



POWERED BY  DUG

DYNAMICS CON

LIVE

MAY 2024

The central graphic is a large, multi-colored starburst shape. Inside the starburst, the text "POWERED BY" is in yellow, followed by a logo consisting of three interlocking geometric shapes (a purple square, a green triangle, and a blue square) and the word "DUG" in yellow. Below this, "DYNAMICS CON" is written in large, bold, yellow 3D block letters with a multi-colored gradient. Underneath that, "LIVE" is written in the same style. At the bottom of the starburst, "MAY 2024" is written in yellow. The background of the starburst is a colorful gradient of purple, pink, and blue.

10 Myths about test automation on customer projects



Brad Prendergast | Tigunia, LLC | Microsoft MVP
Henrik Helgesen | Helgesen Consulting, Inc.

Henrik Helgesen – aka - TheDoubleH

President, Helgesen Consulting, Inc.
Los Angeles, California.

Dinosaur (and proud of it! (RAWR!))

Started with Navigator 3.04 on an IBM
RS/6000® in 1997 in Denmark

Actively developing Automated Unit
tests for close to four years – including
in NAV 2016.



Brad Prendergast

Tigunia, LLC

Co-host of the Dynamics Corner Podcast.

Over 20 years of experience in the Microsoft ecosystem (Navision and Business Central)

Microsoft MVP since 2023



Luc van Vugt – Here in spirit



- Owner at fluxxus.nl, Warnsveld, NL
- Sr. Developer and TA lead 4PS, Ede, NL
- Microsoft MVP since 2011
- *Almost bold* dinosaur kept evolving by juniors
- Started with Navision Financial 2.01 in 1999
- Struck by test automation for more than a decade





Yes - We are a Dinosaurs

Agenda

Ultimate Myth

10 Myths about ...

What next?

Q & A



Objective

The background of the slide features a vibrant sunset or sunrise with rays of light emanating from the top. In the foreground, the silhouettes of a superhero couple stand on a dark cliff. The male figure is on the right, wearing a cape and a mask, while the female figure is on the left, also wearing a cape. They are both looking out over a landscape of rolling hills and a line of trees in the distance.

Clear some common myths that has stopped you from doing automated testing

Test Automation is Evolving Quickly

A lot has changed when it comes to testing

Automated Testing in Microsoft Dynamics 365 Business Central

Efficiently automate test cases in Dynamics NAV and Business Central

Packt>

www.packt.com

Luc van Vugt

Published
Apr 2019

Published
Dec 2021

222 pages

406 pages

Automated Testing in Microsoft Dynamics 365 Business Central

Second Edition

Efficiently automate test cases for faster development cycles with less time needed for manual testing

Luc van Vugt



The ultimate Myth:

**“Test Automation Is
a costly waste”**



Myth #1: It's too Expensive



Myth #1: It's too Expensive



Customer do not want to pay

If you see it as an extra task and execute it as such, it will be an extra cost

... but TA provides you a reusable QA tool

... and getting included from the start it will lead to better code quality

... irrespective if you would walk the TDD road or not

Test Automation is a cost, not a benefit

Do you have the resources to continue testing for each release?

It is possible over time, by taking one step at a time

Don't strive for a complete set, but build it up





Why Not? (Page 5)

Costs are too high and will make us uncompetitive.



Myth #2: The Foundation is rock solid



Myth #2: The Foundation is rock solid



Our team always does a good job!

What happens when people leave?

Can you extrapolate on-prem practices to SaaS?

All our technical dependencies are perfect!

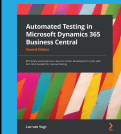
You can assume things to work, but ... assumptions should always be validated

Once the app is deployed, you are DONE!

Your code might not change, but how about the layer underneath?

You can assume base features to continue working, but MS released several updates that broke functionality that have worked since early versions





Microsoft updates Page 13
Incorporating any update from Microsoft ... your features must be (re)tested ...





Steffen Balslev

@SBalslev

#MSDyn365BC v22.5 is out and that means v23 is only a month away - are you ready for it?

We still see a lot of usage of obsolete base logic and will start sending out notifications on v23 compile errors next week 😲. Have a great #Weekend 😎

7:39 AM · Sep 1, 2023



Steffen Balslev

@SBalslev

#MSDyn365BC v22.5 is out and that means v23 is only a month away - are you ready for it?

We still see a lot of usage of obsolete base logic and will start sending out notifications on v23 compile errors next week 😲. Have a great #Weekend 😎

7:39 AM · Sep 1, 2023

**Myth #3:
This is the way we always have done it!**



Myth #3: This is the way we always have done it!



Fixes in AL is the same as C/AL

The two are much akin, but there is at least one essential difference: You can't go into the code, fix the issue and have it instantly running without anybody noticing

Our Customers do not see value in it; why bother?

If YOU see, understand and breathe it, Customers will understand.


Microsoft stopped requiring Test Apps for AppSource; why invest in it?

Do you really know why Microsoft made that change?

Microsoft expect you to understand that not doing it WILL cause issues down the road





 Test automation is required(?)
Page 10
MS does not require automated testing ... anymore [but] strongly recommend using automated tests.



**Myth #4:
It's not worth the Effort**



Myth #4: It's not worth the Effort



Data setup is extensive

Invest once, replay endless

Be smart and take shortcuts , so-called data mocks

Our test lead-time fits easily in monthly rhythm

Great, assuming that you only have to run it once

What if bugs are found, fixed and test rerun is needed?


A lot of work to create and maintain TA; it will never pay off

Yes, it does have a cost, but what is the cost when continuing doing it manually?

Make TA an integral part of dev work; it starts in the requirements with Test Plan

Learn from TDD approach or even implement it



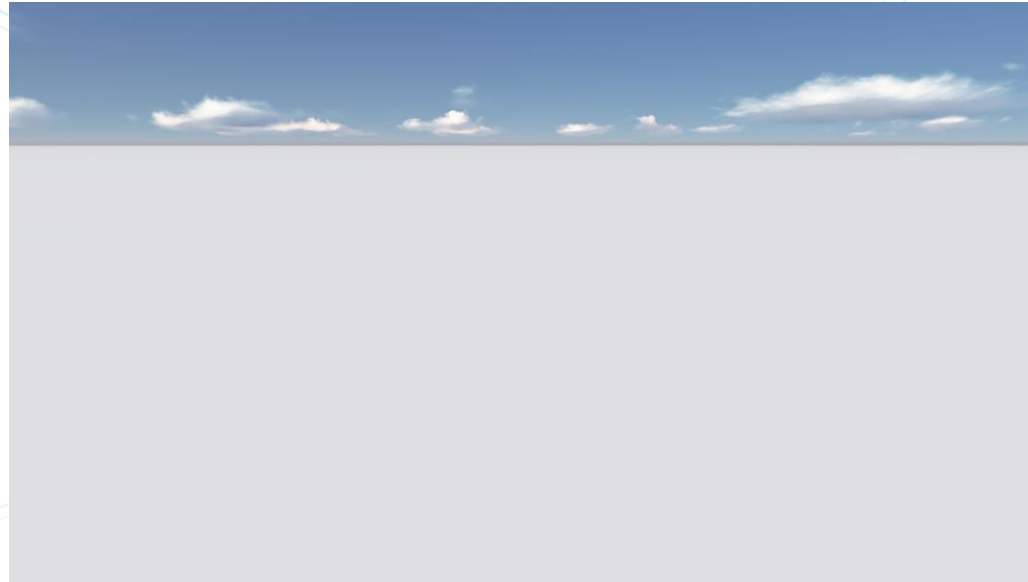


Why yes?
Page 8

... writing automated tests to make your test efforts easier and faster ... it will save you time in the end.



**Myth #5:
We don't have enough Resources**



Myth #5: We don't have enough Resources



... but we'll help our customer like we always did

With the same resources and monthly changes to your customer's BC in SaaS?

... to create Test Automation

Create eventually time by starting TA, raising the quality of your implementation and lower the number of bugs

And yes, there is an initial learning investment ...

We're too busy and cannot add extra work

That all depends on how you implement it and how you see Test Automation

Let Test Automation be a driver to change your way of working -> Test Automation starts in the requirements!

Start TA to head resource shortages





Why Not?
Page 6

*Our everyday business does not
leave room to add a new discipline.*



**Myth #6:
It's too Complex**



Myth #6: It's too Complex



Build pipelines are too complex

AL-Go For GitHub | ALOps for DevOps | Cosmo Alpaca

Take initial threshold and enjoy

Our test scope is too big (to even consider TA)

Set test scope on only your PTE

Use Microsoft tests for standard / generic flows

It's impossible to add TA to each project

Do you and/or the customer have the resources to continue testing for each release?

It is possible over time, by taking one step at a time

Don't strive for a complete set, but build it up





Why Not? Page 6

There are too many different projects to allow for test automation.



Myth #7: Current test quality Suffices



Myth #7: Current test quality Suffices



Only Customers can only do proper testing

Great, make use of that and get them involved in defining an explicit Test Plan, containing all relevant test scenarios ...

... and create TA from that

Our test effort is sufficient for the quality we want

Are you sure? If so, great!

If not, what is your plan B?

TA checks what we know; it cannot level with human testing

Fully true and the one does not exclude the other; they are and should stay complementary

But any test that is reproducible can be automated

And the more you automate the repeatable and boring parts, the better manual testers are set to do intelligent/creative testing





Why Not?
Page 5

Customers do the testing, so why should we bother?



Myth #8: I am a Bystander



Myth #8: I am a Bystander



We are all forced into this by Microsoft and our customers blame us for that

OK, if that is how partners - and customers - feel about it ...

But you can also take this as a chance and offer your customer a choice - see What next section - to insure their backbone, for now and the future

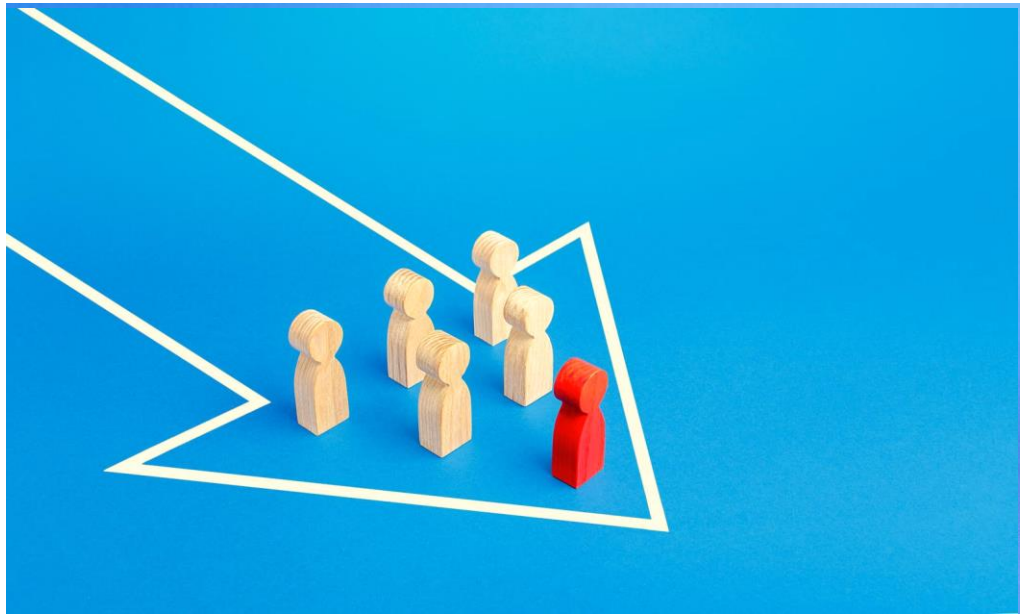
... and in the meantime, help you to look more professional.



Myth #9: Why should we?



Myth #9: Why should we?



Nobody does TA on PTEs, so, why should I?

Are you sure?

BTW: I would say why shouldn't I?

To some extent it all depends on your (company's) character

We never needed TA, so why do we need it now?

Are you aware what is done in the world outside of BC?

Test Automation will drive up our price while others continue for "old" price

That might be, but for how long?

... and does each of your customers only want things cheap?





Why Not?
Page 5

Customers do the testing, so why should we bother?

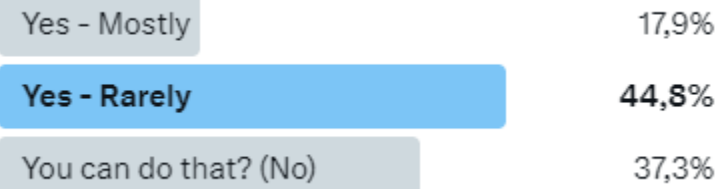




Henrik Helgesen

@TheDoubleH

#MSDyn365bc partners: Do you include automated tests with your PTE's?



8:53 AM · Oct 16, 2023



Henrik Helgesen

@TheDoubleH

#MSDyn365bc partners: Do you include automated tests with your PTE's?

Yes - Mostly

32.3%

Yes - Rarely

32.3%

You can do that? (No)

35.5%

1:23 AM · May 9, 2024

Myth #10: The Silver Bullet!



Myth #10: The Silver Bullet



Test Automation will solve all your problems

The full Monty of TA sets you up with a tool to evaluate your solution at every stage of implementation ...


... but it's a way of working which success depends on your discipline supported by available tooling

... but it will reveal new horizons

... which will induce new challenges





 It's not a silver bullet ...
Page 11
Easy to reproduce – Fast to Execute - Objective





Ólafur Waage

@olafurw

All unit tests passing.



4:09 AM · Oct 8, 2022



The ultimate *Truth* Myth:

**“Test Automation gets
Long-term savings”**



What Next?

The background of the slide features a vibrant sunset or sunrise with rays of light emanating from the top. In the lower-left foreground, there are black silhouettes of a man and a woman standing on a cliff edge. The man is on the right, wearing a cape and a mask, resembling a superhero. The woman is on the left, also wearing a cape. They are looking out over a landscape of rolling hills and mountains under the bright sky.

Get yourself and your teams educated on Test Automation ...

... to respond meaningful and helpful to your customer's need ...

... in safeguarding their solution

Offer them an insurance plan with options they can choose from

Where do you Start

- What are your most important processes?
 - Create Order and Post
 - Create Order
 - Ship
 - Post
 - Create Production Order



How much do you test?

- How Many modifications do you have?
- Do you have dependencies from App Source Apps.
- What will happen if a process breaks?



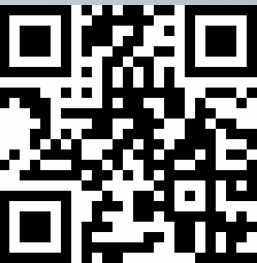


**Whatever YOU decide
YOU own the decision
AND the consequences!**

A young girl with brown hair in a ponytail, wearing a grey sweater, is seen from behind with her right hand raised high. In the background, a teacher is standing in front of a green chalkboard. The scene is set in a classroom with desks and a window on the left.

Questions?

[Why bother about test automation on customer projects? You can't sell that! - YouTube](#)



THANK YOU

Henrik Helgesen
Helgesen Consulting, Inc.
henrik@helgesenconsulting.com



-  thedoubleh.dev
-  github.com/thedoubleh
-  linkedin.com/in/TheDoubleH
-  @TheDoubleH



Brad Prendergast
Tigunia, LLC
brad@dvlprlife.com



-  dynamicscorner.com
-  github.com/dvlprlife
-  linkedin.com/in/brad-prendergast
-  @dvlprlife

