



## TIME SAVINGS & TRUST

# CARIBBEAN DIGITAL TRANSFORMATION PROJECT

— *an interactive influencer tool designed in Python as a sample project* —

### Overview of The Tool

The tool is interactive and collects data to compose a time consumption profile of the respondent, presenting alternatives to use technology as a time saver. Calculations approximate the amount of time consumed versus time saved based on ordinary payment habits. Suggestion to consider digital transformation to spend more time enjoying activities such as those the respondent mentions in response.

### Relevance of The Tool

Dominica shares an immediate concern for digital transformation. The World Bank's Caribbean Digital Transformation Project is designed to meet the common denominators challenging the region as a whole: in-house expertise, end user reluctance, rapid strategy planning and deployment, and limited budgets. And then there's the end user whose reluctance is due, in large part, to the absence of skills/know-how to use and benefit from the new technologies.

The tool seeks to (a) fuel discussion about the advantages of digital transformation, (b) build confidence in tech timid end users, (c) advocate for digital transformation in a personal way.

### Key Observations & Assumptions

- In the absence of the digital experience and its benefits, there will always be the question of 'fixing' what is not viewed as broken.
- A significant number of people do not have access to a digital device or can afford to purchase one.
- A significant number of people do not trust digital devices, preferring a physical record over a digital record.
- Digital records are relatively expensive to print for the rank-and-file worker, preferring a printed or handwritten receipt. Further, many entities still use rubber stamps to authenticate receipts.
- Paying bills or submitting paper forms in service centers is often preferred and culturally intuitive, lending itself to opportunities to build relationships and get firsthand understanding of account status.

## Return Values<sup>1</sup>

- (1) Approximate time consumed in a 40-hour week when paying bills in service centers.
- (2) Approximate time consumed in a 40-hour week paying bills online.
- (3) Time difference of the above values.

## Questions & Penalties Matrix

Questions (all are required)	Answer Options	Time Deductions from 40 business hours (2,400 minutes/week)*	
		Manual (A)	Digital (B)
1. <i>What is your name?</i>	<i>Open text field</i>	-	-
2. <i>What do you like to do in your free time?</i>	<i>Open text field</i>	-	-
3. <i>Where do you pay your phone bill?</i>	a. In the store b. Online	-90 minutes	-2 minutes
4. <i>Where do you pay your water bill?</i>	a. In the store b. Online	-90 minutes	-2 minutes
5. <i>Where do you pay your electricity bill?</i>	a. In the store b. Online	-90 minutes	-2 minutes
6. <i>Where do you buy your groceries?</i>	a. In the store b. Online	-90 minutes	-30 minutes
7. <i>Do you prefer to pay in cash or with a card?</i>	a. Cash b. Card	-10 minutes	-2 minutes
8. <i>Do you use lunch or break time at work to pay bills?</i>	a. Yes b. No	-60 minutes	-2 minutes
<b>MAXIMUM TIME DEDUCTION</b>		<b>6 hours, 10 minutes</b>	<b>38 minutes</b>

\*Time deductions are for demonstration purposes only, based on casual observation. Accurate information may be obtained from flagship industry customer service data available, for example, through cellular phone companies that register arrival and departure times of customers.

<sup>1</sup> **4.1 The time-use approach.** A promising approach to consider the interactions among use cases and keeping complexity at a reasonable level is the time-use approach. Instead of analyzing energy or material flows, the time-use approach primarily focusses on individual lifestyles, i.e. the allocation of time of individuals – as members of private households – to everyday activities [20]. Used as a perspective to understand indirect environmental effects of ICT, the time-use approach emphasizes the impacts of ICT on patterns of consumption (How do individuals spend their time?) and the environmental consequences. In field studies collecting time-use data, individuals usually keep diaries about their daily activities. A large collection of multinational time-use data for various timeframes has been collected and standardized by the Centre for Time Use Research at the University of Oxford since the mid 1980s [21]. To assess the environmental impact of lifestyles, time-use data is commonly linked with data on household expenditure, energy consumption of households, life cycle inventory (LCI) data<sup>1</sup> and environmentally extended economic input-output tables<sup>2</sup> [24–27]. Source: “An Approach to Assess Indirect Environmental Effects of Digitalization Based on a Time-Use Perspective” University of Zurich. Bieser, Jan; Hilty, Lorenz.