

# Extending Business Processes into the World of Unstructured Collaboration



## Applies to:

SAP SNC 7.1; SAP GRC 10.0; SAP StreamWork

## Summary

Most business processes are creating information in two separate worlds, the world of unstructured information and the world of structured information. In the unstructured world, phone conversations take place, documents are getting exchanged, faxes are sent, or e-mails are getting exchanged between the business partners. The structured world consists of ERP systems, CRM systems, or Supply Chain systems, all of them are carrying and storing information in structured data formats. This article describes, how, with the help of Business Methods in StreamWork, the structured and unstructured information can be combined into a single workspace, eliminating the boundary between these, otherwise distinct, two worlds of information.

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**Michael Fry** started working for SAP America in 1999 and has since worked in various capacities as an instructor, programmer analyst, development manager and business consultant. He specializes in ABAP, HCM, and Workflow and co-developed some of the customer business methods described in this article.



**Christian Schmeisser** started working for SAP in 2007 as a BA student in Business Information Technologies. During his studies he started to focus on User Experiences at SAP. 2010 he started working at Value Prototyping in Walldorf. In the team of “Rich User Experiences” he is responsible for building prototypes bringing a new experience to SAP users.

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## Overview

SAP StreamWork is a workspace to combine both structured and unstructured information. The structuring entity known as an Activity can be set up for specific collaboration purposes. Tools like discussions, agendas, polls, timelines and documents can be added to an activity, all of them related to the specific collaboration purpose of the activity. Take as an example a board meeting. A StreamWork activity can set up to combine all preparations around the meeting, such as the collection of agenda items, discussions around logistics of the meeting, a timeline, supporting documents and more. The meeting participants are invited to the activity and StreamWork controls the access.

SAP Value Prototyping has developed a list of StreamWork Business Methods which enable the extension of structured SAP supported business process within the StreamWork collaboration platform. The context of a structured business object is often found in unstructured information such as e-mails or documents. Bringing both sources of information together into a single workspace allows for easy review of past decisions, audits and access to all information relevant for a specific business area.

The extension of SAP processes into StreamWork is achieved by sharing SAP backend data inside the StreamWork activity. This functionality, however, is not a one way street. The business methods allow for updating data in StreamWork and integrating them back into the SAP backend system. An example is the confirmation of a purchase order which is passed to the backend SAP system. The development of specific business methods, rather than embedding SAP backend user interfaces, allows for the development of context specific, easy to use user interfaces inside the StreamWork activity. It also allows for a complete integration into the StreamWork framework, using StreamWork services, such as feeds and provides the same kind of user experience as all other StreamWork tools.

The following chapters will show three examples of existing SAP business processes that have been extended into the collaboration space of StreamWork, and in so doing, have been enriched by all the relevant non-structured information and collaboration features provided by the framework. Furthermore, the processes are extended to potential new user types with limited or even no access to the SAP backend system.<sup>1</sup>

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<sup>1</sup> All of the business methods mentioned in this article have been developed by SAP Value Prototyping and can be deployed for specific customers. Many more use cases can be thought of for areas such as transportation collaboration, dispute management, product lifecycle management and more. SAP Value Prototyping provides the business process understanding as well as the technical skills to provide additional business methods.

## Purchase Order Collaboration

Imagine the purchase of a turbine for a power plant. The customer creates the purchase order and submits it to the supplier. He wants the supplier to confirm the purchase order but anticipates discussions around details of the purchase order and the specifics of the engineering of the turbine. While creating the purchase order in the SAP SNC backend system, the customer selects a button to directly create a StreamWork activity. The purchase order data is automatically transferred into the StreamWork activity. The vendor and customer information are extracted from the purchase order data and both receive an invitation to the StreamWork activity. Collaboration between supplier and customer then occurs within the activity; for example, the turbine vendor can share engineering drawings and perform discussions with the customer as well as confirm or adjust dates and quantities of the Purchase Order, which is then updated to the SAP backend system. All of this happens in a single collaboration environment.

Figure 1 shows this example. From the SAP SNC Purchase Order screen, the customer user decides to generate the StreamWork activity for a particular purchase order. The activity itself, shown in figure 1, contains the Purchase Order Business Method as well as other StreamWork tools supporting further collaboration. Once the Purchase Order data is confirmed by the supplier, the details are integrated back into the SAP backend system.

The screenshot displays the SAP StreamWork interface for an activity titled "SNC PO Collaboration". The interface is divided into several sections:

- Header:** Shows the user "Thorsten" and navigation options like Home, Activities, People, and Inbox.
- Left Sidebar:** Contains navigation options such as "Work Canvas", "Feed", "Action Items", "PARTICIPANTS (2)", and "WORK ITEMS".
- Participants:** Lists Thorsten Schmidt (Available), Christian Butzaff (Offline), and Michael Fry (Offline).
- Timeline:** A calendar view showing dates from May to July. A blue bar highlights the dates 19, 20, and 21.
- Comments:** A list of messages from Thorsten Schmidt and Boost Turbines discussing the purchase order details and dates.
- Activity Details:**
  - Purchase Order:** 12311113, PO Description: Thorsten Schmidt.
  - Customer Information:** Customer ID: AACS, Customer Name: AACS, Header Status: Open, Confirm Status: Partially Confirmed, Change Status: , Created At: 06/07/2011 CET.
  - Product Table:**

Product	Prod. Desc.	Quantity	UoM	Delivery Date
AAC_CH_BEST	AAC_CH_BEST	100	EA	06/10/2011
AAC_CH_BEST	AAC_CH_BEST	40	EA	06/16/2011
  - Schedule Line Table:**

Product	Quantity	Due Quantity	Delivery Date
AAC_CH_BEST	10 EA	10 EA	06/10/2011
AAC_CH_BEST	30 EA	30 EA	06/20/2011
  - Details:** Original Price: 0.060000 USD/EA, Ship-From Location: AAC\_VENDOR, . . . DE, Customer Location: AACS, . . . DE, Ship-To Location: AACS, . . . DE.

Figure 1: Purchase Order using SNC and StreamWork

## Product Demand and Supply Collaboration

In a second example, a High Tech company collaborates with his component suppliers by sharing Forecasts and Purchase Orders. The supplier will commit to the forecast or adjust the quantities to which he can commit. Once the Purchase Orders are sent to the supplier, they will again commit to the purchase order. In this context, the supplier might want to share engineering changes to the product with the customer, or he might want to discuss the forecast quantities or dates provided by the customer. Today, this would occur via e-mail or phone. The e-mail information will get stored independently from the data, making it difficult later on to find e-mail exchanges related to a specific change in the forecast. By using the business method in StreamWork, all the information about the product relationship between the customer and the supplier is captured in a single place: the forecast, the orders as well as the unstructured information such as the discussion of the quantities and dates. This is in particular beneficial for later reference or audits.

In a scenario where the supplier faces a delivery shortfall, the customer would like to discuss and record options with the supplier, having all the information in a single place.

In addition, the customer can share the forecast and order information with a 3<sup>rd</sup> party logistic provider, such as a transportation provider, in order to provide an early view into the demand.

To support these scenarios, the customer will set up an activity around the specific product in StreamWork. He invites the supplier as well as the transportation provider into the activity. The customer and supplier will use StreamWork tools such as discussion, text, and upload of documents for their day to day collaboration. In addition, the customer includes the SAP Value Prototyping Business Methods for Demand Collaboration and Purchase Order Collaboration into the activity. The business methods, integrated with the backend SAP SNC system, allow for sharing the product forecast with the supplier as well as the purchase order. All of this happens inside the StreamWork activity. The supplier can confirm forecasts or purchase orders using the business methods and discuss the data with the customer by using the discussion tool. He has a full overview of all relevant information of this product and customer in a single space.

Figure 2 shows a screenshot of the example. The StreamWork activity was created to capture all collaborative information about product ABC. StreamWork controls the user access to the activity. Inside the activity the different tools allow for discussions, document sharing as well as forecast collaboration and confirmation, and Purchase Order sharing confirmation. All the confirmations are integrated back into the SAP SNC backend system, updating the corresponding business objects.

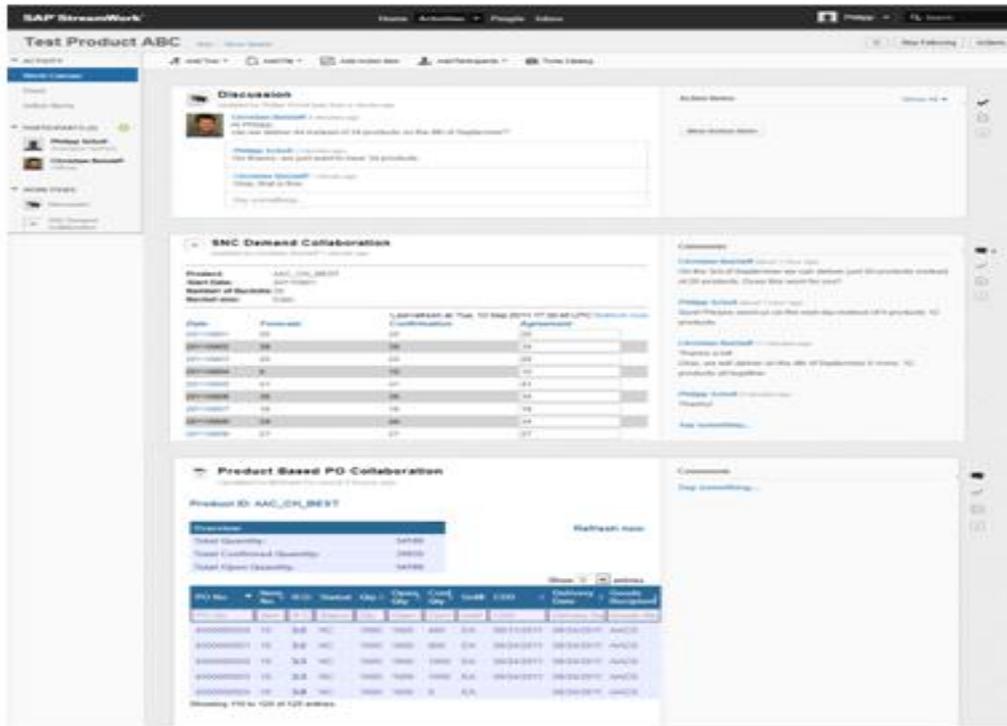


Figure 2: Product Demand and Supply Collaboration using SNC and StreamWork

### Risk Evaluation Collaboration

A third example shows the collaborative extension of a risk assessment process. This example has been developed in close relation with GRC Solution Management. The SAP Value Prototyping Collaborative Risk Assessment business method can be used in conjunction with Enterprise Risk Management (ERM) workshops, or for any generic risk assessment process involving multiple stakeholders providing input. Examples could include risk assessments of key suppliers for an automotive company, drug pipeline assessments for a pharmaceutical company, or large capital projects such as new retail store openings or new oil rig project assessments.

As an example, when conducting a risk workshop, a risk manager uses the SAP Value Prototyping Risk Assessment Business method to share information on the company's key risk areas, and invites key internal business partners and stakeholders to collaborate on identifying any new risk areas, and re-assessing those risks in order to prioritize the areas requiring mitigation initiatives.

To begin, prior to the workshop, the risk manager creates an activity in StreamWork, where she can post all the previous assessment results and presentations, including all relevant documentation pertinent to the ERM program. She adds the business method to the activity, and invites all the workshop participants to join the activity, where they can review the documentation and join in discussions in anticipation to the workshop. In addition, each of the stakeholders can begin by reviewing and revising the list of key risk areas and adding new risks as appropriate. Everyone is able to add relevant documentation, as well as create discussions as needed, to come to the agreement as to the top risks.

Fast forward to the day of the workshop, the top risks have been agreed to, so the risk manager initiates a new assessment in the StreamWork activity. Each workshop participant can log into their mobile device or tablet to assess the impact and probability of each of the risks.

Once all the risks have been assessed, the StreamWork business method produces a heat-map, which the risk manager uses to review the aggregated results with the group, highlighting the risks in the highest impact and highest probability quadrant.

In summary, the Streamwork Collaborative Risk Assessment business method allows for further discussions of the risks and impacts, for sharing of supporting documents, and finally for an easy way to evaluate and

prioritize risks. The intuitive user interface of Streamwork, in combination of mobile access possibilities, allow for a fast, easy to use collaborative evaluation process.

The method is available in two modes. In the integrated mode, there is two-way exchange of data between SAP StreamWork and SAP GRC Risk Management. The structured data including organization structure, risk categories and impact categories are pulled into the StreamWork activity, and the results of the collaborative risk assessments are pushed back into the SAP GRC Risk Management application. In the stand-alone mode, there is no two-way data exchange, and all information is captured and stored within the SAP StreamWork activity.

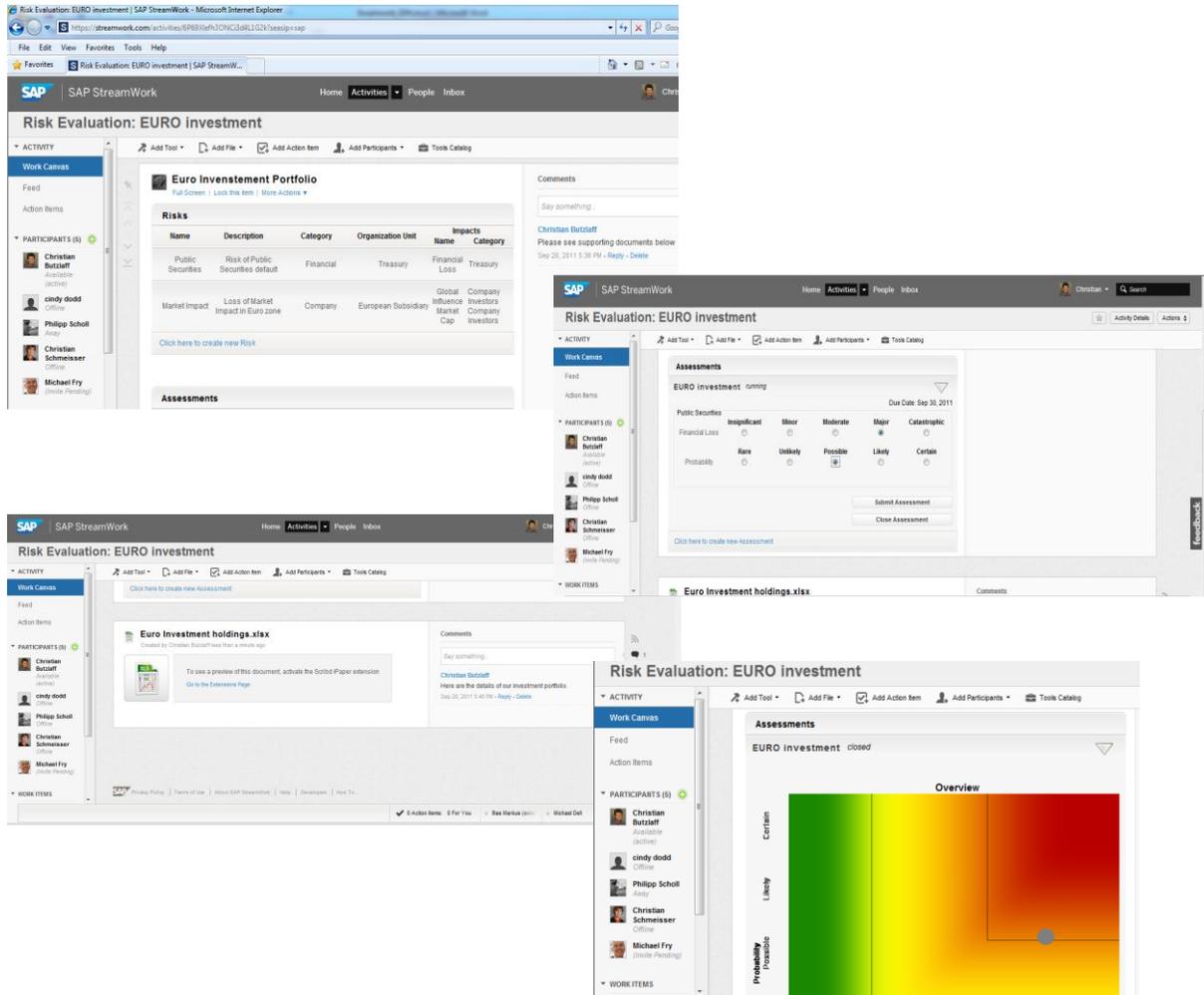


Figure 3: Risk Assessment Collaboration using StreamWork

## Related Content

StreamWork Integration Stereotypes

<http://www.sdn.sap.com/irj/scn/weblogs?blog=/pub/wlg/24787>

SNC Forum on SDN

<https://forums.sdn.sap.com/forum.jspa?forumID=487>

StreamWork product tutorials

<http://www.sdn.sap.com/irj/scn/StreamWork-elearning>

## Acknowledgements

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