

# Zero Email initiative: a critical review of Change Management during the introduction of Enterprise Social Networks

Christian Albert Oettl<sup>1</sup> · Katharina Beck<sup>1</sup> · Franziska Marie Rauffer<sup>1</sup> · Anja Teresa Priglmeir<sup>1</sup> · Markus Böhm<sup>1</sup> · Helmut Krcmar<sup>1</sup>

Published online: 12 March 2018  
© Association for Information Technology Trust 2018

**Abstract** How can a company successfully improve collaboration and teamwork with the introduction of new IT tools? This case offers new solutions to this question by reviewing two Change Management processes which took place over a period of 6 years within Atos' Zero Email initiative. The change processes of (1) replacing internal emails with an Enterprise Social Network (ESN) solution in 2012 and (2) replacing the introduced ESN solution by a second, enhanced ESN solution in 2016 are analyzed. By comparing them to established Change Management theories, important key factors of a change process can be highlighted and the evolution of Change Management within an innovative, multinational IT service provider is shown. The Teaching Case is accompanied by in-depth Teaching Notes where we craft a synthesized checklist for thorough Change Management that addresses IT adoption issues and mitigates the critic that theoretical models are too rigid for vivid organizations. In addition to this

comprehensive “360°-analysis” consisting of personal interviews, inquiries on organizational communication and research on Change Management theory, the Innovation Diffusion Theory (including a reflection of recognized technology acceptance models) is used to find explanations for possible deviations from the expected outcomes.

**Keywords** Teaching case · Zero email · Enterprise social network · Change management · Diffusion theory · Technology acceptance models

## Introduction

Have you ever been in a situation, where you were completely convinced and enthusiastic about “something”? A “something” that would solve multiple problems at once leading to overall improvements and profits that everybody would benefit from. A “something” where the necessity was crystal clear to you and was supported by valid arguments and profound research that supported all your assumptions scientifically. A solution that all stakeholders would benefit from as soon as everybody was on board. There was no doubt that you will receive endless glory and a life-size statue of yourself for your inspiring and world-changing solution. You first introduce your “something” to a friend... “Yes, great... you should absolutely do that”. Then, you explain to your peers... “Hmmm... but this “something” would interrupt another already existing “something” (actually a “something” the peers had once received a live-size statue for) which still works fine after several years and, unfortunately, you need to realize that a third “something” already needs our full attention at the moment; and, by the way, Mr. Somebody (a very important

---

✉ Christian Albert Oettl  
c.oettl@tum.de; oettl@atos.net

Katharina Beck  
bsckatharina.beck@tum.de

Franziska Marie Rauffer  
franziska.rauffer@tum.de

Anja Teresa Priglmeir  
anja.priglmeir@tum.de

Markus Böhm  
markus.boehm@in.tum.de

Helmut Krcmar  
krcmar@in.tum.de

<sup>1</sup> Department of Informatics - Chair for Information Systems, Technical University of Munich, Boltzmannstr. 3, 85748 Garching, Germany



somebody you never met) once said something about that this kind of “something” you mention does not work”.

Still interested in managing change? It is a rough road with twists and turns; full of emotions and challenges, but crucial for building up organizations and necessary when learning about how organizational development works (or does not work).

Organizations face serious challenges when implementing change on a large scale in complex environments. As a precondition, Change Management (CM) requires thorough planning and an execution attitude that consists of positivity and endurance, especially, within organizational development that is closely intertwined with CM. Change within organizations starts with diverse initiatives to enforce strategical, tactical, and operative measures to achieve the desired change goals. In cost-driven markets, organizations often express their change intentions, but they also need to mobilize dedicated and shared resources to conduct the change successfully (Beer and Nohria 2000; Creasey 2016).

A very prominent example of organizational development and organizational change is illustrated by the approach of Atos with their target of abolishing email from internal communication.

“We are producing data on a massive scale that is fast polluting our working environments and also encroaching into our personal lives. At Atos we are taking action now to reverse this trend, just as organisations took measures to reduce environmental pollution after the industrial revolution”—Thierry Breton, 2011 (Atos 2017b).

With this statement, Atos Chairman and CEO Thierry Breton announced the so-called Zero Email initiative in 2011 with the ambitious goal of eliminating all internal emails at Atos within the next 3 years (Atos 2013).

Atos introduced an Enterprise Social Network (ESN) as the central element of this profound organizational change target. ESNs are social platforms that support knowledge workers to communicate with colleagues, to identify potential communication partners, to create, publish, or edit their own contributions, and also to access content created by other users (boyd and Ellison 2007; Leonardi et al. 2013). Thereby, users are required to take an active and open part within the ESN by sharing their thoughts, knowledge, and capabilities (e.g., in discussions or by voicing criticism). The existence of personalized user profiles is a key characteristic of ESNs. These profiles link authors to content and label ESNs as social platforms (boyd and Ellison 2007).

ESNs evolution can be traced back to the need of organizations to efficiently create, develop, and distribute business relevant information within today’s dynamic, decentralized, virtual, and project-driven work

environments (Strother et al. 2012). Especially, as most information and communication solutions today (email, intranet, wiki, instant messaging...) rather lead to information overload than to efficient processing of business relevant information (Verdot et al. 2011; Sobotta and Hummel 2015). Socio-technical solutions, such as ESNs, are discussed to increase the flexibility and the effectiveness of communication and collaboration in organizations to the necessary level (Moser et al. 2002).

ESNs determine the productivity improvement of knowledge workers compared to existent technological solutions (mostly email) today (Treem and Leonardi 2013). ESNs receive increasing attention and are widely used especially in multinational organizations (Ellison et al. 2015; Leonardi et al. 2013). Business analysts found out that “companies could raise the productivity of knowledge workers by 20–25%” with the use of ESNs (Bughin et al. 2012).

However, even if ESNs are introduced in organizations, the value of their contributions seems unclear and 80% of projects do not fulfill expectations (Mann et al. 2012). The typical ROI of any social technology becomes positive when 15–25% of employees use such technology extensively and companies should not assume that “If we build it, they will come” (Bughin 2013).

“Atos SE (Societas Europaea) is a leader in digital transformation with circa 100,000 employees in 72 countries and pro forma annual revenue of circa €12 billion. Serving a global client base, the group is the European leader in big data, cybersecurity, and digital workplace, and provides cloud services, infrastructure and data management, business and platform solutions, as well as transactional services through Worldline, the European leader in the payment industry” (Atos 2016, p. 4). Furthermore, Atos owns several sub-brands, such as Worldline, Unify, or Atos Codex. As a leading information technology services company, Atos focuses on business technology that powers progress and helps organizations to form their future (Atos 2017a).

This teaching case depicts how Atos coordinated and managed two large change processes to adapt their organizational speed to the fast digital working pace in today’s markets. This case is based on the data of seven expert interviews with key stakeholders (change manager, product owner, and change agents) of the introduced changes as well as company documentation and official product descriptions. It profoundly outlines all the complex and energetic factors of Change Management. The power of Change Management to construct and deconstruct opportunities for organizational development is thereby emphasized. In lively discussions and debates, you are invited to learn more about factors of good Change Management and to experience the challenging



dilemmas and hurdles that need to be solved throughout the Change Management process.

## Context of the blueKiwi change

### Guiding change: Zero Email initiative

Over time, the gradually increasing email overload at Atos became an unbearable problem that the company had to face and a new solution had to be found (see Fig. 1). Email overload is a term used when people struggle with too many emails, when email software is used to support the collaborative quality of task and project management (Bellotti et al. 2005). This results in the feeling of being overloaded. To better understand this phenomenon and its impact, surveys and analyses were conducted to show the amount of emails used at Atos and in general. As displayed in Fig. 2, a study conducted at Atos among 300 employees measuring their total email traffic for one week showed that they generated 85,000 messages (sent or received emails) (Silic et al. 2015).

Figure 3 shows another alarming statistic, which revealed that in 2011 73% of employees spent more than one-quarter of their time managing email, and the majority of them see this time as wasted, providing no added value to their productivity (Silic et al. 2015).

The unsustainability of emails within Atos has many reasons and many factors contribute to the circumstance that email has been perceived as outdated regarding information management issues. Increasing data transfer and the incorrect usage of emails have led to unacceptable numbers of “unnecessarily” sent emails within the firm. Email misuse, e.g., by cc’ing emails unnecessarily, results in a large amount of time being spent to structure the email inbox and the information within. If the time used for email management could be reduced, this would result in an overall productivity improvement within companies and an enhanced performance of employees (Shipilov and Crawford 2015). Increasing productivity and decreasing stress levels while not processing messages is confirmed through an experiment conducted by researchers from the University of California, Irvine and the US Army (Burkus 2016b). Especially, the younger generation prefers other sources for communicating, mainly because constantly better communication and collaboration techniques are

emerging. Only 18% of them prefer to use email as a method for communication (Schwabel 2014).

These statistics support the call for a Zero Email initiative. The initiative’s goal was to eliminate internal emails at Atos within 3 years by reallocating communication and collaboration from conventional tools like email and telephone to new social collaboration tools (Atos, 2013). *Which means of communication would you prefer to use for communicating with your colleagues—ESN, email, or do you prefer another alternative—and why? What could you do to reduce your personal email traffic?*

### blueKiwi as the driving force of Zero Email

The key to the success of the Zero Email initiative with the aim of ensuring high quality work environments has been the deployment of a series of sophisticated collaboration technologies (Atos 2013). During 2012, Atos introduced several collaborative, social media-based communications tools. The biggest project was the acquisition of the startup company blueKiwi in April 2012. Its ESN solution, called “blueKiwi”, satisfied all internal requirements for a tool that would help Atos become a Zero Email company (see Fig. 4). It enables the organization to improve productivity through social collaboration on a global level. The rollout was supposed to transform Atos into a social organization, making it a better workplace, increasing business synergies and efficiency and creating the necessary work environment for the future. In addition, Atos’ goal was to enter the newly emerging social IT market with blueKiwi and the launch of two joint ventures, creating synergies by connecting their expertise in consulting, integration, and Change Management (Atos 2012).

blueKiwi focuses on the creation of online work communities across Atos on a global scale. This is supposed to ensure productivity by creating work spaces for groups, services, or projects. In the literature, several definitions of virtual communities exist. The active interaction between people with the goal of sharing knowledge online differs from the conventional definition of communication via email. The following set of conditions describes an online community: people, interactivity, goal sharing, and cyberspace (Koh and Kim 2004). On the other hand, email basically is a method of exchanging digital messages from one sender to one or more recipients (Silic et al. 2015). When analyzing the blueKiwi community feature, which is

**Fig. 1** Teaching case structure “email”



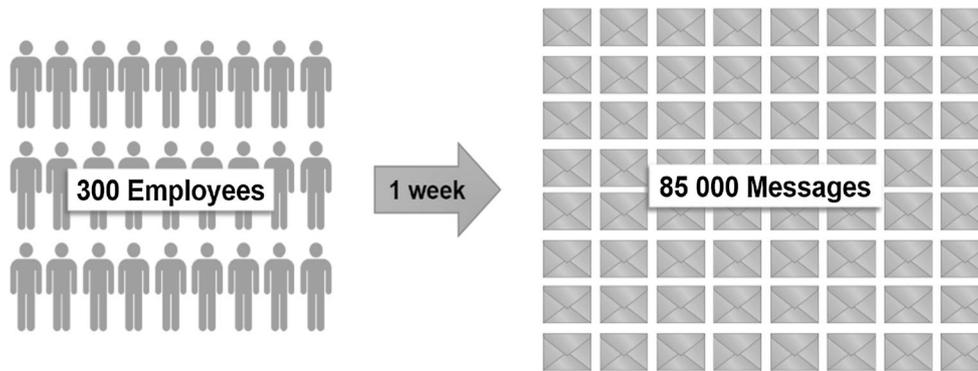


Fig. 2 Email traffic at Atos Reproduced with permission from (Silic et al. 2015)

Fig. 3 Time spent on emails Reproduced with permission from (Silic et al. 2015)

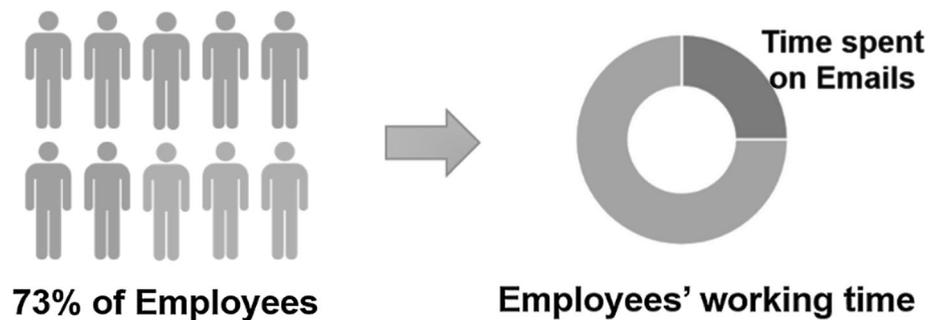
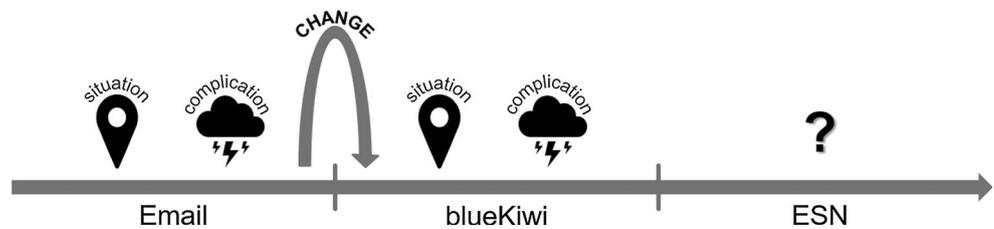


Fig. 4 Teaching case structure “blueKiwi”



one of the most important functions of the tool, it becomes apparent that all criteria of online communities are fulfilled. All employees of Atos work together interactively to achieve the organizations’ goals using real-time features that are easily accessible in cyberspace. This core feature is enhanced with activity feeds enabling real-time updates from contacts and communities. Always being up-to-date increases work productivity and performance. blueKiwi also supports public and private instant messaging with the possibility of attaching links and documents, tagging names, and formatting the text (blueKiwi 2017). In addition, voice mails as well as global content sharing options are implemented (Atos 2013). To track performance and user behavior the blueKiwi infrastructure also provides analytical options to measure upcoming trends, the participation of the employees, and how to enhance their adoption of the tool. Nowadays, addressing security issues within social networks is highly important, wherefore the tool follows security standards. Mobility features ensuring that blueKiwi can be used on mobile devices, complete the

functionality portfolio (blueKiwi 2017). In Table 1, an overview of blueKiwi’s functionalities is shown. Figure 5 additionally shows a screenshot of blueKiwi to provide an overview of the application user interface.

**The blueKiwi change**

**Change Management: integrating blueKiwi into Atos**

*“Never underestimate the power of the mind to disempower.”*

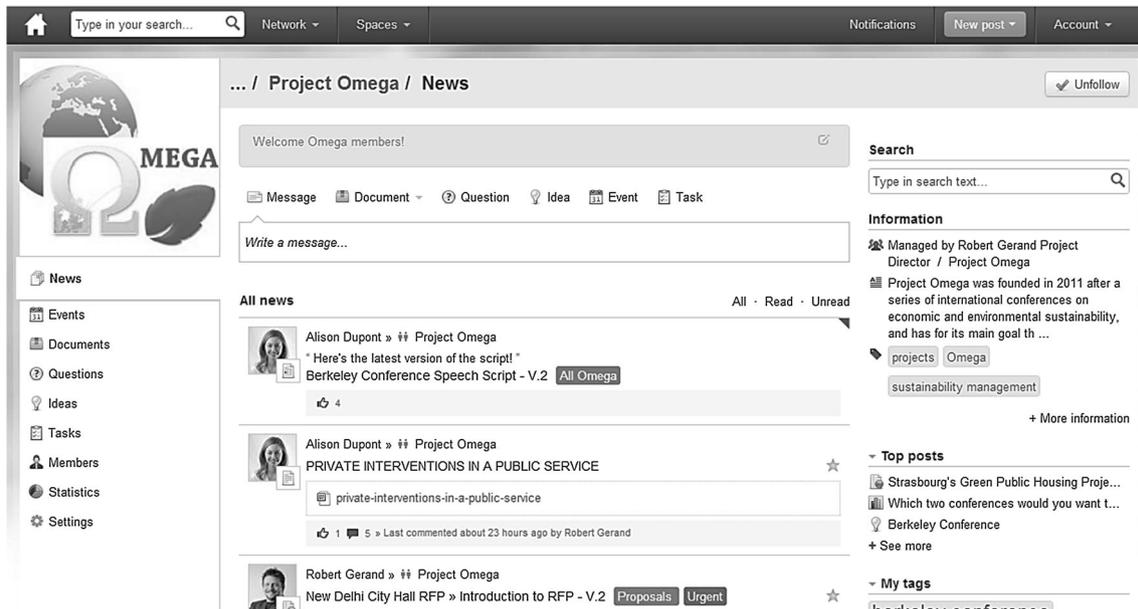
– John P. Kotter.

As Kotter states, the minds of people can have a huge impact on the success of change. Therefore, change must start with changing the mindset of employees. To make sure that the employees accepted the ESN, several cultural shifts needed to be conducted (Silic et al. 2015).



**Table 1** blueKiwi's functionalities (blueKiwi 2017)

blueKiwi's functionalities
Online work communities
Activity feeds enabling real-time updates from contacts and communities
Public and private instant messaging
Global content sharing
Applications for mobile devices
Statistical options for analysis of community and workspace activities

**Fig. 5** Screenshot of blueKiwi Reproduced with permission from (Whatasoftware 2017)

- Individual to community shift: change from thinking as an individual to thinking within a community by removing information silos.
- Controlling to leading shift: enabling a collaborative leadership factor by promoting a new management style.
- Experts to ambassadors' shift: promoters for the initiative ensuring the employees support.
- From information overload to time for business shift: producing better results using the new ways of collaboration.

All these cultural shifts could only be achieved if Atos managed to successfully conduct a change process. The approach Atos chose consisted of several smaller projects within the overall process. It did not follow a specific Change Management model, but a plan and vision for the change facilitated the whole process by guiding managers and team leaders.

The following examinations will focus on the change process that has been conducted within Germany. In some countries, the change process started at the end of 2012.

Plans for the blueKiwi integration in Germany started in the middle of 2012, the actual Change Management process in 2013. Because the change specifications came from the global Atos headquarters in France, the rollout team of Atos in Germany did not shape and plan the change process, even though it would have been highly important to examine the current regional circumstances. The change started with the announcement of the Zero Email initiative which formed the vision behind all Change Management activities. The vision created a clear picture of the goal to be achieved and strengthened people's motivation to change. The change team's responsibilities lied within communicating the global goals to the single divisions in all German Atos locations. To communicate efficiently, their main tasks included building communities within blueKiwi and the planning and execution of blueKiwi trainings. *Which measures can you think of that would facilitate cultural shifts within an organization?*

The individual to community shift was achieved by various initiatives. Sharing success stories was an initiative where successful examples of social collaboration were gathered to serve as a positive example for employees.



Many communities were created in which employees and experts could share their knowledge more easily. Especially, the inner sense of urgency of every individual employee must be driven forward to ensure attention for the whole process and the goal.

To achieve the cultural shift from controlling to leading which implied gaining leaders' engagement, a bonus scheme was developed to motivate management to support the Zero Email initiative. Bonuses were connected directly to the success of the initiative which helped with motivating leaders. Over 5,000 managers were trained to promote the benefits of the new ESN with the help of use-cases and recommendations of how to lead by example within their communities.

Building an ambassador network was another important shift within the Change Management process. At the early stages of the change, the ambassador network was used to promote the Zero Email goal in general. After the blueKiwi tool was launched, the ambassadors' role shifted. They then had the task to spread blueKiwi throughout Atos and motivate employees to use the new tool. They achieved this by providing local trainings and spreading their enthusiasm about the "new world".

### Initiatives driving the change process

On-site trainings were an important part of the whole change process and were differentiated into multi-level trainings for beginners, advanced trainings, and community leader trainings. The initiative started with awareness trainings to show the need for a new tool. As a first step, an email guideline was published emphasizing the correct use of email to create awareness of the disadvantages of incorrect email usage. These trainings also informed people on when to use other tools, e.g., SharePoint for document sharing, which ensured that users were made aware of the advantages of different types of IT tools. In end-user trainings, the Atos employees learned how to access and start using blueKiwi. Future community leaders were educated with the help of special courses and people were animated to start their own communities. Online tutorials were also an important aspect, where different age groups needed different kinds of attention. In general, younger employees were more open to the new tool and the change process than the older generation. Nevertheless, some enthusiastic pioneers among the employees could be identified and developed to encourage their co-workers or team members to fight for the vision. At this time, a well-organized feedback loop had just barely started and reaction time to change requests was not as fast as it should have been.

Above all, discussions and negotiations with works councils and lower level management were conducted.

This exchange provided insight into all aspects affected by the ESN and was valuable to prepare and conduct the decision-making processes in which management and works councils were asked to agree on fast but reasonable implementation terms.

From a global view, blueKiwi was required to become introduced as a mandatory tool within the Atos communication environment. Here, international differences in law and the role and level of participation in decision-making of works councils during the implementation phase had to be considered thoroughly. A fast and pragmatic implementation driven by strong top management support from the global Atos management had to be balanced with important and justified local requirements in Germany. One example was that analyses and discussions with data protection officers and works councils revealed issues that new terms of regulation were required before blueKiwi could be rolled out. Especially, questions of (a) data privacy, (b) the so far unknown high level of transparency, and (c) how to deal with an open and uncontrolled community forming were major topics in the negotiations with the works councils. All in all, blueKiwi could not be introduced as the system that completely replaces internal email within Atos as desired. For communication, alternative tools such as email clients still have to be offered.

Throughout the whole process, communication was the key aspect during the integration. Multiple communication channels such as written handouts or face-to-face communication were utilized to convey the Zero Email message and the necessity of blueKiwi through the Change Management team, the CEO, and individual service lines. Mostly, the communication was conducted as a top-down approach. Expectations for the new tool were high from the start as the Zero Email initiative was highly praised and the new tool strongly advertised. After the initial performance difficulties and too many unrealistic promises, the tool managed to live up to many of the employees' and managers' expectations.

The Change Management process is ongoing. blueKiwi trainings are still conducted for people who are new in the company and people who have not been using blueKiwi until this point. In addition, lessons learned workshops were held during the whole process to ensure the Zero Email initiative's ongoing success and to support future changes.

### Context of the Circuit change

#### Zero Email—mission accomplished?

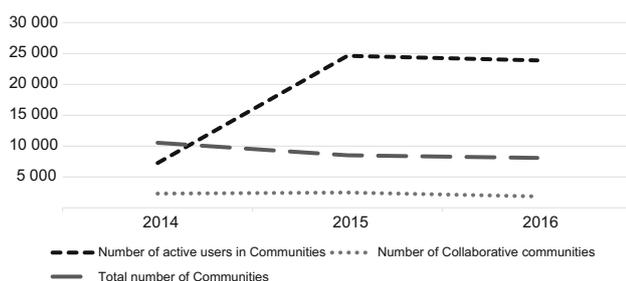
The Atos Zero Email initiative appeared to be working, even though it did not reach the target of Zero Emails



within the company (Burkus 2016a). However, using a social collaboration platform has many more (long-term) advantages. Because of the smart way of communication, larger and more flexible teams can be introduced to perform more complex projects. Another beneficial point is the easy transformation of knowledge and fast access to information, which is also related to better project work. As it is nearly impossible to abandon the whole email traffic in an organization, the vision of Atos to become a Zero Email company seems hardly realizable. The constant level of emails from external partners and third parties requires Atos' employees to deal with numerous emails daily (Silic et al. 2015).

However, the initiative appeared to have visible success until the end of 2013. Atos could reduce the overall internal email flow by 60%, shown by the weekly number of messages per employee, which decreased from 100 emails in 2011 to < 40 in the end of 2013 (Burkus 2016a). Initially, the email decrease implicated a high adoption rate of blueKiwi and indicated the replacement of emails by the functionalities of the new tool (Silic et al. 2015). Especially, the community-based environment of blueKiwi supported the reduction of email use for internal communication. Despite the seemingly positive result at the beginning, a stagnation of the process emerged over time.

As presented in Fig. 6, the number of communities existing in blueKiwi at Atos declined from 2014 to 2016. Interestingly, an increased number of active users joined blueKiwi's communities until 2015, whereby in 2016, less users actively participated in these communities. At this time, Atos announced the acquisition of Unify, a worldwide leader in solutions for real-time communication and real-time collaboration. This allowed Atos to address the stagnation problem and the arising resignation of the users of blueKiwi and to revive the Zero Email campaign by Circuit, a cutting-edge ESN solution developed by Unify. *Would you rate the achievements of the blueKiwi change as successful and why?*



**Fig. 6** blueKiwi developments Reproduced with permission from (Atos 2016)



## About Unify

Unify provides solutions for the “workplace of the future” and develops cloud-based platforms, tools, channels, and media to enhance real-time communication and real-time collaboration within organizations worldwide. Especially, the product Circuit can be seen as a powerful, well-known, and recognized collaboration solution (Unify 2017).

Founded in 2008 as Siemens Enterprise Communication and headquartered in Munich (Germany), Unify was a joint venture between The Gores Group (51%) and Siemens (49%), and active mainly in Europe and in the Americas. With 5600 employees and active in over 60 countries, Unify generated €1.2 billion revenue in 2015. (Atos, The Gores Group and Siemens 2015).

The acquisition of Unify was announced in 2015 and strengthened Atos' portfolio of integrated communication solutions. On January 20th of 2016, Atos announced having completed the acquisition of Unify, the world number three in integrated communication solutions. The acquisition creates a unique integrated proposition for unified communications improving the social collaboration, digital transformation, and business performance of its clients (Atos 2016a, p. 7).

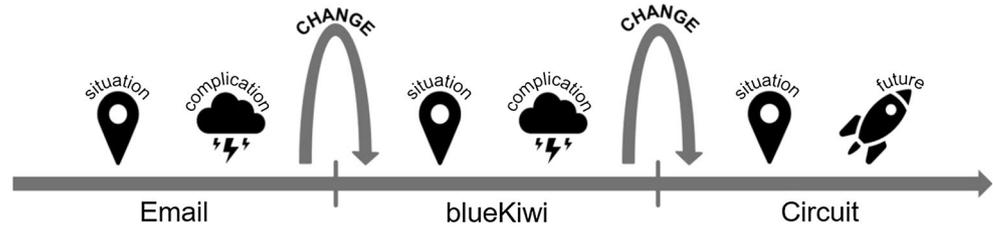
Thierry Breton, Chairman and CEO of Atos stated: “Unify portfolio [...] is a perfect match that uniquely complements existing Atos digital capabilities” (Atos, The Gores Group and Siemens 2015). With the takeover, Atos strengthened its opportunity and knowledge to enhance its end-to-end solutions in the area of unified communications, to enable effective social interactions and, therefore, higher working and business performance for their customers (Atos, The Gores Group and Siemens 2015).

Central functions, like human resources and purchasing, were merged and sales and marketing of both companies were unified to create a consistent customer appearance. In parallel, a thorough change program started to integrate the Unify portfolio and business.

## Circuit as the missing puzzle piece for Zero Email?

As mentioned above, Unify continues to provide solutions for unified communications and real-time issues within Atos. With its WebRTC (Web real-time communication)-based communication and collaboration solution called Circuit (Unify 2016), a high-value product was already established (see Fig. 7). Circuit offers various functionalities. The main strength of Circuit lies within real-time communication. Individual conversations for each work stream can be created which results in a reduced information volume. Users only receive relevant information and they profit from shorter connection times for conversations: IDs and telephone bridge numbers are not

Fig. 7 Teaching case structure



necessary. This functionality makes communication for geographically distributed teams easy using calls via PC but also via phone while moving, screen sharing, and other features (Unify 2016). An analysis of blueKiwi within Atos was and further will be conducted to examine which functionalities of blueKiwi are well proven and, therefore, should also be integrated into Circuit. blueKiwi's open community environment and its searching functionalities are going to be integrated, although not to such a large extent. As extensive and informative user profiles emerge as popular among employees and also seem to be very useful when it comes to expert search, profiles within Circuit are getting extended. Further functionalities which may be integrated in future are the survey and analytic options, theme tags within communities, dashboards, wikis, and micro-blogging. Because of the cloud-based structure of Circuit, it might be developed into a platform-providing service where other platforms such as SharePoint can be integrated. This approach will ensure the flexibility and integrity of the Circuit solution. In addition, it is planned to implement a notification center that combines news of all platforms.

Circuit delivers many functionalities that blueKiwi cannot provide, especially concerning the daily communication between employees. A comparison of blueKiwi and Circuit is shown in Table 2. Integrating and extending Circuit within Atos can, therefore, be an important step towards the Zero Email goal at Atos. *Do you think the different characteristics of blueKiwi and Circuit require addressing employees differently during the respective Change Management process? What would your message be to the employees?*

## The Circuit change

### Change Management: integrating Circuit into Atos

As stated before, Circuit has many features that support Atos and its employees to manage business processes better and increase performance and productivity. The previous tool for communication within Atos was Skype for business and its replacement by Circuit is now being internally discussed. Furthermore, blueKiwi as a powerful solution

**Table 2** Comparison of blueKiwi and Circuit functionalities (blueKiwi 2017; Unify 2016)

	blueKiwi	Circuit
Main goal	Collaboration as well as information and knowledge sharing tool used as social intranet	Real-time communication tool developed as a platform
Communities	Public or private teamwork spaces for cross-functional information sharing across borders and hierarchies	Team collaboration can be organized in conversations, searchable threads consisting of texts, documents, and other input
Communication	Private messages and community messages	Real-time call options, conferences, and screen sharing with high-quality voice and HD video that can be moved from device to device. Private and group messages can be posted in conversations
Content sharing	Content can be shared as member posts or within communities. Following content can be created and uploaded in blueKiwi: Messages, Documents (Notes, Files, and Bookmarks), Videos, Surveys, Events, Ideas, Questions and Tasks. Structure can be accomplished by using tags, comments and notes. Graphical adjustments are possible	Box.com cloud for file sharing All conversations can be searched to find people, files, and specific words
Profiles	Detailed profiles on which member searches can be performed	Simple profiles with basic information about user
Analytics	Statistical options for analysis of community and workspace activities	No analytic features
Mobility	Applications for tablet and phone devices	Applications for tablet and phone devices. Circuit meeting room device for conferences within small rooms



for community-based collaboration has been taken out of the market and substituted by Unify's solution, which has been enriched with added value gained from experiences made with blueKiwi (Bohn 2017). For an indefinite time, blueKiwi remains within Atos parallel with Circuit because of the high rate of knowledge accumulated and saved over time within the tool.

To fully establish the new solution Circuit and to ensure the successful change within Atos, a gradual integration process is planned. The process is not based on a theoretical Change Management model, but nevertheless structured and scheduled. To include knowledge and experiences of previous changes and to lead the current change, the previous Change Management team has been reactivated. Before the Change Management process started, several steps had to be taken to gain knowledge about the status quo within Atos. This started with a blueKiwi application analysis, which consisted of an in-depth user survey to determine user relevant blueKiwi features and functionalities that should remain in the new ESN solution. Performance characteristics and deficits of blueKiwi were compared with those of Circuit. Especially, the stability of the product and agile development methods are emphasized and focused on to guarantee a reliable tool that enhances user experience. In addition, during the blueKiwi change, the attitude and collaboration style within the organization has changed. A higher level of openness and transparency now facilitates the consolidation of blueKiwi and Circuit. The Zero Email initiative supports continuity within the Circuit change, too, but is not as highlighted and hyped as during the blueKiwi change. Circuit is not viewed as a disruption but as an instrument to reach the greater goal. Furthermore, as the change process started, it was divided into several blurred stages which only serve as steps for better structure.

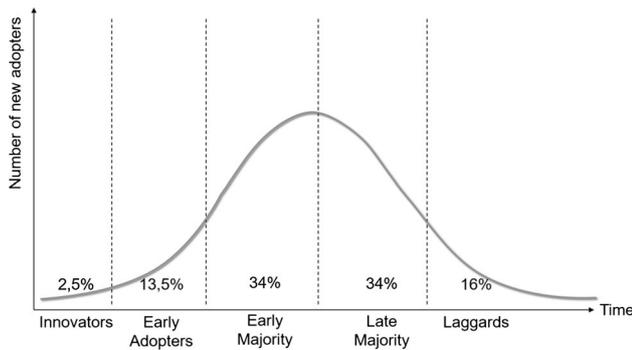
First, a proof of concept was conducted in autumn 2016 before the Circuit rollout. Selected users were trained and received access to Circuit as the so-called "Early Adopters" with the aim of transferring an understanding of the acceptance and adoption of Circuit within Atos. The planned Change Management was tested and evaluated. Afterwards, the network of ambassadors was adopted from the existing pool of ambassadors established during the blueKiwi change and additional ambitious employees. To enable the ambassador network, technical trainings were given and detailed information about Circuit's functionalities were shared. The main role of an ambassador is to be a regionally located contact for employees. With their knowledge, they support and stimulate the adoption process within these locations and train groups of people on how to use the tool according to their needs and cultural background. This also includes age-related adoption issues. Ideally, this leads to help for self-help within these groups.

In the second phase, which lasted from November to December in 2016, every Atos' employee received a Circuit account. The goal was to evaluate if all services functioned correctly and if Circuit fits within the Atos infrastructure and environment. Usage is voluntary because of agreements with the works councils, and the employees are asked to gain experience with the new tool and give feedback. Therefore, a wide range of feedback channels was built up, including forums, support chats, customer advisor reconcile, and the internal product manager community. In addition, the assessment of the fulfillment of "must-have" criteria of Circuit within Atos was conducted during this phase. Skype for business is planned to be replaced as one of the next steps, as all necessary functionalities are represented in Circuit. In a last phase from December 2016 to April 2017, the adoption of Circuit was supported by different training methods, use case courses, videos, and further awareness raising communication. The trainings were mostly given online, could be attended on a voluntary basis and were accessible without any restriction for all employees. Hereby, employees should receive a positive first impression of the tool. Circuit's short update cycles are supposed to ensure the users' curiosity. Trouble free usage is vital at the beginning which is why fast response teams were introduced to prevent the initial difficulties and dissatisfaction. The communication within the process is planned as a top-down approach to emphasize the importance of the usage. "Multipliers" were identified and discussions with top management and works councils had and will have a large impact on future processes and steps. With an appropriate agreement, employees and team members could be encouraged by middle management to use Circuit in daily communication which immediately increased the number of active users. Here, especially, the communication between Atos and new Atos employees within the Unify organization (e.g., within the integration project) via Circuit helped to rise the utilization frequency and to convince more and more employees to use Circuit. This experience strengthened the organization-wide understanding of the sense—to speed up organizational communication and collaboration—behind the new system and the executed change process. *Which assets were created during the blueKiwi change that now support the Circuit change? How can these assets be utilized for the Circuit change process?*

### Understanding change

To analyze Atos' innovative and aggressive approach of organizational development, the well-recognized Innovation Diffusion Theory (IDT) of Rogers (2003) is subsequently used. The IDT categorizes types of people and





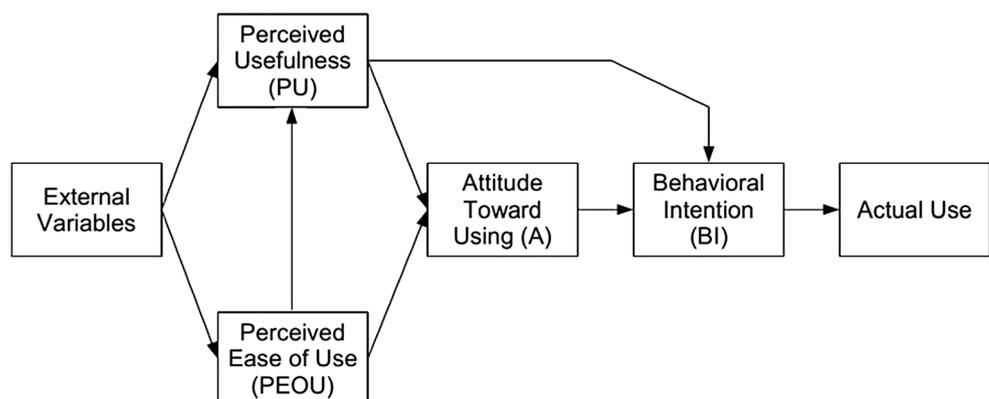
**Fig. 8** Adoption/innovation curve Reproduced with permission from (Rogers 2003)

their attitude towards change on an organizational level (see Fig. 8).

People categorized as Innovators have a high interest in new ideas and are very venturesome. Early Adopters are usually more integrated into the local social system and characterized by a high degree of opinion leadership. In contrast, individuals belonging to the Early Majority are not opinion leaders, but interact a lot with peers. The Late Majority adopts an innovation, because this adoption is necessary to maintain their position within the organization or because of high peer pressure, which means that they only adopt if most of the system already has proven efficient. The last category of people to adopt an innovation is the Laggards which tend to be quite isolated from the social system and are past-oriented. Laggards are very suspicious of innovations, so they have to be completely sure, that the innovation will not fail before they adopt it (Rogers 2003). With this pattern, it is possible to understand change processes and how to adapt Change Management when necessary. *In which category would you see yourself during introduction of Circuit and why? As a manager, on which type of user would you focus your Change Management efforts?*

In addition, individual user acceptance and adoption of information systems, e.g., ESNs can be analyzed using the

**Fig. 9** Technology acceptance model Reproduced with permission from (Davis et al. 1989)



Technology Acceptance Model (TAM) (Davis et al. 1989). Here, the TAM and its enhancements TAM2 and TAM3 centre two determinants of individual IT adoption and use: perceived usefulness and perceived ease of use (see Fig. 9).

Perceived usefulness is the extent to which a person believes that using information technology will enhance his or her job performance. Perceived ease of use defines the degree to which a person believes that using an IT will be free of effort. Both determinants describe the attitude of an individual towards using a new technology, which again predicts actual use. When introducing a new information system within an organization the TAM can help to understand peoples' needs during Change Management. *What would be the 'perceived usefulness' and the 'perceived ease of use' of using Circuit for you?*

### Questions for reflection

1. As a manager, would you support the Zero Email initiative? How would you contribute to the success of this initiative?
2. From your perspective, which three aspects during the introduced two Change Management processes were performed especially well and which three aspects impacted the change negatively?
3. Can you identify ten measures for successfully implementing change and how would you prioritize them?

### Debate topic

Discuss the following bold statements bearing in mind the case described above. Think about arguments for and against these statements.

***Technology is not key! It is all about professional Change Management and a bold strategic vision to create movement within an organization.***



When leading Change Management projects, you are better off by focusing your efforts on the change repudiators. According to online word of mouth (WoM) research the effect of responding to positive WoM is negative and that of responding to negative WoM is positive (Deng and Ravichandran 2017). This also counts for Change Management.

**Open Access** This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

## References

- Atos. 2012. Registration Document 2012. <https://atos.net/content/dam/global/documents/investor-financial-reports/atos-registration-document-2012.pdf>.
- Atos. 2013. Annual Report 2013 at the Core of Life Today. Annual Report. [https://atos.net/content/dam/global/reports-2013/Skins/Atos/doc/PDF\\_RA\\_UK/atos-annual-report-2013.pdf](https://atos.net/content/dam/global/reports-2013/Skins/Atos/doc/PDF_RA_UK/atos-annual-report-2013.pdf). Accessed 02 July 2017.
- Atos. 2016. Registration Document 2016. <https://atos.net/wp-content/uploads/2017/03/atos-2016-registration-document.pdf>. Accessed 02 July 2017.
- Atos. 2017a. Company Profile. <https://atos.net/en/about-us/company-profile>.
- Atos. 2017b. Zero Email. <http://uk.atos.net/en-uk/home/we-are/zero-email.html#>. Accessed 02 July 2017.
- Atos, The Gores Group, and Siemens. 2015. Atos to Acquire Unify from Gores and Siemens. [www.siemens.com/press/PR2015110065COEN](http://www.siemens.com/press/PR2015110065COEN). Accessed 02 July 2017.
- Beer, M., and N. Nohria. 2000. *Cracking the Code of Change*. Harvard Business Review.
- Bellotti, V., N. Ducheneaut, M. Howard, I. Smith, and R.E. Grinter. 2005. Quality Versus Quantity: E-Mail Centric Task Management and its Relation with Overload. *Human Computer Interactions* 20: 89–138.
- blueKiwi. 2017. Core Features. <https://bluekiwi.io/features/>. Accessed 02 July 2017.
- boyd, d.m. and Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication* 13(1): 210–230.
- Bohn, P. 2017. blueKiwi Joins Unify. <https://bluekiwi.io/blog/blue-kiwi-joins-unify/>. Accessed 02 July 2017.
- Bughin, J. 2013. *Look Beyond Your Social Media Presence*. <https://hbr.org/2013/01/look-beyond-a-social-media-presence>.
- Bughin, J., R. Dobbs, C. Roxburgh, H. Sarrazin, G. Sands, and M. Westergren. 2012. The social economy: Unlocking value and productivity through social technologies. <https://www.mckinsey.com/industries/high-tech/our-insights/the-social-economy>.
- Burkus, D. 2016a. Some Companies Are Banning Email and Getting More Done. <https://hbr.org/2016/06/some-companies-are-banning-email-and-getting-more-done>. Accessed 02 July 2017.
- Burkus, D. 2016b. Why Atos Origin is Striving to be a Zero-Email Company. <https://www.forbes.com/sites/davidburkus/2016/07/12/why-atos-origin-is-striving-to-be-a-zero-email-company/#386d44518d0f>. Accessed 02 July 2017.
- Creasey, T. 2016. The History and Future of Change Management. Retrieved July 2, 2017 from <https://www.linkedin.com/pulse/history-future-change-management-tim-creasey>.
- Davis, F.D., R.P. Bagozzi, and P.R. Warshaw. 1989. User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science* 35 (8): 982–1003.
- Deng, C., and T. Ravichandran. 2017. When Do Managers Respond to Electronic Word of Mouth? *Academy of Management Proceedings* 1: 16938.
- Ellison, N.B., J.L. Gibbs, and M.S. Weber. 2015. The Use of Enterprise Social Network Sites for Knowledge Sharing in Distributed Organizations. *American Behavioral Scientist* 59(1): 103–123.
- Koh, J., and Y.-G. Kim. 2004. Knowledge Sharing in Virtual Communities: An e-Business Perspective. *Expert Systems with Applications* 26: 155–166.
- Leonardi, P.M., M. Huysman, and C. Steinfield. 2013. Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication* 19(1): 1–19.
- Mann, J., T. Austin, N. Drakos, C. Rozwell, and A. Walls. 2012. *Predicts 2013: Social and Collaboration Go Deeper and Wider*. Gartner Inc. report.
- Moser, K., K. Preising, A.S. Göritz, and K. Paul. 2002. *Steigende Informationsflut am Arbeitsplatz: Belastungsgünstiger Umgang mit elektronischen Medien (E-Mail, Internet)*: Wirtschaftsverl. NW, Verlag für Neue Wiss.
- Rogers, E. M. 2003. *Diffusion of Innovations* (5th edn.). New York: Free Press.
- Schwabel, D. 2014. Gen Y and Gen Z Global Workplace Expectations Study. <http://millennialbranding.com/2014/geny-genz-global-workplace-expectations-study/>. Accessed 02 July 2017.
- Shipilov, A. and Crawford, R. J. 2015. How One Company Reduced Email by 64%. <https://hbr.org/2015/06/how-one-company-reduced-email-by-64>. Accessed 02 July 2017.
- Silic, M., A. Back, and D. Silic. 2015. Teaching Case—Email: From Zero to Hero—The Beginning of The End? *Journal of Information Technology Teaching Cases* 5: 84–91.
- Sobotta, N., and M. Hummel. (2015). A capacity perspective on e-mail overload: How E-mail use contributes to information overload, in *System Sciences (HICSS), 2015 48th Hawaii International Conference on*, pp. 692–701.
- Strother, J.B., J.M. Ulijn, and Z. Fazal. 2012. Information overload: An international challenge for professional engineers and technical communicators, Vol. 2. John Wiley & Sons.
- Treem, J.W., and P.M. Leonardi. (2013). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Annals of the International Communication Association* 36(1): 143–189.
- Unify. 2016. Circuit—The Better Way to Work. <https://www.circuit.com/learn>. Accessed 02 July 2017.
- Unify. 2017. About Unify. <https://www.unify.com/us/about/company.aspx>. Accessed 02 July 2017.
- Verdot, V., B. Christophe, V. Toubiana, and M. Beauvais. 2011. Scribee Experimentation—Early Statistics on Email Conversations. In *Web Intelligence and Intelligent Agent Technology (WI-IAT), 2011 IEEE/WIC/ACM International Conference on* (Vol. 3, pp. 381–384). IEEE.
- Whatasoftware (2017). blueKiwi—Overview. <https://www.whatasoftware.com/overview/collaboration-productivity-software/blue-kiwi/MjMy>. Accessed 02 July 2017.

**Christian Albert Oettl** was born in Munich, Germany. He has 15 years of professional experience in the fields of information technology, business operations, organizational development,



leadership, and communication. He studied business administration at the Technical University of Munich (TUM), the Tsinghua University Beijing, the University of St. Gallen, and the Steinbeis Hochschule Berlin (Executive MBA in Communication and Leadership). Since 2015, he is researching phenomena of organizational development in the course of digital transformation as a doctoral candidate at TUM, at the Chair of Information Systems.

**Katharina Beck** was born in Munich, Germany. Since 2014, she is a bachelor student in Management and Technology at the Technical University of Munich.

**Franziska Rauffer** was born in Starnberg, Germany. She did her bachelor degree in Management and Technology at the Technical University of Munich. Since 2017, she is a master student also in Management and Technology at the Technical University of Munich.

**Anja Priglmeir** was born in Munich, Germany. Since 2014, she is a bachelor student in Management and Technology at the Technical University of Munich.

**Markus Böhm** is Research Group Leader at the Chair for Information Systems at TUM. He has a diploma in Information Systems from

the University Erlangen-Nürnberg and holds a PhD in Information Systems from TUM. Markus has a profound industry experience as project manager, analyst and software developer at among others fortiss, Siemens, Bosch and BMW. His research interests are the Role of IT in Mergers & Acquisitions (M&A) and Divestitures (Carve-Out), Business Model Innovation and IT-enabled Business Models. Markus is teaching Information and Knowledge Management at TUM, in the Executive MBA program at the University of Fribourg, Switzerland and at the Steinbeis School of Management and Technology.

**Helmut Kremer** is a Chair Professor of Information Systems at Technische Universität München (TUM), Germany. Before 2002, he was Chair for Information Systems, Hohenheim University, Stuttgart. Helmut is an AIS Fellow and has served the IS community in many roles, including as President of the Association for Information Systems. His research interests include information and knowledge management, service management, business process management, and business information systems. His work has appeared in Journal of Management Information Systems, Journal of Strategic Information Systems, Journal of Management Accounting Research, Journal of Information Technology, Information Systems Journal, and Wirtschaftsinformatik.

