The essential result is that among online campaigning tools, only blogs had a significant effect on the number of votes for the candidates (p. 480). Marcinkowski & Metag (2013) investigated the dynamics and importance of online campaigning at different federal levels in Germany, specifically the national elections in 2009, local elections in 2009 and state elections in 2010, both in North Rhine-Westphalia. At the national level, only the presence of personal websites affected the candidates' individual votes, a result that confirms well to the current state of research. The importance of online-campaigning decreases at the state level and almost completely disappears at the local level, where campaigning on the streets, in front of shops, and during local events is far more effective.

Summarizing the current state of research regarding the impact of online campaigning on election outcome, correlations between these two dimensions have indeed been found, especially for elections in the United States, also in Australia and Ireland, but in Germany effects are relatively very small. What all studies have in common is that the causal mechanism behind these effects remains unclear and needs further research. This study therefore starts by offering an explanation of how online campaigning can affect electoral success for the special case of Germany, with its high importance of traditional offline media and other specific circumstances as analysed below.

### **Prerequisites of Online Campaigning in Germany**

Especially in the USA, online campaigning has become indispensable for a successful election campaign and has a noticeable impact on the election outcome.[17] The liberal handling of data privacy and the correspondingly broad availability of voter data make it easy for political candidates to address the electorate directly, mobilize voters, and provide them with information and arguments as to why to vote for them. These reasons are used further in interpersonal communication with friends, colleagues, and family and serve to recruit voters.[32] Most notably, Barack Obama relied on this strategy for his election campaigns in 2008 and 2012 (*grassroots campaigning*).

The conditions for campaigning on the Internet differ considerably between the Anglo-American countries and Western European democracies. Political candidates and parties do not benefit from the US-style advantages in German election campaigns. Access to voter data is heavily restricted, financial and personal resources are more limited, and, in general, because of the political system, election campaigns in Germany are less personalized but more party-centred. Therefore, the internet in German election campaigns is not as well-suited for mobilizing and contacting voters directly as in the US election campaigns.

This might be a reason why a strong correlation between online campaigning and election outcome cannot be found in German elections, neither at the federal level nor at state or local levels (Marcinkowski & Metag, 2012). Politicians are still reluctant to fully integrate online campaigning elements and use social networking sites comprehensively in their election campaigns.\*\*\*[33] In Germany, mediated campaigning takes place almost completely via television and newspapers. Accordingly, all political campaign efforts are focused on getting messages across through the traditional media.[34] Furthermore, voters hesitate to change their media consumption habits in order to inform themselves about the election campaign. The traditional media, first and foremost television, but also newspapers and their online websites, are the preferred media for keeping up to date with campaign events and the associated topics. The websites of political candidates and parties, as well as their presence on social networking sites like Twitter and Facebook, play a less important role.[35,36] As the range of political online content is used mainly by people with high political engagement, two consequences arise. Online political activities either reach voters with strong partisan preferences and stable voting behaviour or those voters who already sympathize with a party or candidate and for this reason, choose corresponding online information.[37,38] However, neither dimension explains why online campaigning can mobilize new voters or persuade them to vote differently from the way they usually do. Building on these circumstances, the question arises as to which functions and impact the internet can have in election campaigns in Germany.

In order to explain the potential effects of online campaigning, some authors have consistently argued that online campaigning does not affect voters directly, but rather influences the coverage of offline campaigns in traditional mass media. Online campaigning could have a spillover-effect on traditional mass media, because journalists are often those addressed by online campaigns, especially by Web 1.0 tools. In the Australian national elections of 2004, candidates with a personal website had a significantly higher presence in traditional media and were engaged in more journalistic interviews. 'This enhanced media attention heightens their public profile and crucially provides them with greater visibility

among voters'. [9,p.256] Those candidates who devote a lot of effort to online campaigning are covered more frequently in traditional mass media. As these also reach less politically interested and undecided voters, such processes lead to a positive effect on the election outcome.

This theoretical argument applies well to our case study on integrating the role of the internet into the specific conditions of German election campaigns. These campaigns are based on the very substantial importance of traditional media for political communication and the daily usage by the eligible voters in Germany. Data from a longitudinal study of political communication in Germany reveal that, despite a slight decline in the last ten years, almost 70 percent of the German population watches political news on television every day and 60 percent reads a newspaper offline every day. [39,p.88;92) The internet has become a more relevant platform for receiving political news, but almost completely through the online websites of traditional media, like TV and Radio stations or weekly magazines, like SPIEGEL or ZEIT. Still only 20 percent visit a website of a politician or political party to obtain political information. Therefore, online political communication supplements, but does not replace traditional forms of political information-seeking behaviour [40,p.249], which also applies to election campaigns. In the two months before the national election in September 2013, 60 percent of voters read a local or regional newspaper to keep up to date with campaign events; almost 80 percent watched the news of the public broadcasters ARD and ZDF – strong evidence to support the fundamental role of the public service broadcast media. At the same time, only 10 percent used social networking sites like Twitter and Facebook to acquire political information about the campaign. [36] In contrast, the internet has increased its popularity for daily news consumption in the US. [41,42] Especially during US presidential elections, the internet has become almost the most important source of political news, trailing cable news and local TV news by a short margin. [43]

Bearing in mind the low usage of political online activities by voters and the strong affinity to traditional media campaign coverage it is unclear, why political candidates and parties would attach importance to online campaigning. An obvious assumption would be that they seek to address not only voters, but also journalists with their messages. Given journalistic research methods, this might well be a promising strategy.

In the last few years, journalists have increasingly used social media, like Twitter, Facebook, or Blogs. [44] Graham and colleagues [19,p.702] show that during the UK national election campaign in 2010, political candidates also interacted with journalists on Twitter. Investigating the use of Twitter as a news source in British and Dutch newspapers from 2007 to



2011, Broersma and Graham [45] detect that tweets are becoming more and more integrated to articles and live events coverage, with a clear focus on human interest topics, but also on the political agenda. This is also the case for the coverage of the British and Dutch elections of 2010.[46] Compared to the Netherlands, tweets were more often used in election coverage by tabloids, as well as broadsheet newspapers in the UK. However, Dutch newspapers introduced interviews with politicians via Twitter for the first time.

As a trend, journalists in Germany have been rather reluctant regarding integrating social media to the daily editorial process. However, social media have recently become more relevant, especially for interacting with recipients and as an additional feedback channel.[47] Editorial staff surveys reveal that social networking sites serve as tool for research and identifying new topics. Especially younger journalists see the benefits of Twitter and Facebook for their work and believe that journalists can no longer forgo social networking sites.[48] These results justify assuming that most notably during election campaigns, journalists pay even more attention to topics and events on social networking sites. Yet another good indication is that many broadcasts about the election on German television are including Twitter and Facebook progressively more into their coverage in order to show what is going on in the web world.

Given the continuing preference for traditional media platforms, combined with the increasing integration of social media in daily journalistic work, we argue that online campaigning in German elections is primarily used to address the traditional media and not the voters. Interviews with German political campaign managers reveal that journalists are indeed an important target group of online campaigning.[49,p.266] Therefore, campaigning on the internet mainly has an effect on the election outcome, when journalists come in contact with the political information provided by the candidates and parties, and daily report on them. Our thesis for exploring the causal relationship between online campaigning and election outcome is:

**The effects of online campaigning on election outcomes can best be explained by assuming a spillover-effect from online campaigning into traditional news media.**

The fundamental idea behind the spillover-effect is that a direct effect from online campaigning on election outcome either does not exist or is a spurious relationship (dashed line in Figure 1). Instead, there is rather an indirect effect via candidate visibility in traditional media (see Figure

1). In line with the existing literature, we hypothesize an indirect mediated effect of online campaigning on the individual electoral support for party candidates. Our assumption is that the application and amount of online campaigning has a positive effect on candidate visibility in traditional media. This media visibility is positively correlated with the electoral performance of candidates.

[Figure 1 about here]

Regarding our methodology we first test whether there is in fact a direct effect between online campaigning and election outcome. We then check the indirect effects, with media visibility functioning as an intervening variable. Our model confirms the spillover-effect, if a direct effect between online campaigning and the election outcome is non-existent or considerably weaker than the present indirect correlation via responses to traditional news.

## **Data and Measurement**

### ***Method and Sample***

The data for this analysis were gathered during the state elections in North Rhine-Westphalia, Germany, in May 2012. With 18 million inhabitants, North Rhine-Westphalia is the most populous federal state in Germany. With 13 million eligible voters (more than one-fifth of the national electorate), the results of the state election are extremely important for national politics and are often regarded as an indicator of satisfaction with the federal government. Thus, political parties and candidates invest substantial time and money in the election campaign. Accordingly, the state elections in North Rhine-Westphalia are a useful case in point. We conducted an online content analysis of the use of different online campaigning tools during the four weeks preceding the election day for all 767 candidates of the five largest German parties, which currently have a parliamentary group in the German Bundestag, and the Pirate Party as an internet-savvy newcomer<sup>1</sup>. Furthermore, the media coverage of candidates in regional and

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<sup>1</sup> Social Democrats (SPD), the Conservatives (CDU), the Liberals (FDP), the Green Party (Bündnis 90/Die Grünen), the Left Party (Die Linke) and the Pirate Party (Piratenpartei). The state of North Rhine-Westphalia was subdivided into 128 constituencies, in which the six parties could nominate their candidates. Ideally, our sample would consist of 768 candidates, but in one constituency, the Left Party did not nominate a candidate. Thus the sample is declined to 767 candidates.

local newspapers was surveyed for the same period with the help of Google News. All data were finally updated on election day. At the same time, we also undertook an online candidate survey to ask candidates about the planning and conducting of their offline election campaign. After the state election supervisor had published the party lists with the nominated candidates for each constituency, contact details of all 767 candidates were researched. A link to the online survey was sent to all candidates with a cover letter via email. A total of 212 candidates completed the survey satisfactorily. Therefore, we also gained insight into their offline campaign activities (response rate: 28%).

### *Measures*

Our dependent variable, individual *electoral support*, was measured through the percentage of votes each candidate receives through first-past-the-post voting in a constituency<sup>2</sup>. The data were added to our set, after the government agency had published the official results.

For the independent variable *online campaigning*, we conducted an audit of the use of several online media so as to obtain a comprehensive view of the role of various online applications during election campaigns. The presence of a personal website, a Facebook profile, a Twitter account and a YouTube account were coded as binary variables (1=yes). We measured the number of Facebook posts, friends, and fans of each candidate. For Twitter, we counted the number of the candidates' tweets and those of the followers. On YouTube, we monitored the quantity of uploaded videos. All data were gathered in the four weeks preceding the election day with a final update on election day.

When testing the spillover-thesis, newspaper coverage functions as an intervening variable in our model. *Candidate visibility in traditional media* was conducted with the help of Google News (number of documents in which the candidate was mentioned by name)<sup>3</sup>. We typed in the name of the candidate plus the name of the party in quotation marks and defined the period for the displayed search results ('last four weeks'). To reduce the number of search results, we clicked on the sixth page of the search results (ten search results per page). Usually,

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<sup>2</sup> Each eligible voter casts two votes, one for the candidate in the constituency and one for the party. The state parliament of North Rhine-Westphalia has 181 representatives of which 128 are directly elected in the single member constituencies (first-past-the-post election). The 53 remaining mandates are appointed according to a predefined rank in the party list.

<sup>3</sup> We had to consider that our dataset is partly biased, as mainly the both front runners of the catch-all parties SPD and CDU, distinguish themselves from all the other candidates regarding publicity and public perception. Therefore, both receive more media coverage and are more popular on Facebook and Twitter than candidates in the rural parts of North Rhine-Westphalia. This bias is taken into account, however, through using party affiliation as a control in our analysis.

Google News reduces the number of search results afterwards. In our research design, the news source, the positioning as well as the portrait of the candidate in the news source were not important. We did not take into account how often and how prominently the candidate was covered in an article (we did not differentiate between an interview, short article, or even headline). We were simply interested in the media visibility (the journalist mention and reader coming into contact with the name of the candidate). Finally, we noted the number of search results. For the first six pages, if necessary, we checked whether the articles really deal with the person or his political program and election campaign. As this is a count variable and many candidates do not receive media attention, the media coverage via GoogleNews variable was logarithmised ( $\log(x+1)$ ) to cope with quite a few zero values and not many extreme values.

This study gauged the following control variables: *candidate's sex* (0=female with  $n=198$ , 1=male with  $n=569$ ), *candidate's age* ( $M=46$ ,  $SD=11$ ), *incumbency* (0=not a member of the state parliament before election, 1=member of the state parliament before election) and *party affiliation*. Thereby, we took the party size as well as the political momentum into consideration.

## **Results**

### ***Descriptive Analysis***

Before we estimate our model of direct and indirect effects, we take a closer look at the distribution of the relevant variables to illustrate the use of various online campaigning tools by the candidates of the six parties.

[Table 1 about here]

More than half of the candidates ( $n=466$ ) administered their own personal website. Of all the online campaigning tools, the Web 1.0 application was the most popular. 220 of those candidates without a personal website were at least present with a short biography and contact information on the websites of their respective parties. However, these websites lacked individuality and were centrally administered. Only 81 candidates did not have any web presence at all. The Web 2.0 applications were, perhaps surprisingly, not as widespread as the websites. Almost half of the politicians ( $n=361$ ) had a profile on Facebook, only a quarter

(n=191) a Twitter account<sup>4</sup> and 66 candidates a YouTube account. Facebook was used most extensively of all the Web 2.0 applications. On average, candidates using Facebook had 25 posts in the four weeks preceding the election day (SD= 29), 147 friends (SD=1005), 425 fans (SD= 743). The number of candidate Facebook profile subscribers is negligible. Twitter played a less important, but still relevant role. Candidates sent an average of 52 tweets in the four weeks preceding election day (SD= 92) and reached 232 Twitter followers on average (SD= 712). The 66 candidates on YouTube uploaded about eight videos each (SD= 9).

The two large parties, the Social Democrats and the Conservatives, are more often present on Facebook, Twitter and YouTube than the smaller parties. For example, in contrast to the almost 90 percent of Social Democrats and the 82 percent of the Conservatives having a personal website, only half of the candidates of the smaller parties or even fewer have a website. 89 candidates of the Left Party, 80 of the Green Party and 71 of the Liberal Democrats do not use Facebook. In comparison, only 28 Social Democrats and 47 Conservatives do not have a Facebook profile.

### *Effects of Online Campaigning on Electoral Success*

After describing the general use of online campaigning tools by the candidates, we can now approach our research question. We first run OLS regressions to test whether there is a direct effect between online campaigning and election outcome. Our dependent variable is the percentage of votes each candidate received at the first vote. All online tools were included<sup>5</sup>. We controlled for age, sex, incumbency, and party affiliation (dummy variables)<sup>6</sup>. We find a statistically significant but fairly marginal effect between the number of Facebook fans and electoral success, whose explanatory power is actually too small to be interpreted meaningfully. Apart from that, we cannot find any direct effects of online campaigning on the candidates' election outcome. Electoral success is rather caused decisively by the party affiliation and the advantage of being an incumbent (Table 2).

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<sup>4</sup> The variable of having a Twitter account or not had some missing values. Therefore, some cases were excluded from the analysis. The sample for Twitter for our empirical analysis is always reduced to n=752. This also applies to YouTube (n=766).

<sup>5</sup> Both independent variables 'Facebook Fans' and 'Facebook friends' were logarithmised, because of the high standard deviation and outliers.

<sup>6</sup> This variable was dichotomized for Social Democrats, Conservatives, Green Party, Liberal Democrats and Pirate Party; the Left Party functions as reference variable.

[Table 2 about here]

We then take a closer look whether any direct effects can be measured for particular groups of partisan candidates. Our regression model remains unchanged, but we add the difference between the second vote results from the 2012 election and the preceding election results in 2010 for each party in the constituency, so as to control for the overall success or failure of each party, which might be reflected in the electoral support for the individual candidates. Three direct effects can be found. For candidates of the Conservative Party and the Pirate Party, having a personal website significantly enhances electoral success. For candidates of the Green Party, the data yield a significant effect of the number of Facebook friends following a candidate.

It seems that in our case, most online campaigning applications probably do not lead to a substantial gain in electoral votes. The traditional personal website, as well as social media, can predict the electoral success of some, but not all parties. Generally speaking, this result integrates well into the current state of research. Most studies testing this correlation identify only a few and mostly minimal effects.

### ***Testing the Spillover-Effect of online campaigning on Traditional Mass Media***

We investigate whether there are indirect effects between the adoption of online campaigning tools and electoral success when candidate visibility in offline news media functions as a mediating variable. Intervening variable models do not impose the requirement of evidence of a simple association between X and Y in order to estimate and test hypotheses about indirect effects. 'That X can exert an indirect effect on Y through M in the absence of an association between X and Y becomes explicable once you consider that a total effect is the sum of many different paths of influence, direct and indirect'. [50,p.414] Therefore, it is reasonable to test all our online campaigning tools as independent variables, although we could not find direct effects on electoral outcome for most of them in the OLS regression.

Our dependent variable is again the percentage of votes each candidate received in the first vote. For the independent variables, we had to bear some restrictions in mind. We excluded the presence of a YouTube Channel (n=67) and the number of uploaded videos (n=63). Most videos related to the candidates were short corporate videos with no clear connection to the campaign. The number of candidates' search results in Google News functions as the mediating variable for the visibility in traditional media. Our thesis is tested

using structural equation modeling in AMOS. We controlled for party affiliation and incumbency, because both variables might also explain media visibility, online campaigning and electoral success.. Additionally, the age and sex of candidates were used as controls. We tested the spillover-effect in eight different models for each online campaigning tool. Coefficients are standardized regression weights (Table 3). The model fit parameters indicate a good model fit for all our models which means that the model can be regarded as acceptable, but without implying that the relationships between the variables are strong.[51,p.53] The indirect effects were tested using a bootstrapping procedure with maximum likelihood estimation, 1,000 samples and bias-corrected 95% confidence intervals.

[Table 3 about here]

Overall, we find good evidence of the spillover-effect which is surprisingly robust. For the use of a personal website, a Facebook profile, a Twitter account, and the number of Facebook posts and Twitter followers, we can identify more or less strong indirect effects between online campaigning and electoral success, when media visibility functions as an intervening mediating variable. We exemplify the spillover-effect for the use of a personal website as our independent variable. Notice that we do not find a direct significant effect between having a personal website and the electoral outcome (-.01). In contrast, we detect a positive direct effect of the personal website on visibility in traditional media (.12\*\*) and a direct effect of visibility on the election result (.03\*). This leads to a significant indirect effect which is also positive (.10\*). The personal website positively influences electoral success when its use is mediated by media visibility. Various studies show that websites are a popular tool for addressing journalists rather than voters. From the perspective of campaign strategists, it seems to be necessary not only to communicate with voters directly and interactively but also to provide useful unidirectional information for journalists. This increases the candidate visibility in traditional media.

Testing direct correlations, we have demonstrated that the number of Facebook fans is directly correlated with electoral outcome. In principle, given our theoretical approach, we should also have been able to confirm the indirect spillover- effect in this model, but this was not the case. More generally, our data reveal either a direct effect between online campaigning and election outcome or the indirect spillover-effect (with the exception of the number of Twitter followers, which is, however, a very small correlation regarding the spillover-effect). That general result confirms our theoretical argument, as the direct effect of online campaigning on election outcome seems to be an artefact, because the vast majority of voters

are neither influenced nor in contact with online campaigning. With the exception of the number of Facebook fans and the number of tweets, all online campaigning tools are positively correlated to media visibility. There is a correlation between media visibility and the election outcome, but clearly weaker and for the number of Facebook fans and Twitter followers, non-existent. One reason might be that, traditionally, offline media coverage has only a small effect on voting behaviour. This shortcoming may explain why media visibility does not influence the electoral outcome for the independent variable 'Facebook fans' and 'Twitter Followers' and all the other effects are weaker in comparison to the correlation between online campaigning and media visibility. It is conspicuous, that concerning the quantity of social media (Facebook posts, number of tweets and Twitter followers), the spillover-effect is only weak.

In the next step, we take a closer look at the direct effects of online campaigning on electoral outcome that we identified for particular parties, more precisely, the direct effect of a personal website for the Conservatives and the Pirate Party and of the number of Facebook friends for the Green Party. Our methodological design remains unchanged, with the exception that we add the party vote swing from 2010 to 2012 for each constituency as a control. With the inclusion of our intervening variable of media visibility, the direct effects for the personal website disappear, but not for the Facebook fans. In all three models we find no spillover-effect (see Table 4). This result seems reasonable to some degree, as candidates of the smaller parties, the Green Party and the Pirate Party, are less known. Therefore, being visible in the news media is much more difficult to achieve, as most of the candidates of these parties were not incumbent.

[Table 4 about here]

Because it might be merely a problem of causality that candidates with stronger online campaigns are covered more in traditional mass media, given that they are generally more prominent and also more active in their offline campaigns, we checked the spillover-effect for those candidates who provide information about their offline campaign activities, and which we gathered from the online survey. The results are similar to those of our whole sample, but we can only find two significant spillover-effects, for the personal website and the number of Facebook posts. Although we find fewer effects when not controlling for the extent of offline campaign activities, the spillover-thesis still seems plausible. First and foremost, this is because we find the spillover-effect for personal websites again, which are a good way to raise media visibility, but do not directly lead to a better election outcome.[9] From this point of view,



personal websites have the most stable indirect effect on electoral performance of all online campaigning tools.

## **Discussion**

The aims of this study were to provide new insights into the mechanisms and significance of online campaigning at the state level in Germany. Particular attention was devoted to a causal explanation of the impact of online campaigning with a presumed spillover-effect on traditional mass media. This was done against the backdrop of German electoral campaigns still being very much dominated by traditional mass media.

The central result of our study is that online campaigning is primarily successful in addressing traditional media, but not in attracting votes. Online campaigning only influences the election outcome if it raises media visibility. We find sound evidence of the indirect spillover-effect, which is remarkably stable. In five of our eight models, we identify an indirect effect of online campaigning on electoral success, with candidate media visibility functioning as a mediating variable. Independently of the indirect spillover-effects, we find weak individual evidence of direct effects between online campaigning and electoral success. Contrary to our assumption, these direct effects do not disappear when simultaneously modeling the indirect effect. We can conclude that the spillover-effect does indeed explain the effects of online campaigning on electoral performance for German election campaigns. However, it does not seem to entirely explain the mechanism underlying the correlation between online campaigning and election outcome. Thus, more research is needed to reveal what lies behind this mechanism.

The public perception of an increasing importance of online campaigning tools is not reflected in the adoption of these tools by political candidates, at least not in our case study. We can identify a bounded group of candidates who integrate a website, Twitter and Facebook into their election campaigns. However, there are still many candidates who avoid communicating with voters via the internet. Nonetheless, merely being present in the internet does not directly influence the electoral success. That is especially true for social networking sites. Having a Facebook profile or Twitter account indicates nothing more to the web community than that the candidate is visible and technically open-minded, which does not result in more votes. In contrast, a candidate's personal website which focuses more on distributing information than on interaction with the voter has at least a small effect on the election result, but only for candidates of the Conservatives and Pirate Party. In our case, the intensity of communication

on social networking (Facebook posts and tweets) sites does not lead to more votes. Our observation as a result of the audit of online media use was that especially on Twitter messages were unrelated to political content and the process of campaigning. For example, the time and place of important local campaign events or media presence of the candidates were often missing.

Acquiring Facebook fans seem to be the best way of becoming visible in the traditional media. At first glance, this result might be confusing, but it makes much more sense when considering that journalists can also be Facebook fans of the candidates. It is also obvious that having a Facebook account only leads to higher media visibility when posting useful information, for example, up-to-date news and details of campaign events. Only then Facebook does stimulate journalists as effectively as personal websites. Websites are still the preferred sources for journalists. Twitter engages journalists much less than the other social media platforms. The number of tweets is not significantly correlated to media visibility. Regarding media visibility, the quality and not the quantity of Tweets is probably decisive. From a normative perspective, this is a comforting result. Journalists do not tend to be impressed by the mere number of Tweets.

There are a few methodological issues and difficulties which need to be considered in interpreting our results. Our object of investigation was the state election in North Rhine-Westphalia in May 2012. This election is, besides the general election at federal level, the most important in Germany, but online campaigning at the state level still does not seem to offer real value, as the offline campaign would appear to remain more effective in persuading and communicating with voters. Furthermore, the state election in North Rhine-Westphalia in May 2012 took place under unique circumstances. The minority government missed out on a majority for the budget plan in parliament and consequently called for re-election which had to take place within 60 days. Accordingly, the election campaign was short and financial resources were difficult to acquire. It may therefore be more suitable to test our research design for more precisely planned election campaigns.

Arguably more relevant is the problem of causality in our research design, which we cannot ultimately avoid, with our data being cross-sectional. It is possible that the general causal direction is the convers of what we propose and that online campaigning does not cause electoral success, but is rather a consequence of electoral success and of extensive media coverage. Therefore, the strong correlation between the number of Facebook fans as well as Twitter followers and candidate media visibility may in fact be caused by the fact that prominent candidates are more often in the news media and have more followers and friends on

social networking sites. Williams and Gulati [52] point out that online campaigning is generally a reflection of innovative practices in campaigns. Financial resources, as well as ‘time and technology are [...] potential mediating factors’ (p. 106) for describing the adoption and usage of online campaigning tools. In their study of the Irish general election in 2007, Sudulich and Wall [11] confirm that better resourced candidates are indeed more likely to campaign online. Because we lack data on the offline campaign activities of all 768 candidates we cannot verify this assumption.

Whether GoogleNews, with its non-transparent link analysis algorithm, is a valid and reliable indicator of candidate visibility in traditional media, is also worthy of analysis. More generally, our dependent variable simply refers to the frequency of being in the media without considering how the candidate is portrayed, whether the journalists quote the candidate or how they evaluate his performance.. That is not a very reliable indicator of electoral success, but the only one we could measure in this case. Theoretically a variable called ‘standing’, in the sense of ‘having a voice in the media’, in which the candidate can really describe and explain his political views, would be more viable[53,p.86] From a theoretical perspective, it makes much more sense that ‘media standing’ has a positive effect on the electoral success. For future applications of this research design, it would be necessary to measure candidate coverage in traditional media in far greater detail.

Besides these methodological challenges and limitations, our results still yield new insights into the significance of online campaigning at the state level in Germany and with the spillover-effect also offering a suitable explanation of correlations between online campaigning and election outcome. The strong role of traditional media and its high usage by the German public for political information constitute an environment for political candidates in which it makes much more sense to concentrate campaign efforts on addressing voters via traditional media. These circumstances hamper an expansion of online campaigning, which has been evident especially in the USA over the last few years.

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**Figure 1: Model of direct and indirect effects**

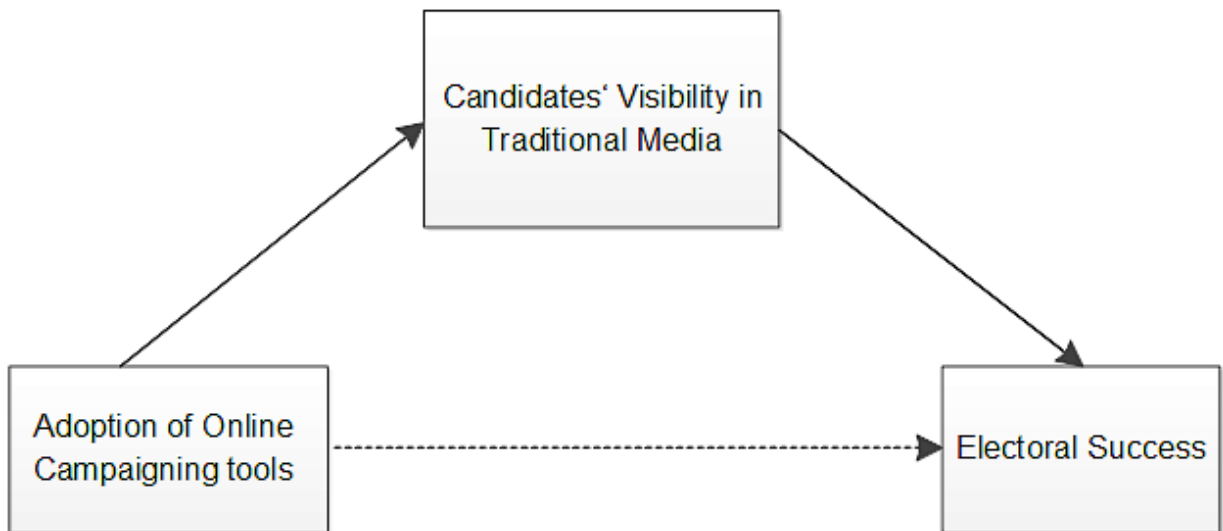




Table 1: Use of online campaigning tools in the state elections (absolute frequencies)

	Personal Website		Facebook		Twitter		YouTube	
	Yes	No	Yes	No	Yes	No	Yes	No
SPD	116	12	100	28	31	97	24	103
CDU	106	22	81	47	36	90	17	111
Grüne	63	65	57	71	29	95	13	115
FDP	50	78	48	80	25	101	3	125
Linke	20	107	38	89	21	102	8	119
Piraten	111	17	37	91	49	76	1	127
	466	301	361	406	191	561	66	700
	(60,8%)	(39,2%)	(47,1%)	(52,9%)	(25,4%)	(74,6%)	(8,6%)	(91,4%)

Table 2: OLS regression of the electoral outcome on online campaigning

	Model 1: All parties		Model 2: Conservatives		Model 3: Green Party		Model 4: Pirate Party	
	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE
<b><i>online campaigning</i></b>								
Personal website	,003	,427	,174*	1,778	,167	,608	,103*	,174
Facebook profile	-,008	,417	,047	1,738	-,140	,729	-,041	,184
Twitter account	-,005	,441	-,030	1,672	-,198	,853	,015	,138
YouTube channel	,010	,732	,004	2,459	-,087	1,396		
Facebook posts	-,100	,008	,003	,046	,094	,014	,039	,006
Facebook friends	-,016	,000	-,143	,001	,358**	,001	-,035	,001
Facebook fans	,030*	,000	,039	,002	-,058	,006	-,055	,006
Tweets	,009	,003	-,008	,053	,179	,008	-,064	,001
Twitter follower	,004	,001	-,008	,004	,099	,002	,060	,000
YouTube videos	-,022	,057	,001	,309	,005	,141		
<b><i>Party membership</i></b>								
Social Democrats	,885***	,658						
The Conservatives	,614***	,647						
The Green Party	,136***	,596						
Liberal Democrats	,043**	,582						
Pirate Party	,128***	,682						
<b><i>Swing of party votes 2010-2012</i></b>			,047	,466	-,111	,157	,880***	,075
<b><i>Incumbency</i></b>	,194***	,478	,593***	1,571	,289**	,998		
<b><i>Social demographics</i></b>								
Gender	,018*	,375	,168*	1,460	-,061	,606	-,084	,179
Age	,002	,016	,033	,067	-,092	,031	,008	,006
Adj. R <sup>2</sup>	,934	4,1893	,439	6,1644	,285	2,8533	,768	,5812
N	767		128		128		128	

\*\*\*p &lt; 0,001; \*\*p &lt; 0,01; \*p &lt; 0,05

Candidates of the Pirate Party did not use YouTube and were not incumbent.

Table 3: Testing the spillover effect using structural equation modeling

Direct and indirect effects/ Fit indices	Model 1: Predictor: Website	Model 2: Predictor: Facebook	Model 3: Predictor: Facebook Posts	Model 4: Predictor: Facebook Friends	Model 5: Predictor: Facebook Fans	Model 6: Predictor: Twitter	Model 7: Predictor: Tweets	Model 8: Predictor: Twitter Follower
Predictor → Electoral outcome	-.01	-.01	.00	-.02*	.03**	.00	.01	.02*
Predictor → GoogleNews	.12**	.09*	.13***	.04	.25***	.08*	.03	.23***
GoogleNews → Electoral outcome	.03*	.03*	.03*	.03*	.02	.03*	.03*	.02
Predictor→GoogleNews→Electoral outcome <sup>a</sup>	.10*	.07*	.002*	.00	.00	.08*	.00	.005*
r <sup>2</sup> electoral outcome	.93	.93	.93	.93	.93	.93	.93	.93
r <sup>2</sup> GoogleNews	.25	.24	.25	.24	.30	.25	.24	.29
Chi <sup>2</sup>	14.589	12.245	16.484	11.555	15.716	14.098	19.195	13.819
df	9	9	11	10	13	11	12	13
p	.095	.200	.124	.316	.265	.228	.084	.387
RMSEA	.029	.022	.026	.014	.017	.019	.028	.009
CFI	.998	.999	.998	1.00	.999	.999	.998	1.00
BIC	393,48	390,867	381,821	383,535	367,767	378,348	376,823	364.824
N	767	767	767	767	767	752	752	752

\*\*\*p < 0,001; \*\*p < 0,01; \*p < 0,05; <sup>a</sup>Bootstrap with maximum likelihood estimation, 1,000 samples, bias-corrected confidence intervals of .95

Table 4: Testing the spillover effect using structural equation modeling (particular party models)

Direct and indirect effects/ Fit indices	Model 1: CDU Predictor: Website	Model 2: Grüne Predictor: Facebook Friends	Model 3: Pirate Party Predictor: Website
Predictor → Electoral outcome	.09	.18*	.06
Predictor → GoogleNews	.15	.14	.02
GoogleNews → Electoral outcome	.07	-.02	-.02
Predictor→GoogleNews→Electoral outcome <sup>a</sup>	.22	.00	.00
r <sup>2</sup> electoral outcome	.40	.27	.78
r <sup>2</sup> GoogleNews	.11	.27	.02
Chi <sup>2</sup>	12.954	9.253	5.510
df	7	9	6
p	.073	.414	.480
RMSEA	.082	.015	.000
CFI	.961	.998	1.00
BIC	114,846	101,442	78,290
N	128	128	128

\*p<0.05; <sup>a</sup>Bootstrap with maximum likelihood estimation, 1,000 samples, bias-corrected confidence intervals of .95