

# PASSION FOR CUSTOMERS.

## Optimizing Marketing Cloud Development

Markus Slabina

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**Markus Slabina**  
Principal Technical Consultant

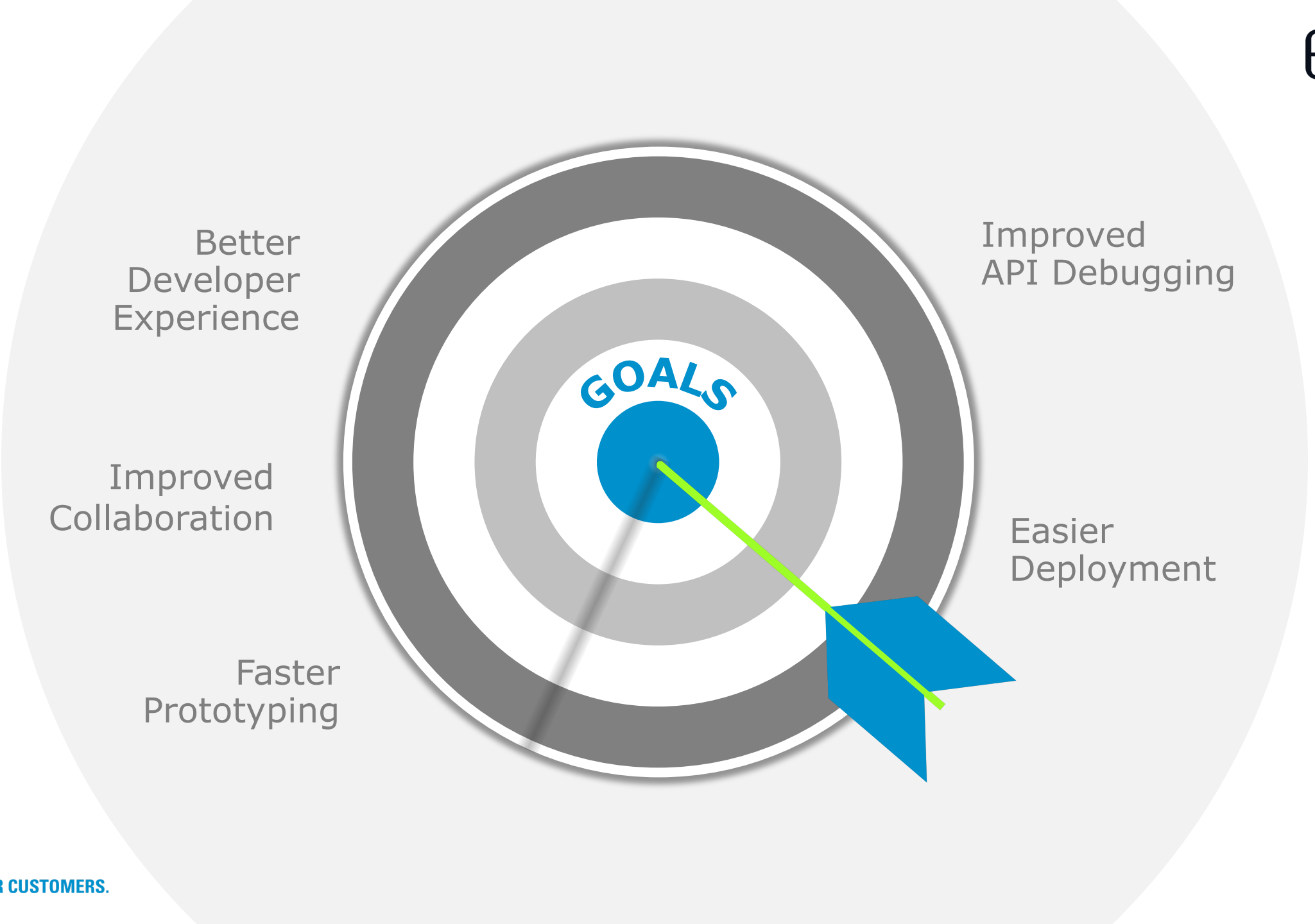
Cross-Cloud Architect/Consultant  
2020 Salesforce Marketing Champion 🏆

Blog: [markus.codes](https://markus.codes)  
LinkedIn: [in/markus-slabina](https://in.linkedin.com/in/markus-slabina)  
Twitter: [@mslabina](https://twitter.com/mslabina)



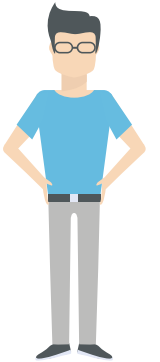
## Anna

- Technical Marketer
- Architects the campaigns
- Acquired development skills over time
- Works on code together with her colleagues



Anna's Team asked for a solution that includes

- an extensible code editor
- one tool for Marketing and Sales Cloud development
- syntax highlighting
- offline editing
- local data storage



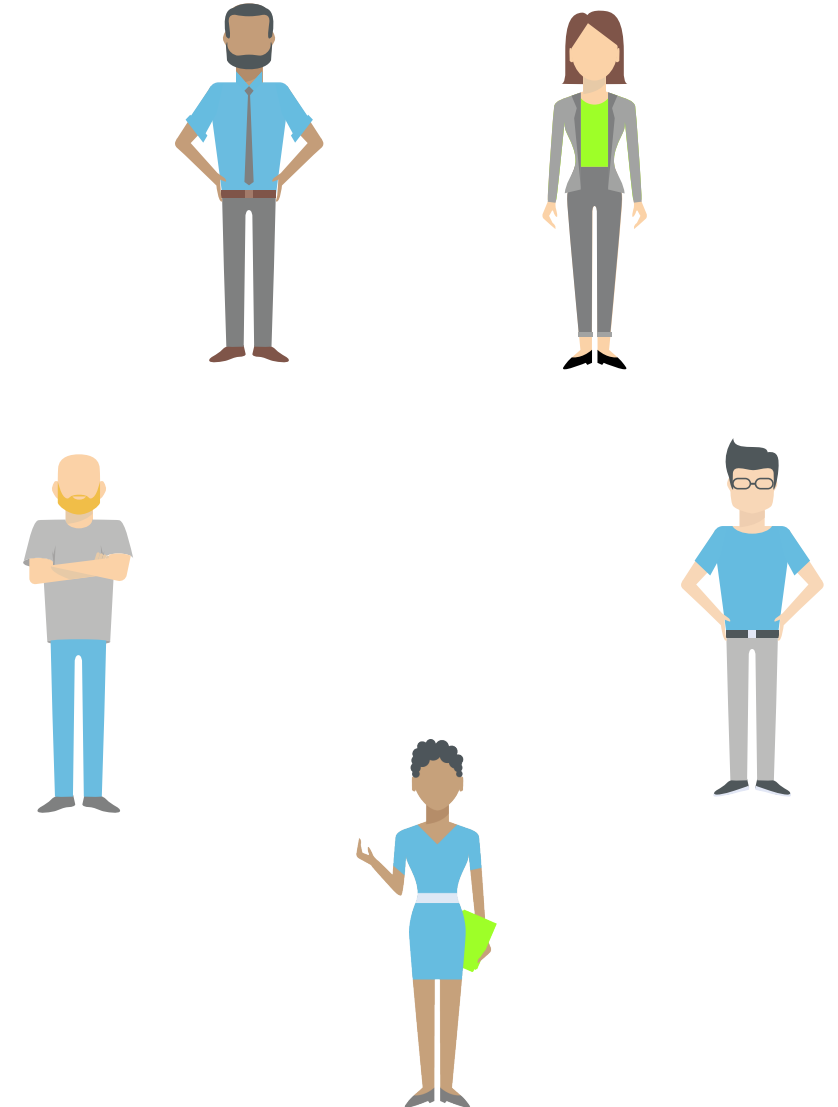
- Visual Studio Code
  - Free code editor
  - Many extensions available
- AMPscript plugin
  - Syntax highlighting
  - Auto completion
  - Documentation references
- Salesforce DX plugin
  - Official Salesforce DX plugin
  - Integrated DX tools, etc.

```
Untitled-1
1  %%[
2      VAR @FirstName, @LastName, @Gender, @PersonalizedSalutation
3
4      SET @FirstName = AttributeValue('FirstName')
5      SET @LastName = AttributeValue('LastName')
6      SET @Gender = AttributeValue('Gender')
7
8      SET @PersonalizedSalutation = Concat(IIf(STRING, STRING, STRING), )
9  ]%%
```

IIf(1, 2, 3)  
Returns the second parameter if the first parameter evaluates True. Returns the third parameter if the first parameter evaluates False.  
===== PARAMETERS =====  
1\* [STRING] Any function or expression that returns a true or false result  
2\* [STRING] Value to return if the expression evaluates True  
3\* [STRING] Value to return if the expression evaluates False  
===== EXAMPLES =====  
%%=IIF(EMPTY(@VAR),'123',@VAR)=%%

Anna's Team wants to have a system that helps to

- Document changes
- Keep a version history
- Perform rollbacks
- Work on a single file simultaneously



- Version Control
    - e.g. git or SVN
  - Extension for Visual Studio Code
  - Establish guidelines on usage
  - Shared repository and local copy
- Cloud Service repository
    - Work from anywhere
    - Automatic backups

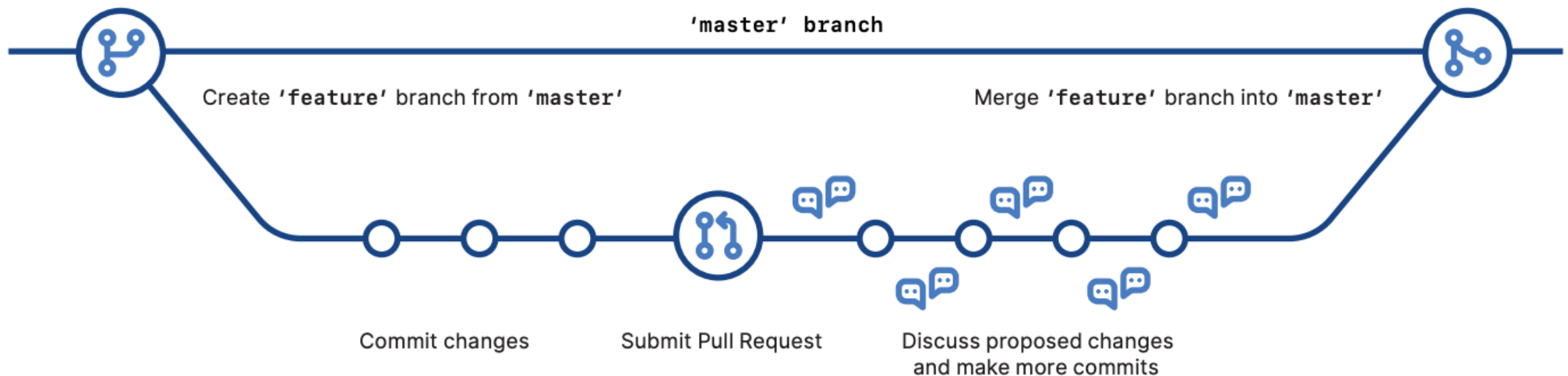
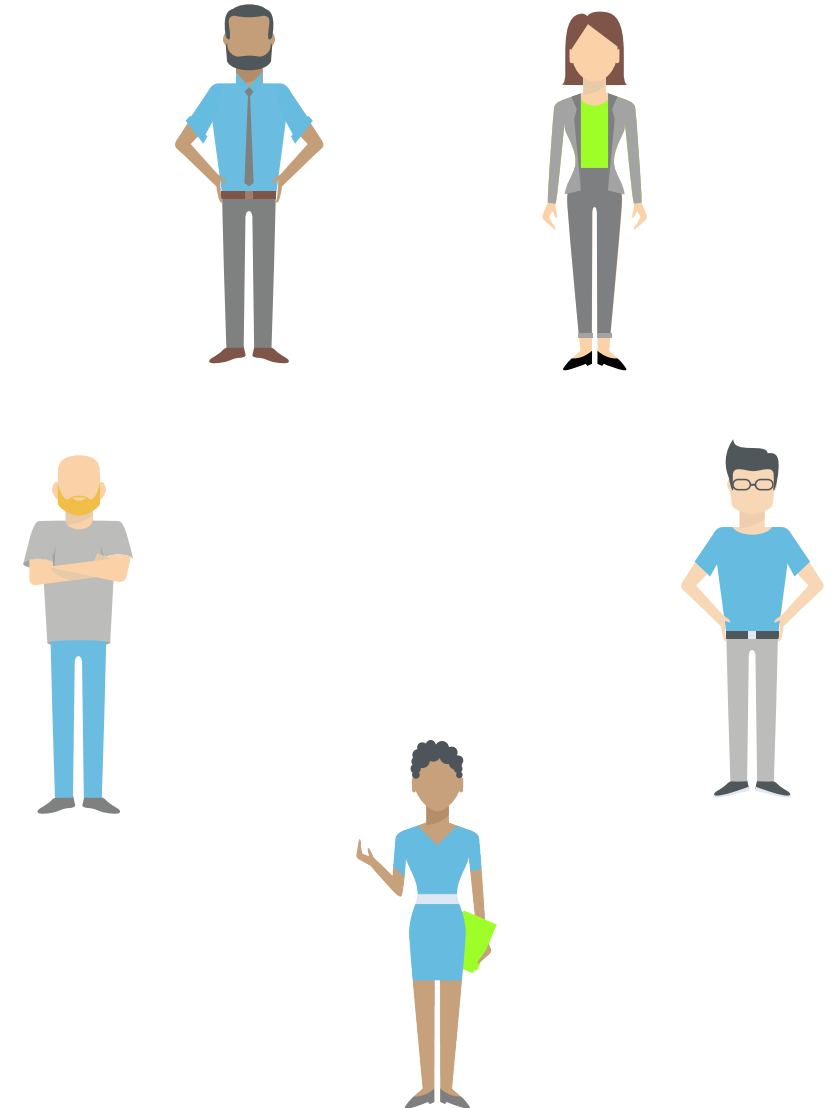


Image Source: <https://training.github.com/downloads/github-git-cheat-sheet.pdf>



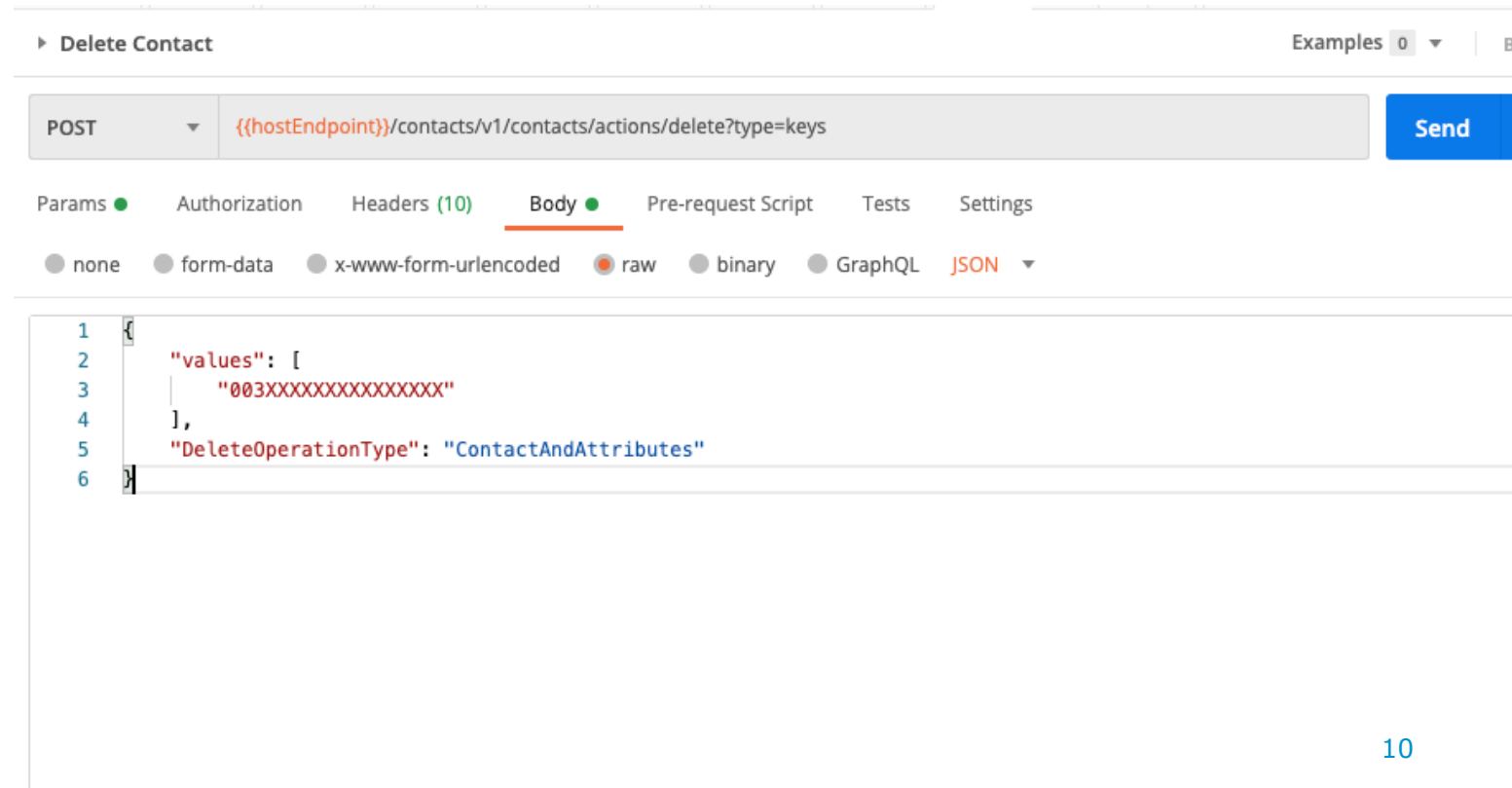
To verify a solution draft Anna wants to

- Quickly test small portions without having to set up a lot of dependencies
- Get error messages for SQL statements
- Test API-Endpoints without coding



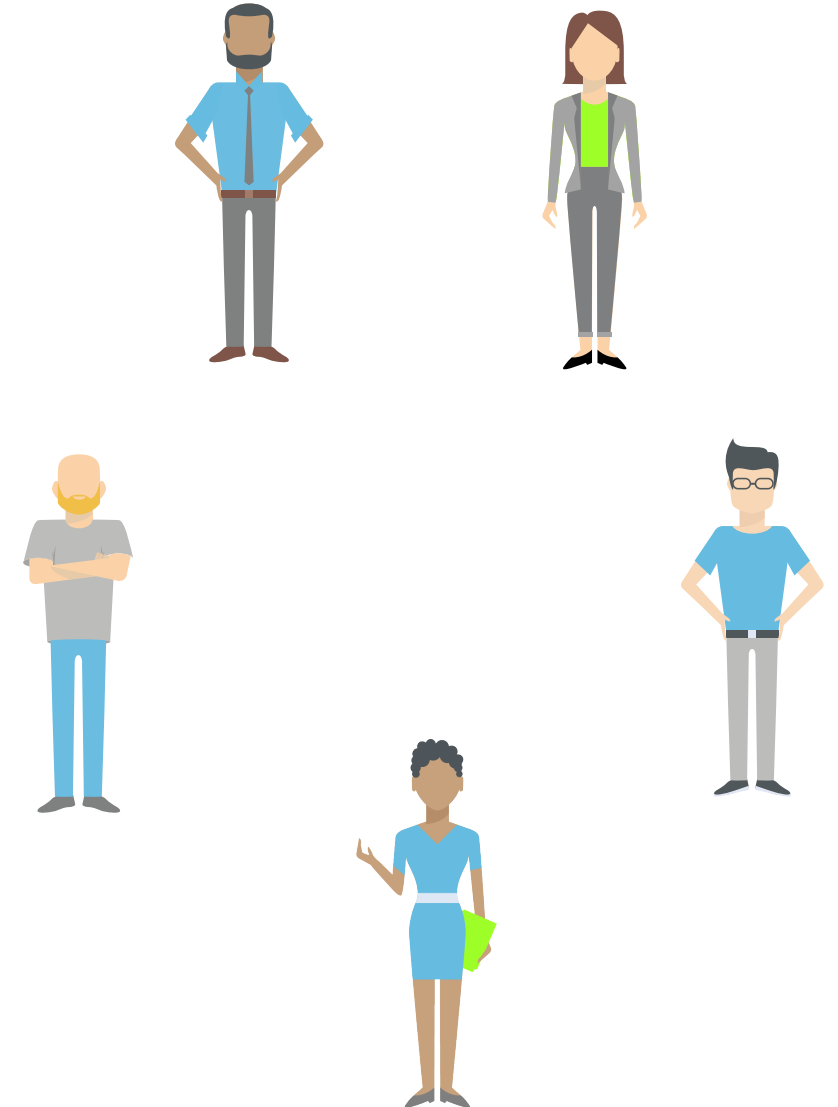
## Faster Prototyping

- Online tool for SQL prototyping:
  - [sqlfiddle.com](https://sqlfiddle.com)
- Quickly try out queries within SFMC:
  - QueryStudio (AppExchange)
- Online tool for JS prototyping:
  - [jsfiddle.net](https://jsfiddle.net)
- API Development Client:
  - [postman.com](https://postman.com)



Anna's Team wants to be able to

- See the transmitted payload data
- Verify the transmitted headers
- All without writing code



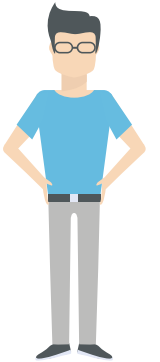
- requestbin.com
  - Creates an endpoint
  - Stores a history of calls
  - Displays payload
  - Displays Headers

The screenshot shows the pipedream web interface. At the top, there's a header with the pipedream logo and a 'Sign in to old version' link. Below that, a navigation bar shows 'Untitled' (public) and an 'Endpoint' field with the URL 'https://enlpo26w1o619.x.pipedream.net/'. There are 'Copy' and 'New' buttons. The main area is split into two panels. The left panel, titled 'Today', shows a list of recent requests: one at 6:10:33 pm and another at 6:10:08 pm, both labeled 'POST /'. The right panel shows the details of a selected request. It's an 'HTTP REQUEST' with ID '1kkHnEl6ysrwtOpwe02L1Wzvz05' and timestamp '2020-11-24T17:10:33.522Z'. The 'Details' section shows 'POST /'. The 'Headers' section is expanded to show 8 headers: host (enlpo26w1o619.x.pipedream.net), accept (\*/), accept-encoding (gzip, deflate, br), cache-control (no-cache), content-type (application/json), postman-token (b6e63), content-length (105), and connection (keep-alive). The 'Body' section is set to 'PRETTY' view and shows a JSON object: 

```
{  "values": [    "003XXXXXXXXXXXXXXXXX"  ],  "DeleteOperationType": "ContactAndAttributes"}
```

Anna's release manager wants to be able to

- Deploy journeys from one BU to another
- Deploy data extensions from one BU to another
- Share content assets
- Save backups of assets, journeys, etc.



- Deployment Manager
  - Journey Flows (structure)
  - Data Extension Schemas
  - Automations (partial)
  - Attribute Groups (partial)
  - Export/Backup these assets
  - *Further features expected soon*
- Out-of-the Box functionality:
  - Content Sharing
  - Data Extension Sharing

The screenshot displays the Salesforce Deployment Manager interface. At the top, there are navigation tabs: 'CREATE SNAPSHOT', 'DEPLOY SNAPSHOT', and 'SESSION HISTORY'. The 'SESSION HISTORY' tab is active. Below the tabs, there is a section titled 'Your Session History' with a sub-item 'Snapshot deployed at 11:23 AM'. To the right, a 'Deployment Details' panel shows the following information:

Deployed At	Deployment Target	Snapshot Name
11:23 AM	MID: 10785356	Global Master Template.json

Below the details panel is a 'Deployed Components' table:

COMPONENT TYPE	NAME	KEY	STATUS
Journey (design)	Traifft Loyalty	74338d5f-c957-4d60-8ff0-390fecedcd94	Successfully deployed
Journey (design)	Northern Trail Cyber Monday Promo	d961646a-2e4b-4aca-ab72-06d41c7c6d14	Successfully deployed
Journey (design)	NTO - Thanksgiving Campaign	d7703eea-dcef-4a58-8610-806c347e2447	Successfully deployed
Journey (design)	Northern Trail Holiday Giveaway	81c81445-d480-4c5f-b2a6-4047e75e51fc	Successfully deployed
Journey (design)	Black Friday Blockbuster Sale	d0a0f1f3-968a-4fea-bacc-f48a096b1225	Successfully deployed
Journey (design)	Halloween Burst Campaign	f2310a63-fab1-4160-a2cf-a12d6e6a8168	Successfully deployed
Journey (design)	NTO - October Special	8becb619-ec63-4113-afd9-eea2e5249fee	Successfully deployed
Journey (design)	Abandoned Cart	8b2a2287-6045-4ce9-bc4b-8745f83ea556	Successfully deployed
Journey (design)	Fall Seasonal Giveaway	9ef0d2d4-0f21-41fc-93da-95e88cb9411f	Successfully deployed
Journey (design)	Fall Athletic Gear	c6edcf9b-214a-4358-809d-683d6ad0c0b1	Successfully deployed
Journey (design)	Summer Ending Clearance Sale	a5b977e8-69dc-46b4-abd0-d018e382d619	Successfully deployed
Journey (design)	Summer Mountaineering Campaign	e119d25e-35bc-4f92-96da-82cc0bbb65c2	Successfully deployed

Image Source: <https://appexchange.salesforce.com/appxListingDetail?listingId=a0N3A00000FvMviUAF>



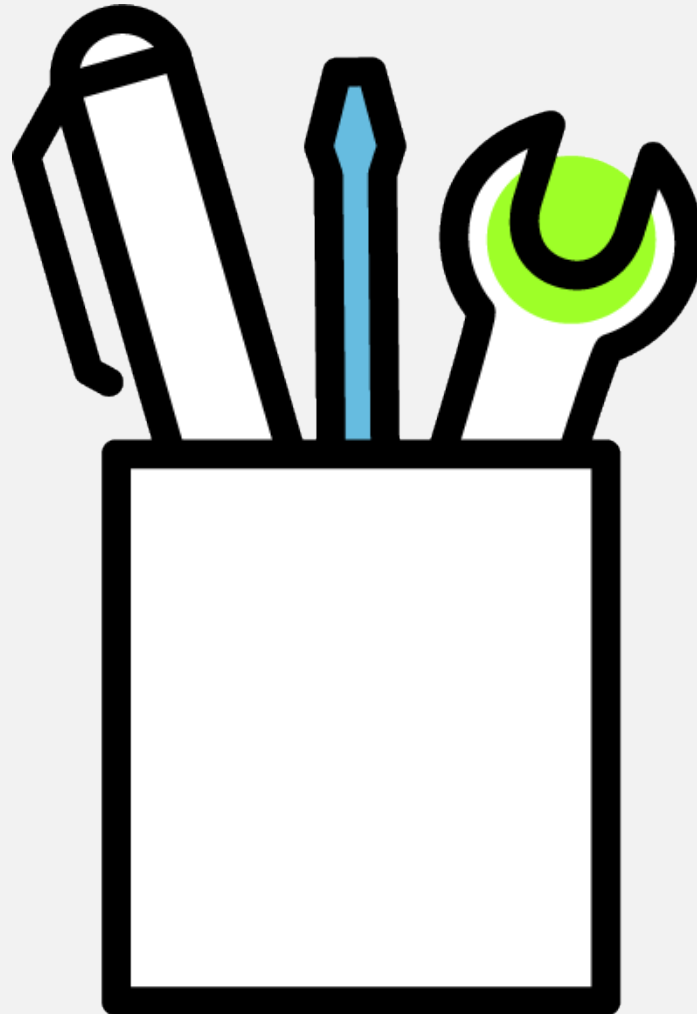
Better Developer Experience



Improved Collaboration



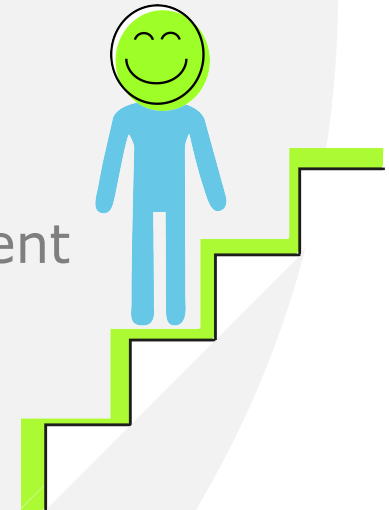
Faster Prototyping



Improved API Debugging



Easier Deployment



- Chrome Extension I developed back in 2017
- Exposes hidden information
- Shows error messages
- Displays instance info
- ...

The screenshot shows the Marketing Cloud Developer Tools interface. At the top, there's a navigation bar with tabs for Console, Elements, Sources, Network, Performance, Memory, Application, Security, Audits, Marketing Cloud, EditThisCookie, and Adblock Plus. The main content is divided into sections:

### Basic Info

NAME:	[REDACTED]
ID:	[REDACTED]
CUSTOMERKEY:	[REDACTED]
VERSIONS:	3

### Versions

VERSION	STATUS	EXECUTION MODE	CREATED DATE	ENTRY MODE	POPULATION	GOAL DESCRIPTION	GOAL LEADS TO EXIT?	MET GOAL (RELATIVE)
3	Published	Production	9.8.2017, 16:55:01	OnceAndDone	[REDACTED]	I want 5% of the population to [REDACTED]	✓	[REDACTED]
2	Unpublished	Production	24.7.2017, 17:30:42	OnceAndDone	[REDACTED]	I want 5% of the population to [REDACTED]	✓	[REDACTED]
1	Unpublished	Production	29.5.2017, 19:45:10	OnceAndDone	[REDACTED]	I want 5% of the population to [REDACTED]	✓	[REDACTED]

### Goal Attainment per Activity (current version)

ID	KEY	MET GOAL (TOTAL)
[REDACTED]	-	[REDACTED]
[REDACTED]	WAIT-1	[REDACTED]
[REDACTED]	WAIT-7	[REDACTED]
[REDACTED]	WAIT-6	[REDACTED]

### Data as JSON

```
[{"totalMetGoal": [REDACTED], "activities": [{"id": [REDACTED], "metGoal": [REDACTED], "key": "WAIT-1"}, {"id": [REDACTED], "metGoal": [REDACTED], "key": "WAIT-7"}, {"id": [REDACTED], "metGoal": [REDACTED], "key": "WAIT-6"}]}
```





[markus.codes/optimizing-sfmc-dev](https://markus.codes/optimizing-sfmc-dev)

Do you have some more questions?  
I'm happy to help you.



**Markus Slabina**  
Principal Technical Consultant

Blog: [markus.codes](http://markus.codes)  
LinkedIn: [in/markus-slabina](https://www.linkedin.com/in/markus-slabina)  
Twitter: [@mslabina](https://twitter.com/mslabina)



**Thank you for your attention.**

**ec4u**

ec4u expert consulting ag  
Zur Giesserei 19-27B  
D-76227 Karlsruhe  
Tel.: +49 (0) 721 46 476-100

ec4u expert consulting (schweiz) ag  
Chaltenbodenstrasse 16  
CH-8834 Schindellegi  
Tel.: +41 (0) 44 87 444-78

ec4u data experts gmbh  
Otto-Lilienthal-Str. 36  
D-71034 Böblingen  
Tel.: +49 (0) 7031 714-620

ec4u marketing experts ag  
Willy-Brandt-Allee 2  
D-81829 München  
Tel.: +49 (0) 89 2032104-0

ec4u marketing experts (austria) gmbh  
Hauptstrasse 43 – 45  
A-7000 Eisenstadt  
Tel.: +43 (0) 720 303080-0

ec4u expert consulting (españa) s.l.u  
World Trade Center  
Edificio Sur – 2a Planta Muelle de Barcelona  
E-08093 Barcelona  
Tel.: +34 (93) 344 32 31